QEverCloud

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Chapter 1

QEverCloud

Unofficial Evernote Cloud API for Qt

1.1 What's this

This library presents the complete Evernote SDK for Qt. All the functionality that is described on Evernote site is implemented and ready to use. In particular OAuth authentication is implemented.

Read doxygen generated documentation for detailed info.

The documentation can also be generated in the form of a .qch file which you can register with your copy of Qt Creator to have context-sensitive help. See below for more details.

1.2 How to contribute

See contribution guide for detailed info.

1.3 Downloads

Prebuilt versions of the library can be downloaded from the following locations:

- Stable version:
  - Windows binaries:
    - MSVC 2019 32 bit Qt 5.15.2
    - MSVC 2019 64 bit Qt 5.15.2
  - Mac binary (built with Qt 5.15.2)
  - Linux binary built on Ubuntu 20.04 with Qt 5.12.8
- Unstable version:
  - Windows binaries:
    - MSVC 2019 32 bit Qt 5.15.2
    - MSVC 2019 64 bit Qt 5.15.2
  - Mac binary (built with Qt 5.15.2)
  - Linux binary built on Ubuntu 20.04 with Qt 5.12.8

1.4 How to build

QEverCloud uses CMake build system which can be used as simply as follows (on Unix platforms):

```
mkdir build
cd build
cmake -DCMAKE_INSTALL_PREFIX=<...> ../
make
make install
```

The library can be built and shipped either as a static library or a shared library. Dll export/import symbols necessary for Windows platform are supported.

QEverCloud uses C++14 standard. CMake automatically checks whether the compiler is capable enough of building QEverCloud so if the pre-build configuration step was successful, the build step should be successful as well. Known capable compilers are g++ 9 or later and Visual Studio 2019 or later.

The recommended version of Qt5 for building the library is the latest Qt 5.15. However, it is also known to build and work with Qt 5.12.

QEverCloud depends on the following Qt components:

- Qt5Core
- Qt5Widgets
- Qt5Network
- (Optional) Qt5WebKit an Qt5WebKitWidgets
- (Optional) Qt5WebEngine and Qt5WebEngineWidgets

The dependencies on Qt5WebKit or Qt5WebEngine are only actual if the library is built with OAuth support. But even then there is an option to build the library with OAuth support but without the dependency on either of these components. More on this below.

By default the library is built with OAuth support and uses Qt5WebEngine for it. The following cmake parameters are available to alter this behaviour:

- `-DBUILD_WITH_OAUTH_SUPPORT=NO` would disable building with OAuth support entirely.
- `-DUSE_QT5_WEBKIT=ON` would build the library with OAuth using Qt5WebKit for web page rendering.
- `-DQEVERCLOUD_USE_SYSTEM_BROWSER=ON` would build the library with OAuth not using either Qt5WebKit or Qt5WebEngine but instead delegating some portion of OAuth procedure to the system browser.

If Qt5's Qt5Test module is found during the pre-build configuration step, the unit tests are enabled and can be run with `make test` and more verbose `make check` commands.

Other available CMake configurations options:

BUILD_DOCUMENTATION - when *ON*, attempts to find Doxygen and in case of success adds *doc* target so the documentation can be built using `make doc` command after the pre-build configuration step. By default this option is on.

BUILD_QCH_DOCUMENTATION - when *ON*, passes instructions on to Doxygen to build the documentation in *qch* format. This option only has any meaning if *BUILD_DOCUMENTATION* option is on. By default this option is off.

BUILD_SHARED - when *ON*, CMake configures the build for the shared library. By default this option is on.

BUILD_WITH_Q_NAMESPACE - when *ON*, `Q_NAMESPACE` and `Q_ENUM_NS` macros are used to add introspection capabilities to enumerations within `qevercloud` namespace. Qt >= 5.8 is required to enable this option. By default this option is enabled.

BUILD_TRANSLATIONS - when *ON*, builds and installs translation files for translatable strings from QEverCloud.

If *BUILD_SHARED* is *ON*, `make install` installs CMake module necessary for applications using CMake's `find_package` command to find the installation of QEverCloud.

It is possible to build the library with enabled sanitizers using additional CMake options:

- `-DSANITIZE_ADDRESS=ON` to enable address sanitizer
- `-DSANITIZE_MEMORY=ON` to enable memory sanitizer
- `-DSANITIZE_THREAD=ON` to enable thread sanitizer
- `-DSANITIZE_UNDEFINED=ON` to enable undefined behaviour sanitizer

1.5 Include files for applications using the library

Two "cumulative" headers - *QEverCloud.h* or *QEverCloudOAuth.h* - include everything needed for the general and OAuth functionality correspondingly. More "fine-grained" headers can also be used if needed.

1.6 Seeding random numbers generator for Qt < 5.10

QEverCloud requires random numbers generator for OAuth procedure. When QEverCloud is built against Qt >= 5.10, it uses `QRandomGenerator` which is cryptographically secure on supported platforms and is seeded by Qt internals. With Qt < 5.10 QEverCloud uses `qrand`. It requires the client application to call `qsrand` with seed value before using OAuth calls of QEverCloud. So if you are using QEverCloud built with Qt < 5.10, make sure to call `qsrand` before using QEverCloud's OAuth.

1.7 Related projects

- `QEverCloudGenerator` repository hosts code generating parser of `Evernote Thrift IDL files`. This parser is used to autogenerate a portion of QEverCloud's headers and sources.
- `libquentier` is a library for creating feature rich full sync Evernote clients built on top of QEverCloud
- `Quentier` is an open source desktop note taking app capable of working as Evernote client built on top of libquentier and QEverCloud

Chapter 2

Namespace Index

2.1 Namespace List

Here is a list of all namespaces with brief descriptions:

Chapter 3

Hierarchical Index

3.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Chapter 4

Class Index

4.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 5

File Index

5.1 File List

Here is a list of all files with brief descriptions:

Chapter 6

Namespace Documentation

6.1 qevercloud Namespace Reference

Classes

- struct Accounting
- struct AccountLimits
- class AsyncResult

  Returned by asynchonous versions of functions.
- struct AuthenticationResult
- struct BootstrapInfo
- struct BootstrapProfile
- struct BootstrapSettings
- struct BusinessInvitation
- struct BusinessNotebook
- struct BusinessUserAttributes
- struct BusinessUserInfo
- struct CanMoveToContainerRestrictions
- struct Contact
- struct CreateOrUpdateNotebookSharesResult
- struct Data
- class EDAMInvalidContactsException
- class EDAMInvalidContactsExceptionData
- class EDAMNotFoundException
- class EDAMNotFoundExceptionData
- class EDAMSystemException
- class EDAMSystemExceptionAuthExpired
- class EDAMSystemExceptionAuthExpiredData
- class EDAMSystemExceptionData
- class EDAMSystemExceptionRateLimitReached
- class EDAMSystemExceptionRateLimitReachedData
- class EDAMUserException
- class EDAMUserExceptionData
- class EventLoopFinisher
- class EverCloudException
- class EverCloudExceptionData

  EverCloudException counterpart for asynchronous API.
- class EverCloudLocalData

The EverCloudLocalData class contains several data elements which are not synchronized with Evernote service but which are nevertheless useful in applications using QEverCloud to implement feature rich full sync Evernote clients. Values of this class' types are contained within QEverCloud types corresponding to actual Evernote API types.

- class EvernoteException
- class EvernoteExceptionData
- class EvernoteOAuthDialog

  Authorizes your app with the Evernote service by means of OAuth authentication.
- class EvernoteOAuthWebView

  The class is tailored specifically for OAuth authorization with Evernote.
- struct Identity
- class IDurableService
- class ILogger
- class InkNoteImageDownloader

  the InkNoteImageDownloader class is for downloading the images of ink notes which can be created with the official Evernote client on Windows (only with it, at least at the time of this writing).
- class INoteStore
- struct InvitationShareRelationship
- class IRequestContext
- struct IRetryPolicy
- class IUserStore
- struct LazyMap
- struct LinkedNotebook
- struct ManageNotebookSharesError
- struct ManageNotebookSharesParameters
- struct ManageNotebookSharesResult
- struct ManageNoteSharesError
- struct ManageNoteSharesParameters
- struct ManageNoteSharesResult
- struct MemberShareRelationship
- class NetworkException

  The NetworkException class represents QNetworkReply level errors.
- class NetworkExceptionData
- struct Note
- struct NoteAttributes
- struct Notebook
- struct NotebookDescriptor
- struct NotebookRecipientSettings
- struct NotebookRestrictions
- struct NotebookShareTemplate
- struct NoteCollectionCounts
- struct NoteEmailParameters
- struct NoteFilter
- struct NoteInvitationShareRelationship
- struct NoteLimits
- struct NoteList
- struct NoteMemberShareRelationship
- struct NoteMetadata
- struct NoteRestrictions
- struct NoteResultSpec
- struct NoteShareRelationshipRestrictions
- struct NoteShareRelationships
- struct NotesMetadataList
- struct NotesMetadataResultSpec
- class NoteStoreServer

The NoteStoreServer class represents customizable server for NoteStore requests. It is primarily used for testing of QEverCloud.

- struct NoteVersionId
- class Optional
- class Printable
- struct PublicUserInfo
- struct Publishing
- class QAssociativeContainerConstReferenceWrapper
- class QAssociativeContainerReferenceWrapper
- struct RelatedContent
- struct RelatedContentImage
- struct RelatedQuery
- struct RelatedResult
- struct RelatedResultSpec
- struct Resource
- struct ResourceAttributes
- struct SavedSearch
- struct SavedSearchScope
- struct SharedNote
- struct SharedNotebook
- struct SharedNotebookRecipientSettings
- struct SharedNoteTemplate
- struct ShareRelationshipRestrictions
- struct ShareRelationships
- struct SyncChunk
- struct SyncChunkFilter
- struct SyncState
- struct Tag
- class ThriftException
- class ThriftExceptionData
- class Thumbnail

  The class is for downloading thumbnails for notes and resources from Evernote servers.
- struct UpdateNoteIfUsnMatchesResult
- struct User
- struct UserAttributes
- struct UserIdentity
- struct UserProfile
- class UserStoreServer

  The UserStoreServer class represents customizable server for UserStore requests. It is primarily used for testing of QEverCloud.
- struct UserUrls

Typedefs

- using IRetryPolicyPtr = std::shared_ptr< IRetryPolicy >
- using IDurableServicePtr = std::shared_ptr< IDurableService >
- using EverCloudExceptionDataPtr = std::shared_ptr< EverCloudExceptionData >
- using INoteStorePtr = std::shared_ptr< INoteStore >
- using IUserStorePtr = std::shared_ptr< IUserStore >
- using InvalidationSequenceNumber = qint64
- using IdentityID = qint64
- using UserID = qint32
- using Guid = QString
- using Timestamp = qint64
- using MessageEventID = qint64
- using MessageThreadID = qint64
- using ILoggerPtr = std::shared_ptr< ILogger >
- using IRequestContextPtr = std::shared_ptr< IRequestContext >

Enumerations

- enum class EDAMErrorCode {
  UNKNOWN = 1 , BAD_DATA_FORMAT = 2 , PERMISSION_DENIED = 3 , INTERNAL_ERROR = 4 ,
  DATA_REQUIRED = 5 , LIMIT_REACHED = 6 , QUOTA_REACHED = 7 , INVALID_AUTH = 8 ,
  AUTH_EXPIRED = 9 , DATA_CONFLICT = 10 , ENML_VALIDATION = 11 , SHARD_UNAVAILABLE = 12 ,
  LEN_TOO_SHORT = 13 , LEN_TOO_LONG = 14 , TOO_FEW = 15 , TOO_MANY = 16 ,
  UNSUPPORTED_OPERATION = 17 , TAKEN_DOWN = 18 , RATE_LIMIT_REACHED = 19 ,
  BUSINESS_SECURITY_LOGIN_REQUIRED = 20 ,
  DEVICE_LIMIT_REACHED = 21 , OPENID_ALREADY_TAKEN = 22 , INVALID_OPENID_TOKEN = 23 ,
  USER_NOT_ASSOCIATED = 24 ,
  USER_NOT_REGISTERED = 25 , USER_ALREADY_ASSOCIATED = 26 , ACCOUNT_CLEAR = 27 ,
  SSO_AUTHENTICATION_REQUIRED = 28 }
- enum class EDAMInvalidContactReason { BAD_ADDRESS , DUPLICATE_CONTACT , NO_CONNECTION }
- enum class ShareRelationshipPrivilegeLevel { READ_NOTEBOOK = 0 , READ_NOTEBOOK_PLUS_ACTIVITY = 10 , MODIFY_NOTEBOOK_PLUS_ACTIVITY = 20 , FULL_ACCESS = 30 }
- enum class PrivilegeLevel {
  NORMAL = 1 , PREMIUM = 3 , VIP = 5 , MANAGER = 7 ,
  SUPPORT = 8 , ADMIN = 9 }
- enum class ServiceLevel { BASIC = 1 , PLUS = 2 , PREMIUM = 3 , BUSINESS = 4 }
- enum class QueryFormat { USER = 1 , SEXP = 2 }
- enum class NoteSortOrder {
  CREATED = 1 , UPDATED = 2 , RELEVANCE = 3 , UPDATE_SEQUENCE_NUMBER = 4 ,
  TITLE = 5 }
- enum class PremiumOrderStatus {
  NONE = 0 , PENDING = 1 , ACTIVE = 2 , FAILED = 3 ,
  CANCELLATION_PENDING = 4 , CANCELED = 5 }
- enum class SharedNotebookPrivilegeLevel {
  READ_NOTEBOOK = 0 , MODIFY_NOTEBOOK_PLUS_ACTIVITY = 1 , READ_NOTEBOOK_PLUS_ACTIVITY = 2 , GROUP = 3 ,
  FULL_ACCESS = 4 , BUSINESS_FULL_ACCESS = 5 }
- enum class SharedNotePrivilegeLevel { READ_NOTE = 0 , MODIFY_NOTE = 1 , FULL_ACCESS = 2 }
- enum class SponsoredGroupRole { GROUP_MEMBER = 1 , GROUP_ADMIN = 2 , GROUP_OWNER = 3 }
- enum class BusinessUserRole { ADMIN = 1 , NORMAL = 2 }
- enum class BusinessUserStatus { ACTIVE = 1 , DEACTIVATED = 2 }
- enum class SharedNotebookInstanceRestrictions { ASSIGNED = 1 , NO_SHARED_NOTEBOOKS = 2 }
- enum class ReminderEmailConfig { DO_NOT_SEND = 1 , SEND_DAILY_EMAIL = 2 }
- enum class BusinessInvitationStatus { APPROVED = 0 , REQUESTED = 1 , REDEEMED = 2 }
- enum class ContactType {
  EVERNOTE = 1 , SMS = 2 , FACEBOOK = 3 , EMAIL = 4 ,
  TWITTER = 5 , LINKEDIN = 6 }
- enum class EntityType { NOTE = 1 , NOTEBOOK = 2 , WORKSPACE = 3 }
- enum class RecipientStatus { NOT_IN_MY_LIST = 1 , IN_MY_LIST = 2 , IN_MY_LIST_AND_DEFAULT_NOTEBOOK = 3 }
- enum class CanMoveToContainerStatus { CAN_BE_MOVED = 1 , INSUFFICIENT_ENTITY_PRIVILEGE = 2 , INSUFFICIENT_CONTAINER_PRIVILEGE = 3 }
- enum class RelatedContentType { NEWS_ARTICLE = 1 , PROFILE_PERSON = 2 , PROFILE_ORGANIZATION = 3 , REFERENCE_MATERIAL = 4 }
- enum class RelatedContentAccess { NOT_ACCESSIBLE = 0 , DIRECT_LINK_ACCESS_OK = 1 , DIRECT_LINK_LOGIN_REQUIRED = 2 , DIRECT_LINK_EMBEDDED_VIEW = 3 }
- enum class UserIdentityType { EVERNOTE_USERID = 1 , EMAIL = 2 , IDENTITYID = 3 }
- enum class LogLevel {
  Trace = 0 , Debug , Info , Warn ,
  Error }

Functions

- QEVERCLOUD_EXPORT IRetryPolicyPtr newRetryPolicy ()
- QEVERCLOUD_EXPORT IRetryPolicyPtr nullRetryPolicy ()
- QEVERCLOUD_EXPORT IDurableServicePtr newDurableService (IRetryPolicyPtr={}, IRequestContextPtr={})
- uint qHash (EDAMErrorCode value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const EDAMErrorCode value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const EDAMErrorCode value)
- uint qHash (EDAMInvalidContactReason value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const EDAMInvalidContactReason value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const EDAMInvalidContactReason value)
- uint qHash (ShareRelationshipPrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const ShareRelationshipPrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const ShareRelationshipPrivilegeLevel value)
- uint qHash (PrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const PrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const PrivilegeLevel value)
- uint qHash (ServiceLevel value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const ServiceLevel value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const ServiceLevel value)
- uint qHash (QueryFormat value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const QueryFormat value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const QueryFormat value)
- uint qHash (NoteSortOrder value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const NoteSortOrder value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const NoteSortOrder value)
- uint qHash (PremiumOrderStatus value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const PremiumOrderStatus value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const PremiumOrderStatus value)
- uint qHash (SharedNotebookPrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const SharedNotebookPrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const SharedNotebookPrivilegeLevel value)
- uint qHash (SharedNotePrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const SharedNotePrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const SharedNotePrivilegeLevel value)
- uint qHash (SponsoredGroupRole value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const SponsoredGroupRole value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const SponsoredGroupRole value)
- uint qHash (BusinessUserRole value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const BusinessUserRole value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const BusinessUserRole value)
- uint qHash (BusinessUserStatus value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const BusinessUserStatus value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const BusinessUserStatus value)
- uint qHash (SharedNotebookInstanceRestrictions value)

- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const SharedNotebookInstanceRestrictions value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const SharedNotebookInstanceRestrictions value)
- uint qHash (ReminderEmailConfig value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const ReminderEmailConfig value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const ReminderEmailConfig value)
- uint qHash (BusinessInvitationStatus value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const BusinessInvitationStatus value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const BusinessInvitationStatus value)
- uint qHash (ContactType value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const ContactType value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const ContactType value)
- uint qHash (EntityType value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const EntityType value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const EntityType value)
- uint qHash (RecipientStatus value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const RecipientStatus value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const RecipientStatus value)
- uint qHash (CanMoveToContainerStatus value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const CanMoveToContainerStatus value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const CanMoveToContainerStatus value)
- uint qHash (RelatedContentType value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const RelatedContentType value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const RelatedContentType value)
- uint qHash (RelatedContentAccess value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const RelatedContentAccess value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const RelatedContentAccess value)
- uint qHash (UserIdentityType value)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const UserIdentityType value)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const UserIdentityType value)
- QEVERCLOUD_EXPORT INoteStore * newNoteStore (QString noteStoreUrl={}, IRequestContextPtr ctx={}, QObject *parent=nullptr, IRetryPolicyPtr retryPolicy={})
- QEVERCLOUD_EXPORT IUserStore * newUserStore (QString userStoreUrl={}, IRequestContextPtr ctx={}, QObject *parent=nullptr, IRetryPolicyPtr retryPolicy={})
- QEVERCLOUD_EXPORT QNetworkProxy evernoteNetworkProxy ()
- QEVERCLOUD_EXPORT void setEvernoteNetworkProxy (QNetworkProxy proxy)
- QEVERCLOUD_EXPORT void resetEvernoteNetworkProxy ()
- QEVERCLOUD_EXPORT int libraryVersion ()
- QEVERCLOUD_EXPORT void initializeQEverCloud ()
- template<class Container > QAssociativeContainerReferenceWrapper< Container > toRange (Container &container)
- template<class Container > QAssociativeContainerConstReferenceWrapper< Container > toRange (const Container &container)
- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &out, const LogLevel level)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &out, const LogLevel level)
- QEVERCLOUD_EXPORT ILoggerPtr logger ()
- QEVERCLOUD_EXPORT void setLogger (ILoggerPtr logger)
- QEVERCLOUD_EXPORT ILoggerPtr nullLogger ()
- QEVERCLOUD_EXPORT ILoggerPtr newStdErrLogger (LogLevel level=LogLevel::Warn)

- void setNonceGenerator (quint64(*nonceGenerator)())

  Sets the function to use for nonce generation for OAuth authentication.
- QEVERCLOUD_EXPORT IRequestContextPtr newRequestContext (QString authenticationToken={}, qint64 requestTimeout=DEFAULT_REQUEST_TIMEOUT_MSEC, bool increaseRequestTimeoutExponentially=DEFAULT_REQUEST_TIMEOUT_EXPONENTIAL_INCREASE, qint64 maxRequestTimeout=DEFAULT_MAX_REQUEST_TIMEOUT_MSEC, quint32 maxRequestRetryCount=DEFAULT_MAX_REQUEST_RETRY_COUNT, QList< QNetworkCookie > cookies={})

Variables

- class QEVERCLOUD_EXPORT EverCloudExceptionData
- QEVERCLOUD_EXPORT const qint32 EDAM_ATTRIBUTE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_ATTRIBUTE_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_ATTRIBUTE_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_ATTRIBUTE_LIST_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_ATTRIBUTE_MAP_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_GUID_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_GUID_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_GUID_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_EMAIL_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_EMAIL_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_EMAIL_LOCAL_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_EMAIL_DOMAIN_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_EMAIL_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_VAT_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_TIMEZONE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_TIMEZONE_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_TIMEZONE_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_MIME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_MIME_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_MIME_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_GIF
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_JPEG
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_PNG
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_TIFF
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_BMP
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_WAV
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_MP3
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_AMR
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_AAC
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_M4A
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_MP4_VIDEO
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_INK
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_PDF
- QEVERCLOUD_EXPORT const QString EDAM_MIME_TYPE_DEFAULT
- QEVERCLOUD_EXPORT const QSet< QString > EDAM_MIME_TYPES
- QEVERCLOUD_EXPORT const QSet< QString > EDAM_INDEXABLE_RESOURCE_MIME_TYPES
- QEVERCLOUD_EXPORT const QSet< QString > EDAM_INDEXABLE_PLAINTEXT_MIME_TYPES
- QEVERCLOUD_EXPORT const qint32 EDAM_SEARCH_QUERY_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_SEARCH_QUERY_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_SEARCH_QUERY_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_HASH_LEN
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_USERNAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_USERNAME_LEN_MAX

- QEVERCLOUD_EXPORT const QString EDAM_USER_USERNAME_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_USER_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_TAG_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_TAG_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_TAG_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_TITLE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_TITLE_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_NOTE_TITLE_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_CONTENT_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_CONTENT_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_APPLICATIONDATA_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_APPLICATIONDATA_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_APPLICATIONDATA_VALUE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_APPLICATIONDATA_VALUE_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_APPLICATIONDATA_ENTRY_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_APPLICATIONDATA_NAME_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_APPLICATIONDATA_VALUE_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTEBOOK_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTEBOOK_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_NOTEBOOK_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTEBOOK_STACK_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTEBOOK_STACK_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_NOTEBOOK_STACK_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_WORKSPACE_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_WORKSPACE_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_WORKSPACE_DESCRIPTION_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_WORKSPACE_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_PUBLISHING_URI_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_PUBLISHING_URI_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_PUBLISHING_URI_REGEX
- QEVERCLOUD_EXPORT const QSet< QString > EDAM_PUBLISHING_URI_PROHIBITED
- QEVERCLOUD_EXPORT const qint32 EDAM_PUBLISHING_DESCRIPTION_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_PUBLISHING_DESCRIPTION_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_PUBLISHING_DESCRIPTION_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_SAVED_SEARCH_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_SAVED_SEARCH_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_SAVED_SEARCH_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_PASSWORD_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_PASSWORD_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_USER_PASSWORD_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_URI_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_BUSINESS_MARKETING_CODE_REGEX_PATTERN
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_TAGS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_RESOURCES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_TAGS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_TAGS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_SAVED_SEARCHES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_NOTEBOOKS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_WORKSPACES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_NOTEBOOKS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_WORKSPACES_MAX

- QEVERCLOUD_EXPORT const qint32 EDAM_USER_RECENT_MAILED_ADDRESSES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_MAIL_LIMIT_DAILY_FREE
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_MAIL_LIMIT_DAILY_PREMIUM
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_LIMIT_FREE
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_LIMIT_PREMIUM
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS_FIRST_MONTH
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS_NEXT_MONTH
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_LIMIT_PLUS
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_SURVEY_THRESHOLD
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS
- QEVERCLOUD_EXPORT const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS_PER_USER
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_SIZE_MAX_FREE
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_SIZE_MAX_PREMIUM
- QEVERCLOUD_EXPORT const qint32 EDAM_RESOURCE_SIZE_MAX_FREE
- QEVERCLOUD_EXPORT const qint32 EDAM_RESOURCE_SIZE_MAX_PREMIUM
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_LINKED_NOTEBOOK_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_LINKED_NOTEBOOK_MAX_PREMIUM
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTEBOOK_BUSINESS_SHARED_NOTEBOOK_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTEBOOK_PERSONAL_SHARED_NOTEBOOK_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_BUSINESS_SHARED_NOTE_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_PERSONAL_SHARED_NOTE_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_CONTENT_CLASS_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_CONTENT_CLASS_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_NOTE_CONTENT_CLASS_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_HELLO_APP_CONTENT_CLASS_PREFIX
- QEVERCLOUD_EXPORT const QString EDAM_FOOD_APP_CONTENT_CLASS_PREFIX
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_HELLO_ENCOUNTER
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_HELLO_PROFILE
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_FOOD_MEAL
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_SKITCH_PREFIX
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_SKITCH
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_SKITCH_PDF
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_PENULTIMATE_PREFIX
- QEVERCLOUD_EXPORT const QString EDAM_CONTENT_CLASS_PENULTIMATE_NOTEBOOK
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_APPLICATION_POSTIT
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_APPLICATION_MOLESKINE
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_APPLICATION_EN_SCANSNAP
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_APPLICATION_EWC
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_APPLICATION_ANDROID_SHARE_EXTENSION
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_APPLICATION_IOS_SHARE_EXTENSION
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_APPLICATION_WEB_CLIPPER
- QEVERCLOUD_EXPORT const QString EDAM_SOURCE_OUTLOOK_CLIPPER
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_TITLE_QUALITY_UNTITLED
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_TITLE_QUALITY_LOW
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_TITLE_QUALITY_MEDIUM
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_TITLE_QUALITY_HIGH
- QEVERCLOUD_EXPORT const qint32 EDAM_RELATED_PLAINTEXT_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_RELATED_PLAINTEXT_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_RELATED_MAX_NOTES
- QEVERCLOUD_EXPORT const qint32 EDAM_RELATED_MAX_NOTEBOOKS
- QEVERCLOUD_EXPORT const qint32 EDAM_RELATED_MAX_TAGS
- QEVERCLOUD_EXPORT const qint32 EDAM_RELATED_MAX_EXPERTS
- QEVERCLOUD_EXPORT const qint32 EDAM_RELATED_MAX_RELATED_CONTENT
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MAX

- QEVERCLOUD_EXPORT const QString EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_BUSINESS_PHONE_NUMBER_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_PREFERENCE_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_PREFERENCE_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_PREFERENCE_VALUE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_PREFERENCE_VALUE_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_MAX_PREFERENCES
- QEVERCLOUD_EXPORT const qint32 EDAM_MAX_VALUES_PER_PREFERENCE
- QEVERCLOUD_EXPORT const qint32 EDAM_PREFERENCE_ONLY_ONE_VALUE_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_PREFERENCE_NAME_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_PREFERENCE_VALUE_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_PREFERENCE_ONLY_ONE_VALUE_REGEX
- QEVERCLOUD_EXPORT const QString EDAM_PREFERENCE_SHORTCUTS
- QEVERCLOUD_EXPORT const QString EDAM_PREFERENCE_BUSINESS_DEFAULT_NOTEBOOK
- QEVERCLOUD_EXPORT const QString EDAM_PREFERENCE_BUSINESS_QUICKNOTE
- QEVERCLOUD_EXPORT const qint32 EDAM_PREFERENCE_SHORTCUTS_MAX_VALUES
- QEVERCLOUD_EXPORT const qint32 EDAM_DEVICE_ID_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_DEVICE_ID_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_DEVICE_DESCRIPTION_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_DEVICE_DESCRIPTION_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_SEARCH_SUGGESTIONS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 EDAM_FIND_CONTACT_DEFAULT_MAX_RESULTS
- QEVERCLOUD_EXPORT const qint32 EDAM_FIND_CONTACT_MAX_RESULTS
- QEVERCLOUD_EXPORT const qint32 EDAM_NOTE_LOCK_VIEWERS_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_GET_ORDERS_MAX_RESULTS
- QEVERCLOUD_EXPORT const qint32 EDAM_MESSAGE_BODY_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_MESSAGE_BODY_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_MESSAGE_RECIPIENTS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_MESSAGE_ATTACHMENTS_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_MESSAGE_ATTACHMENT_TITLE_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_MESSAGE_ATTACHMENT_TITLE_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_MESSAGE_ATTACHMENT_SNIPPET_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_MESSAGE_ATTACHMENT_SNIPPET_REGEX
- QEVERCLOUD_EXPORT const qint32 EDAM_USER_PROFILE_PHOTO_MAX_BYTES
- QEVERCLOUD_EXPORT const qint32 EDAM_PROMOTION_ID_LEN_MAX
- QEVERCLOUD_EXPORT const QString EDAM_PROMOTION_ID_REGEX
- QEVERCLOUD_EXPORT const qint16 EDAM_APP_RATING_MIN
- QEVERCLOUD_EXPORT const qint16 EDAM_APP_RATING_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_SNIPPETS_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_CONNECTED_IDENTITY_REQUEST_MAX
- QEVERCLOUD_EXPORT const qint32 EDAM_OPEN_ID_ACCESS_TOKEN_MAX
- QEVERCLOUD_EXPORT const QString CLASSIFICATION_RECIPE_USER_NON_RECIPE
- QEVERCLOUD_EXPORT const QString CLASSIFICATION_RECIPE_USER_RECIPE
- QEVERCLOUD_EXPORT const QString CLASSIFICATION_RECIPE_SERVICE_RECIPE
- QEVERCLOUD_EXPORT const QString EDAM_NOTE_SOURCE_WEB_CLIP
- QEVERCLOUD_EXPORT const QString EDAM_NOTE_SOURCE_WEB_CLIP_SIMPLIFIED
- QEVERCLOUD_EXPORT const QString EDAM_NOTE_SOURCE_MAIL_CLIP
- QEVERCLOUD_EXPORT const QString EDAM_NOTE_SOURCE_MAIL_SMTP_GATEWAY
- QEVERCLOUD_EXPORT const qint16 EDAM_VERSION_MAJOR
- QEVERCLOUD_EXPORT const qint16 EDAM_VERSION_MINOR

6.1.1 Detailed Description

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6.1.2 Typedef Documentation

6.1.2.1 EverCloudExceptionDataPtr

```
using qevercloud::EverCloudExceptionDataPtr = typedef std::shared_ptr<EverCloudExceptionData>
```

6.1.2.2 Guid

```
using qevercloud::Guid = typedef QString
```

Most data elements within a user's account (e.g. notebooks, notes, tags, resources, etc.) are internally referred to using a globally unique identifier that is written in a standard string format. For example:

"8743428c-ef91-4d05-9e7c-4a2e856e813a"

The internal components of the GUID are not given any particular meaning: only the entire string is relevant as a unique identifier.

6.1.2.3 IdentityID

```
using qevercloud::IdentityID = typedef qint64
```

A type alias for the primary identifiers for Identity objects.

6.1.2.4 IDurableServicePtr

```
using qevercloud::IDurableServicePtr = typedef std::shared_ptr<IDurableService>
```

6.1.2.5 ILoggerPtr

```
using qevercloud::ILoggerPtr = typedef std::shared_ptr<ILogger>
```

6.1.2.6 INoteStorePtr

```
using qevercloud::INoteStorePtr = typedef std::shared_ptr<INoteStore>
```

6.1.2.7 InvalidationSequenceNumber

```
using qevercloud::InvalidationSequenceNumber = typedef qint64
```

A monotonically incrementing number on each shard that identifies a cross shard cache invalidation event.

6.1.2.8 IRequestContextPtr

```
using qevercloud::IRequestContextPtr = typedef std::shared_ptr<IRequestContext>
```

6.1.2.9 IRetryPolicyPtr

```
using qevercloud::IRetryPolicyPtr = typedef std::shared_ptr<IRetryPolicy>
```

6.1.2.10 IUserStorePtr

```
using qevercloud::IUserStorePtr = typedef std::shared_ptr<IUserStore>
```

6.1.2.11 MessageEventID

```
using qevercloud::MessageEventID = typedef qint64
```

A sequence number for the MessageStore subsystem.

6.1.2.12 MessageThreadID

```
using qevercloud::MessageThreadID = typedef qint64
```

A type alias for the primary identifiers for MessageThread objects.

6.1.2.13 Timestamp

```
using qevercloud::Timestamp = typedef qint64
```

An Evernote Timestamp is the date and time of an event in UTC time. This is expressed as a specific number of milliseconds since the standard base "epoch" of:

January 1, 1970, 00:00:00 GMT

NOTE: the time is expressed at the resolution of milliseconds, but the value is only precise to the level of seconds. This means that the last three (decimal) digits of the timestamp will be '000'.

The Thrift IDL specification does not include a native date/time type, so this value is used instead.

The service will accept timestamp values (e.g. for Note created and update times) between 1000-01-01 and 9999-12-31

6.1.2.14 UserID

```
using qevercloud::UserID = typedef qint32
```

Every Evernote account is assigned a unique numeric identifier which will not change for the life of the account. This is independent of the (string-based) "username" which is known by the user for login purposes. The user should have no reason to know their UserID.

6.1.3 Enumeration Type Documentation

6.1.3.1 BusinessInvitationStatus

```
enum class qevercloud::BusinessInvitationStatus [strong]
```

An enumeration defining the possible states of a BusinessInvitation.

APPROVED: The invitation was created or approved by a business admin and may be redeemed by the invited email.

REQUESTED: The invitation was requested by a non-admin member of the business and must be approved by an admin before it may be redeemed. Invitations in this state do not count against a business' seat limit.

REDEEMED: The invitation has already been redeemed. Invitations in this state do not count against a business' seat limit.

Enumerator

APPROVED	
REQUESTED	
REDEEMED	

6.1.3.2 BusinessUserRole

```
enum class qevercloud::BusinessUserRole [strong]
```

Enumeration of the roles that a User can have within an Evernote Business account.

ADMIN: The user is an administrator of the Evernote Business account.

NORMAL: The user is a regular user within the Evernote Business account.

Enumerator

ADMIN	
NORMAL	

6.1.3.3 BusinessUserStatus

```
enum class qevercloud::BusinessUserStatus [strong]
```

The BusinessUserStatus indicates the status of the user in the business.

A BusinessUser will typically start as ACTIVE. Only ACTIVE users can authenticate to the Business.

ACTIVE

The business user can authenticate to and access the business.

DEACTIVATED

The business user has been deactivated and cannot access the business

Enumerator

ACTIVE	
DEACTIVATED	

6.1.3.4 CanMoveToContainerStatus

```
enum class qevercloud::CanMoveToContainerStatus [strong]
```

This enumeration defines the possible types of canMoveToContainer outcomes.

An outdated client is expected to signal a "Cannot Move, Please Upgrade To Learn Why" like response to the user if an unknown enumeration value is received.

CAN_BE_MOVED Can move Notebook to Workspace.

INSUFFICIENT_ENTITY_PRIVILEGE Can not move Notebook to Workspace, because either: a) Notebook not in Workspace and insufficient privilege on Notebook or b) Notebook in Workspace and membership on Workspace with insufficient privilege for move

INSUFFICIENT_CONTAINER_PRIVILEGE Notebook in Workspace and no membership on Workspace.

Enumerator

CAN_BE_MOVED	
INSUFFICIENT_ENTITY_PRIVILEGE	
INSUFFICIENT_CONTAINER_PRIVILEGE	

6.1.3.5 ContactType

```
enum class qevercloud::ContactType [strong]
```

What kinds of Contacts does the Evernote service know about?

Enumerator

EVERNOTE	
SMS	
FACEBOOK	
EMAIL	
TWITTER	
LINKEDIN	

6.1.3.6 EDAMErrorCode

```
enum class qevercloud::EDAMErrorCode  [strong]
```

Numeric codes indicating the type of error that occurred on the service.

UNKNOWN No information available about the error

BAD_DATA_FORMAT The format of the request data was incorrect

PERMISSION_DENIED Not permitted to perform action

INTERNAL_ERROR Unexpected problem with the service

DATA_REQUIRED A required parameter/field was absent

LIMIT_REACHED Operation denied due to data model limit

QUOTA_REACHED Operation denied due to user storage limit

INVALID_AUTH Username and/or password incorrect

AUTH_EXPIRED Authentication token expired

DATA_CONFLICT Change denied due to data model conflict

ENML_VALIDATION Content of submitted note was malformed

SHARD_UNAVAILABLE Service shard with account data is temporarily down

LEN_TOO_SHORT Operation denied due to data model limit, where something such as a string length was too short

LEN_TOO_LONG Operation denied due to data model limit, where something such as a string length was too long

TOO_FEW Operation denied due to data model limit, where there were too few of something.

TOO_MANY Operation denied due to data model limit, where there were too many of something.

UNSUPPORTED_OPERATION Operation denied because it is currently unsupported.

TAKEN_DOWN Operation denied because access to the corresponding object is prohibited in response to a take-down notice.

RATE_LIMIT_REACHED Operation denied because the calling application has reached its hourly API call limit for this user.

BUSINESS_SECURITY_LOGIN_REQUIRED Access to a business account has been denied because the user must complete additional steps in order to comply with business security requirements.

DEVICE_LIMIT_REACHED Operation denied because the user has exceeded their maximum allowed number of devices.

OPENID_ALREADY_TAKEN Operation failed because the Open ID is already associated with another user.

INVALID_OPENID_TOKEN Operation denied because the Open ID token is invalid. Please re-issue a valid token.

USER_NOT_REGISTERED There is no Evernote user associated with this OpenID account, and no Evernote user with a matching email

USER_NOT_ASSOCIATED There is no Evernote user associated with this OpenID account, but Evernote user with matching email exists

USER_ALREADY_ASSOCIATED Evernote user is already associated with this provider using a different email address.

ACCOUNT_CLEAR The user's account has been disabled. Clients should deal with this errorCode by logging the user out and purging all locally saved content, including local edits not yet pushed to the server.

SSO_AUTHENTICATION_REQUIRED SSO authentication is the only type of authentication allowed for the user's account. This error is thrown when the user attempts to authenticate by another method (password, OpenId, etc).

Enumerator

UNKNOWN	
BAD_DATA_FORMAT	
PERMISSION_DENIED	
INTERNAL_ERROR	
DATA_REQUIRED	
LIMIT_REACHED	
QUOTA_REACHED	
INVALID_AUTH	
AUTH_EXPIRED	
DATA_CONFLICT	
ENML_VALIDATION	
SHARD_UNAVAILABLE	
LEN_TOO_SHORT	
LEN_TOO_LONG	
TOO_FEW	
TOO_MANY	
UNSUPPORTED_OPERATION	
TAKEN_DOWN	
RATE_LIMIT_REACHED	
BUSINESS_SECURITY_LOGIN_REQUIRED	
DEVICE_LIMIT_REACHED	
OPENID_ALREADY_TAKEN	
INVALID_OPENID_TOKEN	
USER_NOT_ASSOCIATED	
USER_NOT_REGISTERED	
USER_ALREADY_ASSOCIATED	
ACCOUNT_CLEAR	
SSO_AUTHENTICATION_REQUIRED	

6.1.3.7 EDAMInvalidContactReason

```
enum class qevercloud::EDAMInvalidContactReason  [strong]
```

An enumeration that provides a reason for why a given contact was invalid, for example, as thrown via an EDAMInvalidContactsException.

BAD_ADDRESS The contact information does not represent a valid address for a recipient. Clients should be validating and normalizing contacts, so receiving this error code commonly represents a client error.

DUPLICATE_CONTACT If the method throwing this exception accepts a list of contacts, this error code indicates that the given contact is a duplicate of another contact in the list. Note that the server may clean up contacts, and that this cleanup occurs before checking for duplication. Receiving this error is commonly an indication of a client issue, since client should be normalizing contacts and removing duplicates. All instances that are duplicates are returned. For example, if a list of 5 contacts has the same e-mail address twice, the two conflicting e-mail address contacts will be returned.

NO_CONNECTION Indicates that the given contact, an Evernote type contact, is not connected to the user for which the call is being made. It is possible that clients are out of sync with the server and should re-synchronize their identities and business user state. See Identity.userConnected for more information on user connections.

Note that if multiple reasons may apply, only one is returned. The precedence order is BAD_ADDRESS, DUPLICATE_CONTACT, NO_CONNECTION, meaning that if a contact has a bad address and is also duplicated, it will be returned as a BAD_ADDRESS.

Enumerator

BAD_ADDRESS	
DUPLICATE_CONTACT	
NO_CONNECTION	

6.1.3.8 EntityType

```
enum class qevercloud::EntityType  [strong]
```

Entity types

Enumerator

NOTE	
NOTEBOOK	
WORKSPACE	

6.1.3.9 LogLevel

```
enum class qevercloud::LogLevel  [strong]
```

Enumerator

Trace	
Debug	
Info	
Warn	
Error	

6.1.3.10 NoteSortOrder

`enum class qevercloud::NoteSortOrder [strong]`

This enumeration defines the possible sort ordering for notes when they are returned from a search result.

Enumerator

CREATED	
UPDATED	
RELEVANCE	
UPDATE_SEQUENCE_NUMBER	
TITLE	

6.1.3.11 PremiumOrderStatus

`enum class qevercloud::PremiumOrderStatus [strong]`

This enumeration defines the possible states of a premium account

NONE: the user has never attempted to become a premium subscriber

PENDING: the user has requested a premium account but their charge has not been confirmed

ACTIVE: the user has been charged and their premium account is in good standing

FAILED: the system attempted to charge the was denied. We will periodically attempt to re-validate their order.

CANCELLATION_PENDING: the user has requested that no further charges be made but the current account is still active.

CANCELED: the premium account was canceled either because of failure to pay or user cancelation. No more attempts will be made to activate the account.

Enumerator

NONE	
PENDING	
ACTIVE	
FAILED	
CANCELLATION_PENDING	
CANCELED	

6.1.3.12 PrivilegeLevel

`enum class qevercloud::PrivilegeLevel [strong]`

This enumeration defines the possible permission levels for a user. Free accounts will have a level of NORMAL and paid Premium accounts will have a level of PREMIUM.

Enumerator

NORMAL	
PREMIUM	
VIP	
MANAGER	
SUPPORT	
ADMIN	

6.1.3.13 QueryFormat

`enum class qevercloud::QueryFormat [strong]`

Every search query is specified as a sequence of characters. Currently, only the USER query format is supported.

Enumerator

USER	
SEXP	

6.1.3.14 RecipientStatus

`enum class qevercloud::RecipientStatus [strong]`

This enumeration defines the possible states that a notebook can be in for a recipient. It encompasses the "inMyList" boolean and default notebook status.

NOT_IN_MY_LIST The notebook is not in the recipient's list (not "joined").

IN_MY_LIST The notebook is in the recipient's notebook list (formerly, we would say that the recipient has "joined" the notebook)

IN_MY_LIST_AND_DEFAULT_NOTEBOOK The same as IN_MY_LIST and this notebook is the user's default notebook.

Enumerator

NOT_IN_MY_LIST	
IN_MY_LIST	
IN_MY_LIST_AND_DEFAULT_NOTEBOOK	

6.1.3.15 RelatedContentAccess

enum class qevercloud::RelatedContentAccess [strong]

This enumeration defines the possible ways to access related content.

NOT_ACCESSIBLE: The content is not accessible given the user's privilege level, but still worth showing as a snippet. The content url may point to a webpage that explains why not, or explains how to access that content.

DIRECT_LINK_ACCESS_OK: The content is accessible directly, and no additional login is required.

DIRECT_LINK_LOGIN_REQUIRED: The content is accessible directly, but an additional login is required.

DIRECT_LINK_EMBEDDED_VIEW: The content is accessible directly, and should be shown in an embedded web view. If the URL refers to a secured location under our control (for example, https://www.evernote.↩com/<smth>), the client may include user-specific authentication credentials with the request.

Enumerator

NOT_ACCESSIBLE	
DIRECT_LINK_ACCESS_OK	
DIRECT_LINK_LOGIN_REQUIRED	
DIRECT_LINK_EMBEDDED_VIEW	

6.1.3.16 RelatedContentType

enum class qevercloud::RelatedContentType [strong]

This enumeration defines the possible types of related content.

NEWS_ARTICLE: This related content is a news article PROFILE_PERSON: This match refers to the profile of an individual person PROFILE_ORGANIZATION: This match refers to the profile of an organization REFERENCE_↩MATERIAL: This related content is material from reference works

Enumerator

NEWS_ARTICLE	
PROFILE_PERSON	
PROFILE_ORGANIZATION	
REFERENCE_MATERIAL	

6.1.3.17 ReminderEmailConfig

enum class qevercloud::ReminderEmailConfig [strong]

An enumeration describing the configuration state related to receiving reminder e-mails from the service. Reminder e-mails summarize notes based on their Note.attributes.reminderTime values.

DO_NOT_SEND: The user has selected to not receive reminder e-mail.

SEND_DAILY_EMAIL: The user has selected to receive reminder e-mail for those days when there is a reminder.

Enumerator

DO_NOT_SEND	
SEND_DAILY_EMAIL	

6.1.3.18 ServiceLevel

```
enum class qevercloud::ServiceLevel  [strong]
```

This enumeration defines the possible tiers of service that a user may have. A ServiceLevel of BUSINESS signifies a business-only account, which can never be any other ServiceLevel.

Enumerator

BASIC	
PLUS	
PREMIUM	
BUSINESS	

6.1.3.19 SharedNotebookInstanceRestrictions

```
enum class qevercloud::SharedNotebookInstanceRestrictions  [strong]
```

An enumeration describing restrictions on the domain of shared notebook instances that are valid for a given operation, as used, for example, in NotebookRestrictions.

ASSIGNED: The domain consists of shared notebooks that belong, or are assigned, to the recipient.

NO_SHARED_NOTEBOOKS: No shared notebooks are applicable to the operation.

Enumerator

ASSIGNED	
NO_SHARED_NOTEBOOKS	

6.1.3.20 SharedNotebookPrivilegeLevel

enum class qevercloud::SharedNotebookPrivilegeLevel [strong]

Privilege levels for accessing shared notebooks.

Note that as of 2014-04, FULL_ACCESS is synonymous with BUSINESS_FULL_ACCESS. If a user is a member of a business and has FULL_ACCESS privileges, then they will automatically be granted BUSINESS_FULL_↩ ACCESS for notebooks in their business. This will happen implicitly when they attempt to access the corresponding notebooks of the business. BUSINESS_FULL_ACCESS is therefore deprecated.

READ_NOTEBOOK: Recipient is able to read the contents of the shared notebook but does not have access to information about other recipients of the notebook or the activity stream information.

MODIFY_NOTEBOOK_PLUS_ACTIVITY: Recipient has rights to read and modify the contents of the shared notebook, including the right to move notes to the trash and to create notes in the notebook. The recipient can also access information about other recipients and the activity stream.

READ_NOTEBOOK_PLUS_ACTIVITY: Recipient has READ_NOTEBOOK rights and can also access information about other recipients and the activity stream.

GROUP: If the user belongs to a group, such as a Business, that has a defined privilege level, use the privilege level of the group as the privilege for the individual.

FULL_ACCESS: Recipient has full rights to the shared notebook and recipient lists, including privilege to revoke and create invitations and to change privilege levels on invitations for individuals. For members of a business, FULL↩ _ACCESS privilege on business notebooks also grants the ability to change how the notebook will appear when shared with the business, including the rights to share and unshare the notebook with the business.

BUSINESS_FULL_ACCESS: Deprecated. See the note above about BUSINESS_FULL_ACCESS and FULL_↩ ACCESS being synonymous.

Enumerator

READ_NOTEBOOK	
MODIFY_NOTEBOOK_PLUS_ACTIVITY	
READ_NOTEBOOK_PLUS_ACTIVITY	
GROUP	
FULL_ACCESS	
BUSINESS_FULL_ACCESS	

6.1.3.21 SharedNotePrivilegeLevel

enum class qevercloud::SharedNotePrivilegeLevel [strong]

Privilege levels for accessing a shared note. All privilege levels convey "activity feed" access, which allows the recipient to access information about other recipients and the activity stream.

READ_NOTE: Recipient has rights to read the shared note.

MODIFY_NOTE: Recipient has all of the rights of READ_NOTE, plus rights to modify the shared note's content, title and resources. Other fields, including the notebook, tags and metadata, may not be modified.

FULL_ACCESS: Recipient has all of the rights of MODIFY_NOTE, plus rights to share the note with other users via email, public note links, and note sharing. Recipient may also update and remove other recipient's note sharing rights.

Enumerator

READ_NOTE	
MODIFY_NOTE	
FULL_ACCESS	

6.1.3.22 ShareRelationshipPrivilegeLevel

`enum class qevercloud::ShareRelationshipPrivilegeLevel [strong]`

Privilege levels for accessing shared notebooks.

READ_NOTEBOOK: Recipient is able to read the contents of the shared notebook but does not have access to information about other recipients of the notebook or the activity stream information.

READ_NOTEBOOK_PLUS_ACTIVITY: Recipient has READ_NOTEBOOK rights and can also access information about other recipients and the activity stream.

MODIFY_NOTEBOOK_PLUS_ACTIVITY: Recipient has rights to read and modify the contents of the shared notebook, including the right to move notes to the trash and to create notes in the notebook. The recipient can also access information about other recipients and the activity stream.

FULL_ACCESS: Recipient has full rights to the shared notebook and recipient lists, including privilege to revoke and create invitations and to change privilege levels on invitations for individuals. If the user is a member of the same group, (e.g. the same business) as the shared notebook, they will additionally be granted permissions to update the publishing status of the notebook.

Enumerator

READ_NOTEBOOK	
READ_NOTEBOOK_PLUS_ACTIVITY	
MODIFY_NOTEBOOK_PLUS_ACTIVITY	
FULL_ACCESS	

6.1.3.23 SponsoredGroupRole

`enum class qevercloud::SponsoredGroupRole [strong]`

Enumeration of the roles that a User can have within a sponsored group.

GROUP_MEMBER: The user is a member of the group with no special privileges.

GROUP_ADMIN: The user is an administrator within the group.

GROUP_OWNER: The user is the owner of the group.

Enumerator

GROUP_MEMBER	
GROUP_ADMIN	
GROUP_OWNER	

6.1.3.24 UserIdentityType

```
enum class qevercloud::UserIdentityType  [strong]
```

Enumerator

EVERNOTE_USERID	
EMAIL	
IDENTITYID	

6.1.4 Function Documentation

6.1.4.1 evernoteNetworkProxy()

```
QEVERCLOUD_EXPORT QNetworkProxy qevercloud::evernoteNetworkProxy ( )
```

Getter for network proxy settings used by QEverCloud. If none were set explicitly, returns the same result as QNetworkProxy::applicationProxy. Hence, QEverCloud uses the same proxy settings as the application which uses QEverCloud by default.

This function is thread-safe although internally it operates on a static object containing proxy settings so it's not recommended to read and write proxy settings concurrently to avoid contention for static object.

WARNING: when QEverCloud is built with QtWebEngine and some proxy settings different from QNetworkProxy↩ ::applicationProxy are set, the OAuth call which loads the web page would not use them; instead it would use proxy settings from QNetworkProxy::applicationProxy. This limitation is imposed by Qt: https://doc.qt.↩ io/qt-5/qtwebengine-overview.html#proxy-support

6.1.4.2 initializeQEverCloud()

```
QEVERCLOUD_EXPORT void qevercloud::initializeQEverCloud ( )
```

Initialization function for QEverCloud, needs to be called once before using the library. There is no harm if it is called multiple times

6.1.4.3 libraryVersion()

```
QEVERCLOUD_EXPORT int qevercloud::libraryVersion ( )
```

QEverCloud library version.

6.1.4.4 logger()

```
QEVERCLOUD_EXPORT ILoggerPtr qevercloud::logger ( )
```

6.1.4.5 newDurableService()

```
QEVERCLOUD_EXPORT IDurableServicePtr qevercloud::newDurableService (
            IRetryPolicyPtr  = {},
            IRequestContextPtr  = {} )
```

6.1.4.6 newNoteStore()

```
QEVERCLOUD_EXPORT INoteStore * qevercloud::newNoteStore (
            QString noteStoreUrl = {},
            IRequestContextPtr ctx = {},
            QObject * parent = nullptr,
            IRetryPolicyPtr retryPolicy = {} )
```

6.1.4.7 newRequestContext()

```
QEVERCLOUD_EXPORT IRequestContextPtr qevercloud::newRequestContext (
            QString authenticationToken = {},
            qint64 requestTimeout = DEFAULT_REQUEST_TIMEOUT_MSEC,
            bool increaseRequestTimeoutExponentially = DEFAULT_REQUEST_TIMEOUT_EXPONENTIAL_↩
INCREASE,
            qint64 maxRequestTimeout = DEFAULT_MAX_REQUEST_TIMEOUT_MSEC,
            quint32 maxRequestRetryCount = DEFAULT_MAX_REQUEST_RETRY_COUNT,
            QList< QNetworkCookie > cookies = {} )
```

6.1.4.8 newRetryPolicy()

```
QEVERCLOUD_EXPORT IRetryPolicyPtr qevercloud::newRetryPolicy ( )
```

6.1.4.9 newStdErrLogger()

```
QEVERCLOUD_EXPORT ILoggerPtr qevercloud::newStdErrLogger (
            LogLevel level = LogLevel::Warn )
```

6.1.4.10 newUserStore()

```
QEVERCLOUD_EXPORT IUserStore * qevercloud::newUserStore (
            QString userStoreUrl = {},
            IRequestContextPtr ctx = {},
            QObject * parent = nullptr,
            IRetryPolicyPtr retryPolicy = {} )
```

6.1.4.11 nullLogger()

```
QEVERCLOUD_EXPORT ILoggerPtr qevercloud::nullLogger ( )
```

6.1.4.12 nullRetryPolicy()

```
QEVERCLOUD_EXPORT IRetryPolicyPtr qevercloud::nullRetryPolicy ( )
```

6.1.4.13 operator<<() [1/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const BusinessInvitationStatus value )
```

6.1.4.14 operator<<() [2/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const BusinessUserRole value )
```

6.1.4.15 operator<<() [3/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const BusinessUserStatus value )
```

6.1.4.16 operator<<() [4/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const CanMoveToContainerStatus value )
```

6.1.4.17 operator<<() [5/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const ContactType value )
```

6.1.4.18 operator<<() [6/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const EDAMErrorCode value )
```

6.1.4.19 operator<<() [7/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const EDAMInvalidContactReason value )
```

6.1.4.20 operator<<() [8/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const EntityType value )
```

6.1.4.21 operator<<() [9/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const LogLevel level )
```

6.1.4.22 operator<<() [10/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const NoteSortOrder value )
```

6.1.4.23 operator<<() [11/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const PremiumOrderStatus value )
```

6.1.4.24 operator<<() [12/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const PrivilegeLevel value )
```

6.1.4.25 operator<<() [13/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const QueryFormat value )
```

6.1.4.26 operator<<() [14/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const RecipientStatus value )
```

6.1.4.27 operator<<() [15/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const RelatedContentAccess value )
```

6.1.4.28 operator<<() [16/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const RelatedContentType value )
```

6.1.4.29 operator<<() [17/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const ReminderEmailConfig value )
```

6.1.4.30 operator<<() [18/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const ServiceLevel value )
```

6.1.4.31 operator<<() [19/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const SharedNotebookInstanceRestrictions value )
```

6.1.4.32 operator<<() [20/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const SharedNotebookPrivilegeLevel value )
```

6.1.4.33 operator<<() [21/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const SharedNotePrivilegeLevel value )
```

6.1.4.34 operator<<() [22/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const ShareRelationshipPrivilegeLevel value )
```

6.1.4.35 operator<<() [23/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const SponsoredGroupRole value )
```

6.1.4.36 operator<<() [24/48]

```
QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (
            QDebug & out,
            const UserIdentityType value )
```

6.1.4.37 operator<<() [25/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const BusinessInvitationStatus value )
```

6.1.4.38 operator<<() [26/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const BusinessUserRole value )
```

6.1.4.39 operator<<() [27/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const BusinessUserStatus value )
```

6.1.4.40 operator<<() [28/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const CanMoveToContainerStatus value )
```

6.1.4.41 operator<<() [29/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const ContactType value )
```

6.1.4.42 operator<<() [30/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const EDAMErrorCode value )
```

6.1.4.43 operator<<() [31/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const EDAMInvalidContactReason value )
```

6.1.4.44 operator<<() [32/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const EntityType value )
```

6.1.4.45 operator<<() [33/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const LogLevel level )
```

6.1.4.46 operator<<() [34/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const NoteSortOrder value )
```

6.1.4.47 operator<<() [35/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const PremiumOrderStatus value )
```

6.1.4.48 operator<<() [36/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const PrivilegeLevel value )
```

6.1.4.49 operator<<() [37/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const QueryFormat value )
```

6.1.4.50 operator<<() [38/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const RecipientStatus value )
```

6.1.4.51 operator<<() [39/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const RelatedContentAccess value )
```

6.1.4.52 operator<<() [40/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const RelatedContentType value )
```

6.1.4.53 operator<<() [41/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const ReminderEmailConfig value )
```

6.1.4.54 operator<<() [42/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const ServiceLevel value )
```

6.1.4.55 operator<<() [43/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const SharedNotebookInstanceRestrictions value )
```

6.1.4.56 operator<<() [44/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const SharedNotebookPrivilegeLevel value )
```

6.1.4.57 operator<<() [45/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const SharedNotePrivilegeLevel value )
```

6.1.4.58 operator<<() [46/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const ShareRelationshipPrivilegeLevel value )
```

6.1.4.59 operator<<() [47/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const SponsoredGroupRole value )
```

6.1.4.60 operator<<() [48/48]

```
QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (
            QTextStream & out,
            const UserIdentityType value )
```

6.1.4.61 qHash() [1/23]

```
uint qevercloud::qHash (
            BusinessInvitationStatus value )  [inline]
```

6.1.4.62 qHash() [2/23]

```
uint qevercloud::qHash (
            BusinessUserRole value )  [inline]
```

6.1.4.63 qHash() [3/23]

```
uint qevercloud::qHash (
            BusinessUserStatus value )  [inline]
```

6.1.4.64 qHash() [4/23]

```
uint qevercloud::qHash (
            CanMoveToContainerStatus value )  [inline]
```

6.1.4.65 qHash() [5/23]

```
uint qevercloud::qHash (
            ContactType value )  [inline]
```

6.1.4.66 qHash() [6/23]

```
uint qevercloud::qHash (
            EDAMErrorCode value )  [inline]
```

6.1.4.67 qHash() [7/23]

```
uint qevercloud::qHash (
            EDAMInvalidContactReason value )  [inline]
```

6.1.4.68 qHash() [8/23]

```
uint qevercloud::qHash (
            EntityType value )  [inline]
```

6.1.4.69 qHash() [9/23]

```
uint qevercloud::qHash (
            NoteSortOrder value )  [inline]
```

6.1.4.70 qHash() [10/23]

```
uint qevercloud::qHash (
            PremiumOrderStatus value ) [inline]
```

6.1.4.71 qHash() [11/23]

```
uint qevercloud::qHash (
            PrivilegeLevel value ) [inline]
```

6.1.4.72 qHash() [12/23]

```
uint qevercloud::qHash (
            QueryFormat value ) [inline]
```

6.1.4.73 qHash() [13/23]

```
uint qevercloud::qHash (
            RecipientStatus value ) [inline]
```

6.1.4.74 qHash() [14/23]

```
uint qevercloud::qHash (
            RelatedContentAccess value ) [inline]
```

6.1.4.75 qHash() [15/23]

```
uint qevercloud::qHash (
            RelatedContentType value ) [inline]
```

6.1.4.76 qHash() [16/23]

```
uint qevercloud::qHash (
            ReminderEmailConfig value ) [inline]
```

6.1.4.77 qHash() [17/23]

```
uint qevercloud::qHash (
            ServiceLevel value )  [inline]
```

6.1.4.78 qHash() [18/23]

```
uint qevercloud::qHash (
            SharedNotebookInstanceRestrictions value )  [inline]
```

6.1.4.79 qHash() [19/23]

```
uint qevercloud::qHash (
            SharedNotebookPrivilegeLevel value )  [inline]
```

6.1.4.80 qHash() [20/23]

```
uint qevercloud::qHash (
            SharedNotePrivilegeLevel value )  [inline]
```

6.1.4.81 qHash() [21/23]

```
uint qevercloud::qHash (
            ShareRelationshipPrivilegeLevel value )  [inline]
```

6.1.4.82 qHash() [22/23]

```
uint qevercloud::qHash (
            SponsoredGroupRole value )  [inline]
```

6.1.4.83 qHash() [23/23]

```
uint qevercloud::qHash (
            UserIdentityType value )  [inline]
```

6.1.4.84 resetEvernoteNetworkProxy()

```
QEVERCLOUD_EXPORT void qevercloud::resetEvernoteNetworkProxy ( )
```

Reset network proxy settings used by QEverCloud to those returned from QNetworkProxy::applicationProxy static method.

This function is thread-safe although internally it operates on a static object containing proxy settings so it's not recommended to read and write proxy settings concurrently to avoid contention for static object.

6.1.4.85 setEvernoteNetworkProxy()

```
QEVERCLOUD_EXPORT void qevercloud::setEvernoteNetworkProxy (
            QNetworkProxy proxy )
```

Setter for network proxy settings used by QEverCloud. If this function is never called, QEverCloud would use proxy settings returned from QNetworkProxy::applicationProxy static method.

This function is thread-safe although internally it operates on a static object containing proxy settings so it's not recommended to read and write proxy settings concurrently to avoid contention for static object.

WARNING: when QEverCloud is built with QtWebEngine and some proxy settings different from QNetworkProxy↩ ::applicationProxy are set, the OAuth call which loads the web page would not use them; instead it would use proxy settings from QNetworkProxy::applicationProxy. This limitation is imposed by Qt: https://doc.qt.↩ io/qt-5/qtwebengine-overview.html#proxy-support

6.1.4.86 setLogger()

```
QEVERCLOUD_EXPORT void qevercloud::setLogger (
            ILoggerPtr logger )
```

6.1.4.87 setNonceGenerator()

```
void qevercloud::setNonceGenerator (
            quint64(*)() nonceGenerator )
```

Sets the function to use for nonce generation for OAuth authentication.

The default algorithm uses qrand() so do not forget to call qsrand() in your application!

qrand() is not guaranteed to be cryptographically strong. I try to amend the fact by using QUuid::createUuid() which uses /dev/urandom if it's available. But this is no guarantee either. So if you want total control over nonce generation you can write you own algorithm.

setNonceGenerator is NOT thread safe.

6.1.4.88 toRange() [1/2]

```
template<class Container >
QAssociativeContainerConstReferenceWrapper< Container > qevercloud::toRange (
            const Container & container )
```

6.1.4.89 toRange() [2/2]

```
template<class Container >
QAssociativeContainerReferenceWrapper< Container > qevercloud::toRange (
            Container & container )
```

6.1.5 Variable Documentation

6.1.5.1 CLASSIFICATION_RECIPE_SERVICE_RECIPE

```
QEVERCLOUD_EXPORT const QString qevercloud::CLASSIFICATION_RECIPE_SERVICE_RECIPE  [extern]
```

A value for the "recipe" key in the "classifications" map in NoteAttributes that indicates the Evernote service has classified a note as being a recipe.

6.1.5.2 CLASSIFICATION_RECIPE_USER_NON_RECIPE

```
QEVERCLOUD_EXPORT const QString qevercloud::CLASSIFICATION_RECIPE_USER_NON_RECIPE  [extern]
```

A value for the "recipe" key in the "classifications" map in NoteAttributes that indicates the user has classified a note as being a non-recipe.

6.1.5.3 CLASSIFICATION_RECIPE_USER_RECIPE

```
QEVERCLOUD_EXPORT const QString qevercloud::CLASSIFICATION_RECIPE_USER_RECIPE  [extern]
```

A value for the "recipe" key in the "classifications" map in NoteAttributes that indicates the user has classified a note as being a recipe.

6.1.5.4 EDAM_APP_RATING_MAX

```
QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_APP_RATING_MAX  [extern]
```

6.1.5.5 EDAM_APP_RATING_MIN

```
QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_APP_RATING_MIN  [extern]
```

App Feedback Rating range

6.1.5.6 EDAM_APPLICATIONDATA_ENTRY_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_ENTRY_LEN_MAX  [extern]
```

The total length of an entry in an applicationData LazyMap, which is the sum of the length of the key and the value for the entry.

6.1.5.7 EDAM_APPLICATIONDATA_NAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_NAME_LEN_MAX  [extern]
```

Maximum length of an application name, which is the key in an applicationData LazyMap found in entities such as Resources and Notes.

6.1.5.8 EDAM_APPLICATIONDATA_NAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_NAME_LEN_MIN  [extern]
```

Minimum length of an application name, which is the key in an applicationData LazyMap found in entities such as Resources and Notes.

6.1.5.9 EDAM_APPLICATIONDATA_NAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_APPLICATIONDATA_NAME_REGEX  [extern]
```

An application name must match this regex. An application name is the key portion of an entry in an applicationData map as found in entities such as Resources and Notes. Note that even if both the name and value regexes match, it is still necessary to check the sum of the lengths against EDAM_APPLICATIONDATA_ENTRY_LEN_MAX.

6.1.5.10 EDAM_APPLICATIONDATA_VALUE_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_VALUE_LEN_MAX  [extern]
```

Maximum length of an applicationData value in a LazyMap, found in entities such as Resources and Notes. Note, however, that the sum of the size of hte key and value is constrained by EDAM_APPLICATIONDATA_ENTRY_↩ LEN_MAX, so the maximum length, in practice, depends upon the key value being used.

6.1.5.11 EDAM_APPLICATIONDATA_VALUE_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_VALUE_LEN_MIN  [extern]
```

Minimum length of an applicationData value in a LazyMap, found in entities such as Resources and Notes.

6.1.5.12 EDAM_APPLICATIONDATA_VALUE_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_APPLICATIONDATA_VALUE_REGEX  [extern]
```

An applicationData map value must match this regex. Note that even if both the name and value regexes match, it is still necessary to check the sum of the lengths against EDAM_APPLICATIONDATA_ENTRY_LEN_MAX.

6.1.5.13 EDAM_ATTRIBUTE_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_LEN_MAX  [extern]
```

Maximum length of any string-based attribute, in Unicode chars

6.1.5.14 EDAM_ATTRIBUTE_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_LEN_MIN  [extern]
```

Minimum length of any string-based attribute, in Unicode chars

6.1.5.15 EDAM_ATTRIBUTE_LIST_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_LIST_MAX  [extern]
```

The maximum number of values that can be stored in a list-based attribute (e.g. see UserAttributes.recentMailedAddresses)

6.1.5.16 EDAM_ATTRIBUTE_MAP_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_MAP_MAX  [extern]
```

The maximum number of entries that can be stored in a map-based attribute such as applicationData fields in Resources and Notes.

6.1.5.17 EDAM_ATTRIBUTE_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_ATTRIBUTE_REGEX  [extern]
```

Any string-based attribute must match the provided regular expression. This excludes all Unicode line endings and control characters.

6.1.5.18 EDAM_BUSINESS_MARKETING_CODE_REGEX_PATTERN

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_BUSINESS_MARKETING_CODE_REGEX_PATTERN  [extern]
```

Valid Evernote Business marketing code / affiliate code format.

6.1.5.19 EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MAX  [extern]
```

The maximum length, in Unicode characters, of a description for a business notebook.

6.1.5.20 EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MIN  [extern]
```

The minimum length, in Unicode characters, of a description for a business notebook.

6.1.5.21 EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_REGEX  [extern]
```

All business notebook descriptions must match this pattern. This excludes control chars or line/paragraph separators. The string may not begin or end with whitespace.

6.1.5.22 EDAM_BUSINESS_NOTEBOOKS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTEBOOKS_MAX  [extern]
```

Maximum number of Notebooks in a business account

6.1.5.23 EDAM_BUSINESS_NOTES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTES_MAX  [extern]
```

Maximum number of Notes per business account

6.1.5.24 EDAM_BUSINESS_PHONE_NUMBER_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_PHONE_NUMBER_LEN_MAX  [extern]
```

The maximum length of a business phone number.

6.1.5.25 EDAM_BUSINESS_TAGS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_TAGS_MAX  [extern]
```

Maximum number of Tags per business account.

6.1.5.26 EDAM_BUSINESS_URI_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_URI_LEN_MAX  [extern]
```

The maximum length of an Evernote Business URI

6.1.5.27 EDAM_BUSINESS_WORKSPACES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_WORKSPACES_MAX  [extern]
```

Maximum number of Workspaces in a business account

6.1.5.28 EDAM_CONNECTED_IDENTITY_REQUEST_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_CONNECTED_IDENTITY_REQUEST_MAX  [extern]
```

The maximum number of connected identities a client can request.

6.1.5.29 EDAM_CONTENT_CLASS_FOOD_MEAL

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_FOOD_MEAL  [extern]
```

The content class prefix used for structured notes created by Evernote Food that captures the experience of a particular meal. When performing a wildcard search via filtered sync chunks or search strings, the ∗ character must be appended to this constant.

6.1.5.30 EDAM_CONTENT_CLASS_HELLO_ENCOUNTER

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_HELLO_ENCOUNTER  [extern]
```

The content class prefix used for structured notes created by Evernote Hello that represents an encounter with a person. When performing a wildcard search via filtered sync chunks or search strings, the ∗ character must be appended to this constant.

6.1.5.31 EDAM_CONTENT_CLASS_HELLO_PROFILE

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_HELLO_PROFILE  [extern]
```

The content class prefix used for structured notes created by Evernote Hello that represents the user's profile. When performing a wildcard search via filtered sync chunks or search strings, the ∗ character must be appended to this constant.

6.1.5.32 EDAM_CONTENT_CLASS_PENULTIMATE_NOTEBOOK

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_PENULTIMATE_NOTEBOOK  [extern]
```

The content class value used for structured notes created by Evernote Penultimate that represents a Penultimate notebook.

6.1.5.33 EDAM_CONTENT_CLASS_PENULTIMATE_PREFIX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_PENULTIMATE_PREFIX  [extern]
```

The content class prefix used for structured notes created by Evernote Penultimate. When performing a wildcard search via filtered sync chunks or search strings, the * character must be appended to this constant.

6.1.5.34 EDAM_CONTENT_CLASS_SKITCH

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_SKITCH  [extern]
```

The content class value used for structured image notes created by Evernote Skitch.

6.1.5.35 EDAM_CONTENT_CLASS_SKITCH_PDF

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_SKITCH_PDF  [extern]
```

The content class value used for structured PDF notes created by Evernote Skitch.

6.1.5.36 EDAM_CONTENT_CLASS_SKITCH_PREFIX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_SKITCH_PREFIX  [extern]
```

The content class prefix used for structured notes created by Evernote Skitch. When performing a wildcard search via filtered sync chunks or search strings, the * character must be appended to this constant.

6.1.5.37 EDAM_DEVICE_DESCRIPTION_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_DEVICE_DESCRIPTION_LEN_MAX  [extern]
```

Maximum length of the device description string associated with long sessions.

6.1.5.38 EDAM_DEVICE_DESCRIPTION_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_DEVICE_DESCRIPTION_REGEX  [extern]
```

Regular expression for device description strings associated with long sessions.

6.1.5.39 EDAM_DEVICE_ID_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_DEVICE_ID_LEN_MAX  [extern]
```

Maximum length of the device identifier string associated with long sessions.

6.1.5.40 EDAM_DEVICE_ID_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_DEVICE_ID_REGEX  [extern]
```

Regular expression for device identifier strings associated with long sessions.

6.1.5.41 EDAM_EMAIL_DOMAIN_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_EMAIL_DOMAIN_REGEX  [extern]
```

A regular expression that matches the part of an email address after the '@' symbol.

6.1.5.42 EDAM_EMAIL_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_EMAIL_LEN_MAX  [extern]
```

The maximum length of any email address

6.1.5.43 EDAM_EMAIL_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_EMAIL_LEN_MIN  [extern]
```

The minimum length of any email address

6.1.5.44 EDAM_EMAIL_LOCAL_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_EMAIL_LOCAL_REGEX  [extern]
```

A regular expression that matches the part of an email address before the '@' symbol.

6.1.5.45 EDAM_EMAIL_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_EMAIL_REGEX  [extern]
```

A regular expression that must match any email address given to Evernote. Email addresses must comply with RFC 2821 and 2822.

6.1.5.46 EDAM_FIND_CONTACT_DEFAULT_MAX_RESULTS

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_FIND_CONTACT_DEFAULT_MAX_RESULTS  [extern]
```

Default maximum number of results the service will return for findContact

6.1.5.47 EDAM_FIND_CONTACT_MAX_RESULTS

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_FIND_CONTACT_MAX_RESULTS  [extern]
```

Absolute maximum number of results the service will return for findContact

6.1.5.48 EDAM_FOOD_APP_CONTENT_CLASS_PREFIX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_FOOD_APP_CONTENT_CLASS_PREFIX  [extern]
```

The content class prefix used for all notes created by Evernote Food. This prefix can be used to assemble individual content class strings, or can be used to create a wildcard search to get all notes created by Food. When performing a wildcard search via filtered sync chunks or search strings, the * character must be appended to this constant.

6.1.5.49 EDAM_GET_ORDERS_MAX_RESULTS

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_GET_ORDERS_MAX_RESULTS  [extern]
```

Absolute maximum number of results the servce will return for PersistentInternalMarket.getOrders()

6.1.5.50 EDAM_GUID_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_GUID_LEN_MAX  [extern]
```

The maximum length of a GUID generated by the Evernote service

6.1.5.51 EDAM_GUID_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_GUID_LEN_MIN  [extern]
```

The minimum length of a GUID generated by the Evernote service

6.1.5.52 EDAM_GUID_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_GUID_REGEX  [extern]
```

GUIDs generated by the Evernote service will match the provided pattern

6.1.5.53 EDAM_HASH_LEN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_HASH_LEN  [extern]
```

The exact length of a MD5 hash checksum, in binary bytes. This is the exact length that must be matched for any binary hash value.

6.1.5.54 EDAM_HELLO_APP_CONTENT_CLASS_PREFIX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_HELLO_APP_CONTENT_CLASS_PREFIX  [extern]
```

The content class prefix used for all notes created by Evernote Hello. This prefix can be used to assemble individual content class strings, or can be used to create a wildcard search to get all notes created by Hello. When performing a wildcard search via filtered sync chunks or search strings, the * character must be appended to this constant.

6.1.5.55 EDAM_INDEXABLE_PLAINTEXT_MIME_TYPES

```
QEVERCLOUD_EXPORT const QSet<QString> qevercloud::EDAM_INDEXABLE_PLAINTEXT_MIME_TYPES  [extern]
```

The set of plain text MIME types that Evernote will parse and index for searching. The MIME types which start with "text/" will be handled separately by each client (i.e. hard-coded in each client).

6.1.5.56 EDAM_INDEXABLE_RESOURCE_MIME_TYPES

```
QEVERCLOUD_EXPORT const QSet<QString> qevercloud::EDAM_INDEXABLE_RESOURCE_MIME_TYPES  [extern]
```

The set of MIME types that Evernote will parse and index for searching. With exception of images, PDFs and plain text files, which are handled in a different way.

6.1.5.57 EDAM_MAX_PREFERENCES

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MAX_PREFERENCES  [extern]
```

Maximum number of name/value pairs allowed

6.1.5.58 EDAM_MAX_VALUES_PER_PREFERENCE

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MAX_VALUES_PER_PREFERENCE  [extern]
```

Maximum number of values per preference name when using values of size no greater than EDAM_↩ PREFERENCE_VALUE_LEN_MAX.

6.1.5.59 EDAM_MESSAGE_ATTACHMENT_SNIPPET_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_ATTACHMENT_SNIPPET_LEN_MAX  [extern]
```

The maximum length of a message attachment snippet in unicode characters.

6.1.5.60 EDAM_MESSAGE_ATTACHMENT_SNIPPET_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MESSAGE_ATTACHMENT_SNIPPET_REGEX  [extern]
```

The regex to validate message attachment snippets against

6.1.5.61 EDAM_MESSAGE_ATTACHMENT_TITLE_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_ATTACHMENT_TITLE_LEN_MAX  [extern]
```

The maximum length of a message attachment title in unicode characters.

6.1.5.62 EDAM_MESSAGE_ATTACHMENT_TITLE_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MESSAGE_ATTACHMENT_TITLE_REGEX  [extern]
```

The regex to validate message attachment titles against

6.1.5.63 EDAM_MESSAGE_ATTACHMENTS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_ATTACHMENTS_MAX  [extern]
```

The maximum number of attachments a Message can have.

6.1.5.64 EDAM_MESSAGE_BODY_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_BODY_LEN_MAX  [extern]
```

The maximum length of a message body in unicode characters.

6.1.5.65 EDAM_MESSAGE_BODY_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MESSAGE_BODY_REGEX  [extern]
```

The regex to validate message.body against

6.1.5.66 EDAM_MESSAGE_RECIPIENTS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_RECIPIENTS_MAX  [extern]
```

The maximum number of recipients on a MessageThread.

6.1.5.67 EDAM_MIME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MIME_LEN_MAX  [extern]
```

The maximum length of any MIME type string given to Evernote

6.1.5.68 EDAM_MIME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MIME_LEN_MIN  [extern]
```

The minimum length of any MIME type string given to Evernote

6.1.5.69 EDAM_MIME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_REGEX  [extern]
```

Any MIME type string given to Evernote must match the provided pattern. E.g.: image/gif

6.1.5.70 EDAM_MIME_TYPE_AAC

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_AAC  [extern]
```

Canonical MIME type string for AAC audio resources

6.1.5.71 EDAM_MIME_TYPE_AMR

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_AMR  [extern]
```

Canonical MIME type string for AMR audio resources

6.1.5.72 EDAM_MIME_TYPE_BMP

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_BMP  [extern]
```

Canonical MIME type string for BMP image resources

6.1.5.73 EDAM_MIME_TYPE_DEFAULT

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_DEFAULT  [extern]
```

MIME type used for attachments of an unspecified type

6.1.5.74 EDAM_MIME_TYPE_GIF

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_GIF  [extern]
```

Canonical MIME type string for GIF image resources

6.1.5.75 EDAM_MIME_TYPE_INK

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_INK  [extern]
```

Canonical MIME type string for Evernote Ink resources

6.1.5.76 EDAM_MIME_TYPE_JPEG

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_JPEG  [extern]
```

Canonical MIME type string for JPEG image resources

6.1.5.77 EDAM_MIME_TYPE_M4A

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_M4A  [extern]
```

Canonical MIME type string for MP4 audio resources

6.1.5.78 EDAM_MIME_TYPE_MP3

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_MP3  [extern]
```

Canonical MIME type string for MP3 audio resources

6.1.5.79 EDAM_MIME_TYPE_MP4_VIDEO

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_MP4_VIDEO  [extern]
```

Canonical MIME type string for MP4 video resources

6.1.5.80 EDAM_MIME_TYPE_PDF

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_PDF  [extern]
```

Canonical MIME type string for PDF resources

6.1.5.81 EDAM_MIME_TYPE_PNG

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_PNG  [extern]
```

Canonical MIME type string for PNG image resources

6.1.5.82 EDAM_MIME_TYPE_TIFF

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_TIFF  [extern]
```

Canonical MIME type string for TIFF image resources

6.1.5.83 EDAM_MIME_TYPE_WAV

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_WAV  [extern]
```

Canonical MIME type string for WAV audio resources

6.1.5.84 EDAM_MIME_TYPES

```
QEVERCLOUD_EXPORT const QSet<QString> qevercloud::EDAM_MIME_TYPES  [extern]
```

The set of resource MIME types that are expected to be handled correctly by all of the major Evernote client applications.

6.1.5.85 EDAM_NOTE_BUSINESS_SHARED_NOTE_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_BUSINESS_SHARED_NOTE_MAX  [extern]
```

Maximum number of SharedNote records per business note

6.1.5.86 EDAM_NOTE_CONTENT_CLASS_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_CLASS_LEN_MAX  [extern]
```

The maximum length of the content class attribute of a note.

6.1.5.87 EDAM_NOTE_CONTENT_CLASS_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_CLASS_LEN_MIN  [extern]
```

The minimum length of the content class attribute of a note.

6.1.5.88 EDAM_NOTE_CONTENT_CLASS_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_CONTENT_CLASS_REGEX  [extern]
```

The regular expression that the content class of a note must match to be valid.

6.1.5.89 EDAM_NOTE_CONTENT_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_LEN_MAX  [extern]
```

Maximum length of a Note.content field Note.content fields must comply with the ENML DTD.

6.1.5.90 EDAM_NOTE_CONTENT_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_LEN_MIN  [extern]
```

Minimum length of a Note.content field. Note.content fields must comply with the ENML DTD.

6.1.5.91 EDAM_NOTE_LOCK_VIEWERS_NOTES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_LOCK_VIEWERS_NOTES_MAX  [extern]
```

The maximum number of separate notes that may be queried in a single call to NoteStore.getViewersForNotes.

6.1.5.92 EDAM_NOTE_PERSONAL_SHARED_NOTE_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_PERSONAL_SHARED_NOTE_MAX  [extern]
```

Maximum number of SharedNote records per personal note

6.1.5.93 EDAM_NOTE_RESOURCES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_RESOURCES_MAX  [extern]
```

The maximum number of Resources per Note

6.1.5.94 EDAM_NOTE_SIZE_MAX_FREE

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_SIZE_MAX_FREE  [extern]
```

Maximum total size of a Note that can be added to a Free account. The size of a note is calculated as: ENML content length (in Unicode characters) plus the sum of all resource sizes (in bytes).

6.1.5.95 EDAM_NOTE_SIZE_MAX_PREMIUM

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_SIZE_MAX_PREMIUM  [extern]
```

Maximum total size of a Note that can be added to a Premium account. The size of a note is calculated as: ENML content length (in Unicode characters) plus the sum of all resource sizes (in bytes).

6.1.5.96 EDAM_NOTE_SOURCE_MAIL_CLIP

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_MAIL_CLIP  [extern]
```

Standardized value for the 'source' NoteAttribute for notes that were clipped from an email message.

6.1.5.97 EDAM_NOTE_SOURCE_MAIL_SMTP_GATEWAY

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_MAIL_SMTP_GATEWAY  [extern]
```

Standardized value for the 'source' NoteAttribute for notes that were created via email sent to Evernote's email interface.

6.1.5.98 EDAM_NOTE_SOURCE_WEB_CLIP

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_WEB_CLIP  [extern]
```

Standardized value for the 'source' NoteAttribute for notes that were clipped from the web in some manner.

6.1.5.99 EDAM_NOTE_SOURCE_WEB_CLIP_SIMPLIFIED

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_WEB_CLIP_SIMPLIFIED  [extern]
```

Standardized value for the 'source' NoteAttribute for notes that were clipped using the "simplified article" function of the clipper.

6.1.5.100 EDAM_NOTE_TAGS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TAGS_MAX  [extern]
```

The maximum number of Tags per Note

6.1.5.101 EDAM_NOTE_TITLE_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_LEN_MAX  [extern]
```

The maximum length of a Note.title, in Unicode characters

6.1.5.102 EDAM_NOTE_TITLE_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_LEN_MIN  [extern]
```

The minimum length of a Note.title, in Unicode characters

6.1.5.103 EDAM_NOTE_TITLE_QUALITY_HIGH

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_HIGH  [extern]
```

A NoteAttributes.noteTitleQuality value indicating that the quality of an automatically generated note title is high. Examples of high quality titles include those based on a scanned business card, such as "John Doe - Scanned Business Card".

6.1.5.104 EDAM_NOTE_TITLE_QUALITY_LOW

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_LOW  [extern]
```

A NoteAttributes.noteTitleQuality value indicating that the quality of an automatically generated note title is low. Examples of low quality titles include those based on a note's type and location, such as "Snapshot from 123 Sesame Street in New York".

6.1.5.105 EDAM_NOTE_TITLE_QUALITY_MEDIUM

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_MEDIUM  [extern]
```

A NoteAttributes.noteTitleQuality value indicating that the quality of an automatically generated note title is medium. Examples of medium quality titles include those based on a calendar entry, such as "Note from Weekly Staff Meeting".

6.1.5.106 EDAM_NOTE_TITLE_QUALITY_UNTITLED

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_UNTITLED  [extern]
```

A NoteAttributes.noteTitleQuality value indicating that a note has no meaningful title, only a placeholder value such as "Untitled Note".

6.1.5.107 EDAM_NOTE_TITLE_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_TITLE_REGEX  [extern]
```

All Note.title fields must match this pattern. This excludes control chars or line/paragraph separators. The string may not begin or end with whitespace.

6.1.5.108 EDAM_NOTEBOOK_BUSINESS_SHARED_NOTEBOOK_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_BUSINESS_SHARED_NOTEBOOK_MAX  [extern]
```

Maximum number of shared notebooks per business notebook

6.1.5.109 EDAM_NOTEBOOK_NAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_NAME_LEN_MAX  [extern]
```

The maximum length of a Notebook.name, in Unicode characters

6.1.5.110 EDAM_NOTEBOOK_NAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_NAME_LEN_MIN  [extern]
```

The minimum length of a Notebook.name, in Unicode characters

6.1.5.111 EDAM_NOTEBOOK_NAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTEBOOK_NAME_REGEX  [extern]
```

All Notebook.name fields must match this pattern. This excludes control chars or line/paragraph separators. The string may not begin or end with whitespace.

6.1.5.112 EDAM_NOTEBOOK_PERSONAL_SHARED_NOTEBOOK_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_PERSONAL_SHARED_NOTEBOOK_MAX  [extern]
```

Maximum number of shared notebooks per personal notebook

6.1.5.113 EDAM_NOTEBOOK_STACK_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_STACK_LEN_MAX  [extern]
```

The maximum length of a Notebook.stack, in Unicode characters

6.1.5.114 EDAM_NOTEBOOK_STACK_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_STACK_LEN_MIN  [extern]
```

The minimum length of a Notebook.stack, in Unicode characters

6.1.5.115 EDAM_NOTEBOOK_STACK_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTEBOOK_STACK_REGEX  [extern]
```

All Notebook.stack fields must match this pattern. This excludes control chars or line/paragraph separators. The string may not begin or end with whitespace.

6.1.5.116 EDAM_OPEN_ID_ACCESS_TOKEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_OPEN_ID_ACCESS_TOKEN_MAX  [extern]
```

Maximum length for OpenID token. There is no official enforced limit. The length of the Token ID depends on the provider. 1000 seems to be the safest value at this time.

6.1.5.117 EDAM_PREFERENCE_BUSINESS_DEFAULT_NOTEBOOK

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_BUSINESS_DEFAULT_NOTEBOOK  [extern]
```

The name of the preferences entry that contains the notebook GUID (not the linked notebook) of the default business notebook. It must be in the format EDAM_GUID_REGEX. If a default business notebook is not set and the user is a business user the user should be prompted to set the default business notebook. The default business notebook must be a read/write notebook. Whenever the default business notebook guid is used, it must be revalidiated as a writable notebook. If it is not valid, the user should be re-prompted to set the value. This value is used by clients only.

6.1.5.118 EDAM_PREFERENCE_BUSINESS_QUICKNOTE

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_BUSINESS_QUICKNOTE  [extern]
```

The name of the preferences entry that contains a boolean indicating that default quicknotes should go into a business notebook. The EDAM_PREFERENCE_BUSINESS_DEFAULT_NOTEBOOK must be set correctly for this preference to be honored. The quicknote preferences should only be set to "true", if quicknote should use a business notebook. Any value other than "true" (or the omission of a value) should be treated as "false". In this case, quicknotes should be created in in the user's personal default notebook. The interface should not allow users to set quicknote to a business notebook without a valid default business notebook selected, however, clients should handle the edge case of an invalid business notebook guid. If a user stops being a business user or does not have write access to any business notebooks the quicknote preference should be ignored.

6.1.5.119 EDAM_PREFERENCE_NAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_NAME_LEN_MAX  [extern]
```

Maximum length of a preference name

6.1.5.120 EDAM_PREFERENCE_NAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_NAME_LEN_MIN  [extern]
```

Minimum length of a preference name

6.1.5.121 EDAM_PREFERENCE_NAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_NAME_REGEX  [extern]
```

A preference name must match this regex.

6.1.5.122 EDAM_PREFERENCE_ONLY_ONE_VALUE_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_ONLY_ONE_VALUE_LEN_MAX  [extern]
```

The maximum length of a preference value if you only use one value per preference rather than up to EDAM_↩ MAX_VALUES_PER_PREFERENCE. This option is useful if you want a single string that is larger than EDAM↩ _PREFERENCE_VALUE_LEN_MAX and would otherwise need to split the string into multiple pieces to store it.

6.1.5.123 EDAM_PREFERENCE_ONLY_ONE_VALUE_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_ONLY_ONE_VALUE_REGEX  [extern]
```

A preference value must match this regex if you are using a single value for a preference.

6.1.5.124 EDAM_PREFERENCE_SHORTCUTS

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_SHORTCUTS  [extern]
```

The name of the preferences entry that contains shortcuts.

6.1.5.125 EDAM_PREFERENCE_SHORTCUTS_MAX_VALUES

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_SHORTCUTS_MAX_VALUES  [extern]
```

The maximum number of shortcuts that a user may have.

6.1.5.126 EDAM_PREFERENCE_VALUE_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_VALUE_LEN_MAX  [extern]
```

Maximum length of a preference value

6.1.5.127 EDAM_PREFERENCE_VALUE_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_VALUE_LEN_MIN  [extern]
```

Minimum length of a preference value

6.1.5.128 EDAM_PREFERENCE_VALUE_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_VALUE_REGEX  [extern]
```

A preference value must match this regex if you are using more than a single value for a preference.

6.1.5.129 EDAM_PROMOTION_ID_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PROMOTION_ID_LEN_MAX  [extern]
```

The maximum length of a promotion ID in unicode characters.

6.1.5.130 EDAM_PROMOTION_ID_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PROMOTION_ID_REGEX  [extern]
```

The regex to validate promotion IDs against.

6.1.5.131 EDAM_PUBLISHING_DESCRIPTION_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_DESCRIPTION_LEN_MAX  [extern]
```

The maximum length of a Publishing.publicDescription field.

6.1.5.132 EDAM_PUBLISHING_DESCRIPTION_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_DESCRIPTION_LEN_MIN  [extern]
```

The minimum length of a Publishing.publicDescription field.

6.1.5.133 EDAM_PUBLISHING_DESCRIPTION_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PUBLISHING_DESCRIPTION_REGEX  [extern]
```

Any public notebook's Publishing.publicDescription field must match this pattern. No control chars or line/paragraph separators, and can't start or end with whitespace.

6.1.5.134 EDAM_PUBLISHING_URI_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_URI_LEN_MAX  [extern]
```

The maximum length of a public notebook URI component

6.1.5.135 EDAM_PUBLISHING_URI_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_URI_LEN_MIN  [extern]
```

The minimum length of a public notebook URI component

6.1.5.136 EDAM_PUBLISHING_URI_PROHIBITED

```
QEVERCLOUD_EXPORT const QSet<QString> qevercloud::EDAM_PUBLISHING_URI_PROHIBITED  [extern]
```

The set of strings that may not be used as a publishing URI

6.1.5.137 EDAM_PUBLISHING_URI_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PUBLISHING_URI_REGEX  [extern]
```

A public notebook URI component must match the provided pattern

6.1.5.138 EDAM_RELATED_MAX_EXPERTS

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_EXPERTS  [extern]
```

The maximum number of experts that will be returned from a findRelated() query

6.1.5.139 EDAM_RELATED_MAX_NOTEBOOKS

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_NOTEBOOKS  [extern]
```

The maximum number of notebooks that will be returned from a findRelated() query.

6.1.5.140 EDAM_RELATED_MAX_NOTES

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_NOTES  [extern]
```

The maximum number of notes that will be returned from a findRelated() query.

6.1.5.141 EDAM_RELATED_MAX_RELATED_CONTENT

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_RELATED_CONTENT  [extern]
```

The maximum number of related content snippets that will be returned from a findRelated() query.

6.1.5.142 EDAM_RELATED_MAX_TAGS

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_TAGS  [extern]
```

The maximum number of tags that will be returned from a findRelated() query.

6.1.5.143 EDAM_RELATED_PLAINTEXT_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_PLAINTEXT_LEN_MAX  [extern]
```

The maximum length of the plain text in a findRelated query, assuming that plaintext is being provided.

6.1.5.144 EDAM_RELATED_PLAINTEXT_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_PLAINTEXT_LEN_MIN  [extern]
```

The minimum length of the plain text in a findRelated query, assuming that plaintext is being provided.

6.1.5.145 EDAM_RESOURCE_SIZE_MAX_FREE

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RESOURCE_SIZE_MAX_FREE  [extern]
```

Maximum size of a resource, in bytes, for Free accounts

6.1.5.146 EDAM_RESOURCE_SIZE_MAX_PREMIUM

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RESOURCE_SIZE_MAX_PREMIUM  [extern]
```

Maximum size of a resource, in bytes, for Premium accounts

6.1.5.147 EDAM_SAVED_SEARCH_NAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SAVED_SEARCH_NAME_LEN_MAX  [extern]
```

The maximum length of a SavedSearch.name field

6.1.5.148 EDAM_SAVED_SEARCH_NAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SAVED_SEARCH_NAME_LEN_MIN  [extern]
```

The minimum length of a SavedSearch.name field

6.1.5.149 EDAM_SAVED_SEARCH_NAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SAVED_SEARCH_NAME_REGEX  [extern]
```

SavedSearch.name fields must match this pattern. No control chars or line/paragraph separators, and can't start or end with whitespace.

6.1.5.150 EDAM_SEARCH_QUERY_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_QUERY_LEN_MAX  [extern]
```

The maximum length of a user search query string in Unicode chars

6.1.5.151 EDAM_SEARCH_QUERY_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_QUERY_LEN_MIN  [extern]
```

The minimum length of a user search query string in Unicode chars

6.1.5.152 EDAM_SEARCH_QUERY_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SEARCH_QUERY_REGEX  [extern]
```

Search queries must match the provided pattern. This is used for both ad-hoc queries and SavedSearch.query fields. This excludes all control characters and line/paragraph separators.

6.1.5.153 EDAM_SEARCH_SUGGESTIONS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_SUGGESTIONS_MAX  [extern]
```

Maximum number of search suggestions that can be returned

6.1.5.154 EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MAX  [extern]
```

Maximum length of the search suggestion prefix

6.1.5.155 EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MIN  [extern]
```

Minimum length of the search suggestion prefix

6.1.5.156 EDAM_SNIPPETS_NOTES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SNIPPETS_NOTES_MAX  [extern]
```

The maximium number of note snippets you can retrieve in a single request

6.1.5.157 EDAM_SOURCE_APPLICATION_ANDROID_SHARE_EXTENSION

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_ANDROID_SHARE_EXTENSION
[extern]
```

The NoteAttributes.sourceApplication value used for notes captured with the Android share extension.

6.1.5.158 EDAM_SOURCE_APPLICATION_EN_SCANSNAP

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_EN_SCANSNAP  [extern]
```

The NoteAttributes.sourceApplication value used for notes captured by PFU ScanSnap Evernote Edition.

6.1.5.159 EDAM_SOURCE_APPLICATION_EWC

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_EWC  [extern]
```

The NoteAttributes.sourceApplication value used for notes captured with the Embedded Web Clipper.

6.1.5.160 EDAM_SOURCE_APPLICATION_IOS_SHARE_EXTENSION

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_IOS_SHARE_EXTENSION  [extern]
```

The NoteAttributes.sourceApplication value used for notes captured with the iOS share extension.

6.1.5.161 EDAM_SOURCE_APPLICATION_MOLESKINE

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_MOLESKINE  [extern]
```

The NoteAttributes.sourceApplication value used for notes captured by the Moleskine page camera.

6.1.5.162 EDAM_SOURCE_APPLICATION_POSTIT

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_POSTIT  [extern]
```

The NoteAttributes.sourceApplication value used for notes captured by the Post-it camera.

6.1.5.163 EDAM_SOURCE_APPLICATION_WEB_CLIPPER

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_WEB_CLIPPER  [extern]
```

The NoteAttributes.sourceApplication value used for notes captured with the Evernote Web Clipper.

6.1.5.164 EDAM_SOURCE_OUTLOOK_CLIPPER

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_OUTLOOK_CLIPPER  [extern]
```

The NoteAttributes.source value used for notes captured by the Microsoft Outlook clipper.

6.1.5.165 EDAM_TAG_NAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TAG_NAME_LEN_MAX  [extern]
```

The maximum length of a Tag.name, in Unicode characters

6.1.5.166 EDAM_TAG_NAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TAG_NAME_LEN_MIN  [extern]
```

The minimum length of a Tag.name, in Unicode characters

6.1.5.167 EDAM_TAG_NAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_TAG_NAME_REGEX  [extern]
```

All Tag.name fields must match this pattern. This excludes control chars, commas or line/paragraph separators. The string may not begin or end with whitespace.

6.1.5.168 EDAM_TIMEZONE_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TIMEZONE_LEN_MAX  [extern]
```

The maximum length of a timezone specification string

6.1.5.169 EDAM_TIMEZONE_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TIMEZONE_LEN_MIN  [extern]
```

The minimum length of a timezone specification string

6.1.5.170 EDAM_TIMEZONE_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_TIMEZONE_REGEX  [extern]
```

Any timezone string given to Evernote must match the provided pattern. This permits either a locale-based standard timezone or a GMT offset. E.g.:

- America/Los_Angeles
- GMT+08:00

6.1.5.171 EDAM_USER_LINKED_NOTEBOOK_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_LINKED_NOTEBOOK_MAX  [extern]
```

Maximum number of linked notebooks per account, for a free account.

6.1.5.172 EDAM_USER_LINKED_NOTEBOOK_MAX_PREMIUM

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_LINKED_NOTEBOOK_MAX_PREMIUM  [extern]
```

Maximum number of linked notebooks per account, for a premium account. Users who are part of an active business are also covered under "premium".

6.1.5.173 EDAM_USER_MAIL_LIMIT_DAILY_FREE

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_MAIL_LIMIT_DAILY_FREE  [extern]
```

The number of emails of any type that can be sent by a user with a Free account from the service per day. If an email is sent to two different recipients, this counts as two emails.

6.1.5.174 EDAM_USER_MAIL_LIMIT_DAILY_PREMIUM

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_MAIL_LIMIT_DAILY_PREMIUM  [extern]
```

The number of emails of any type that can be sent by a user with a Premium account from the service per day. If an email is sent to two different recipients, this counts as two emails.

6.1.5.175 EDAM_USER_NAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NAME_LEN_MAX  [extern]
```

Maximum length of the User.name field

6.1.5.176 EDAM_USER_NAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NAME_LEN_MIN  [extern]
```

Minimum length of the User.name field

6.1.5.177 EDAM_USER_NAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_USER_NAME_REGEX  [extern]
```

The User.name field must match this pattern, which excludes line endings and control characters.

6.1.5.178 EDAM_USER_NOTEBOOKS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NOTEBOOKS_MAX  [extern]
```

Maximum number of Notebooks per user

6.1.5.179 EDAM_USER_NOTES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NOTES_MAX  [extern]
```

Maximum number of Notes per user

6.1.5.180 EDAM_USER_PASSWORD_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_PASSWORD_LEN_MAX  [extern]
```

The maximum length of an Evernote user password

6.1.5.181 EDAM_USER_PASSWORD_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_PASSWORD_LEN_MIN  [extern]
```

The minimum length of an Evernote user password

6.1.5.182 EDAM_USER_PASSWORD_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_USER_PASSWORD_REGEX  [extern]
```

Evernote user passwords must match this regular expression

6.1.5.183 EDAM_USER_PROFILE_PHOTO_MAX_BYTES

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_PROFILE_PHOTO_MAX_BYTES  [extern]
```

Maximum user profile photo size, in bytes, that clients may send to the service. Photos may be resized before being stored on the service.

6.1.5.184 EDAM_USER_RECENT_MAILED_ADDRESSES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_RECENT_MAILED_ADDRESSES_MAX  [extern]
```

Maximum number of recent email addresses that are maintained (see UserAttributes.recentMailedAddresses)

6.1.5.185 EDAM_USER_SAVED_SEARCHES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_SAVED_SEARCHES_MAX  [extern]
```

Maximum number of SavedSearches per account

6.1.5.186 EDAM_USER_TAGS_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_TAGS_MAX  [extern]
```

Maximum number of Tags per account

6.1.5.187 EDAM_USER_UPLOAD_LIMIT_BUSINESS

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS  [extern]
```

The number of bytes of new data that may be uploaded to a Business user's personal account each month. Note that content uploaded into the Business notebooks by the user does not count against this limit.

6.1.5.188 EDAM_USER_UPLOAD_LIMIT_BUSINESS_FIRST_MONTH

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS_FIRST_MONTH  [extern]
```

The number of bytes of new data that may be uploaded to new business account during the first month. 50GB.

6.1.5.189 EDAM_USER_UPLOAD_LIMIT_BUSINESS_NEXT_MONTH

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS_NEXT_MONTH  [extern]
```

The number of bytes of new data that may be uploaded to a business account for the next month. 20GB.

6.1.5.190 EDAM_USER_UPLOAD_LIMIT_BUSINESS_PER_USER

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS_PER_USER  [extern]
```

The number of bytes of new data that may be uploaded to a Business for each member of the business per month. The total bytes available can be determined by multiplying this with the number of business users.

6.1.5.191 EDAM_USER_UPLOAD_LIMIT_FREE

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_FREE  [extern]
```

The number of bytes of new data that may be uploaded to a Free user's account each month.

6.1.5.192 EDAM_USER_UPLOAD_LIMIT_PLUS

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_PLUS  [extern]
```

The number of bytes of new data that may be uploaded each month to an account at a Plus service level.

6.1.5.193 EDAM_USER_UPLOAD_LIMIT_PREMIUM

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_PREMIUM  [extern]
```

The number of bytes of new data that may be uploaded to a Premium user's account each month.

6.1.5.194 EDAM_USER_UPLOAD_SURVEY_THRESHOLD

```
QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_SURVEY_THRESHOLD  [extern]
```

The number of bytes of new data uploaded in a monthly quota cycle at which point users should be prompted with a survey to gather information on how they are using Evernote.

6.1.5.195 EDAM_USER_USERNAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_USERNAME_LEN_MAX  [extern]
```

The maximum length of an Evernote username

6.1.5.196 EDAM_USER_USERNAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_USERNAME_LEN_MIN  [extern]
```

The minimum length of an Evernote username

6.1.5.197 EDAM_USER_USERNAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_USER_USERNAME_REGEX  [extern]
```

Any Evernote User.username field must match this pattern. This restricts usernames to a format that could permit use as a domain name component. E.g. "username.whatever.evernote.com"

6.1.5.198 EDAM_USER_WORKSPACES_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_WORKSPACES_MAX  [extern]
```

Maximum number of Workspaces per user

6.1.5.199 EDAM_VAT_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_VAT_REGEX  [extern]
```

A regular expression that must match any VAT ID given to Evernote. ref http://en.wikipedia.↩
org/wiki/VAT_identification_number ref http://my.safaribooksonline.com/book/programming/re

6.1.5.200 EDAM_VERSION_MAJOR

```
QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_VERSION_MAJOR  [extern]
```

The major version number for the current revision of the EDAM protocol. Clients pass this to the service using UserStore.checkVersion at the beginning of a session to confirm that they are not out of date.

6.1.5.201 EDAM_VERSION_MINOR

```
QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_VERSION_MINOR  [extern]
```

The minor version number for the current revision of the EDAM protocol. Clients pass this to the service using UserStore.checkVersion at the beginning of a session to confirm that they are not out of date.

6.1.5.202 EDAM_WORKSPACE_DESCRIPTION_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_WORKSPACE_DESCRIPTION_LEN_MAX  [extern]
```

The maximum length of a Workspace.description, in Unicode characters

6.1.5.203 EDAM_WORKSPACE_NAME_LEN_MAX

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_WORKSPACE_NAME_LEN_MAX  [extern]
```

The maximum length of a Workspace.name, in Unicode characters

6.1.5.204 EDAM_WORKSPACE_NAME_LEN_MIN

```
QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_WORKSPACE_NAME_LEN_MIN  [extern]
```

The minimum length of a Workspace.name, in Unicode characters

6.1.5.205 EDAM_WORKSPACE_NAME_REGEX

```
QEVERCLOUD_EXPORT const QString qevercloud::EDAM_WORKSPACE_NAME_REGEX  [extern]
```

All Workspace.name fields must match this pattern. This excludes control chars or line/paragraph separators. The string may not begin or end with whitespace.

6.1.5.206 EverCloudExceptionData

```
class QEVERCLOUD_EXPORT qevercloud::EverCloudExceptionData
```

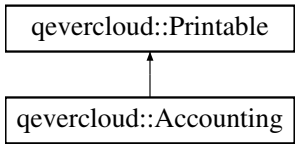
Chapter 7

Class Documentation

7.1 qevercloud::Accounting Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::Accounting:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Accounting &other) const
- bool operator!= (const Accounting &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Timestamp > uploadLimitEnd
- Optional< qint64 > uploadLimitNextMonth
- Optional< PremiumOrderStatus > premiumServiceStatus
- Optional< QString > premiumOrderNumber
- Optional< QString > premiumCommerceService
- Optional< Timestamp > premiumServiceStart
- Optional< QString > premiumServiceSKU
- Optional< Timestamp > lastSuccessfulCharge
- Optional< Timestamp > lastFailedCharge
- Optional< QString > lastFailedChargeReason
- Optional< Timestamp > nextPaymentDue
- Optional< Timestamp > premiumLockUntil
- Optional< Timestamp > updated
- Optional< QString > premiumSubscriptionNumber

- Optional< Timestamp > lastRequestedCharge
- Optional< QString > currency
- Optional< qint32 > unitPrice
- Optional< qint32 > businessId
- Optional< QString > businessName
- Optional< BusinessUserRole > businessRole
- Optional< qint32 > unitDiscount
- Optional< Timestamp > nextChargeDate
- Optional< qint32 > availablePoints

7.1.1 Detailed Description

This represents the bookkeeping information for the user's subscription.

7.1.2 Member Function Documentation

7.1.2.1 operator"!=()

```
bool qevercloud::Accounting::operator!= (
            const Accounting & other ) const  [inline]
```

7.1.2.2 operator==()

```
bool qevercloud::Accounting::operator== (
            const Accounting & other ) const  [inline]
```

7.1.2.3 print()

```
virtual void qevercloud::Accounting::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.1.3 Member Data Documentation

7.1.3.1 availablePoints

`Optional< qint32 > qevercloud::Accounting::availablePoints`

NOT DOCUMENTED

7.1.3.2 businessId

`Optional< qint32 > qevercloud::Accounting::businessId`

*DEPRECATED:*See BusinessUserInfo.

7.1.3.3 businessName

`Optional< QString > qevercloud::Accounting::businessName`

*DEPRECATED:*See BusinessUserInfo.

7.1.3.4 businessRole

`Optional< BusinessUserRole > qevercloud::Accounting::businessRole`

*DEPRECATED:*See BusinessUserInfo.

7.1.3.5 currency

`Optional< QString > qevercloud::Accounting::currency`

ISO 4217 currency code

7.1.3.6 lastFailedCharge

`Optional< Timestamp > qevercloud::Accounting::lastFailedCharge`

Date the last time a charge was attempted and failed.

7.1.3.7 lastFailedChargeReason

`Optional< QString > qevercloud::Accounting::lastFailedChargeReason`

Reason provided for the charge failure

7.1.3.8 lastRequestedCharge

`Optional< Timestamp > qevercloud::Accounting::lastRequestedCharge`

Date charge last attempted

7.1.3.9 lastSuccessfulCharge

```
Optional< Timestamp > qevercloud::Accounting::lastSuccessfulCharge
```

Date the last time the user was charged. Null if never charged.

7.1.3.10 localData

```
EverCloudLocalData qevercloud::Accounting::localData
```

See the declaration of EverCloudLocalData for details

7.1.3.11 nextChargeDate

```
Optional< Timestamp > qevercloud::Accounting::nextChargeDate
```

The next time the user will be charged, may or may not be the same as nextPaymentDue

7.1.3.12 nextPaymentDue

```
Optional< Timestamp > qevercloud::Accounting::nextPaymentDue
```

The end of the billing cycle. This could be in the past if there are failed charges.

7.1.3.13 premiumCommerceService

```
Optional< QString > qevercloud::Accounting::premiumCommerceService
```

The commerce system used (paypal, Google checkout, etc)

7.1.3.14 premiumLockUntil

```
Optional< Timestamp > qevercloud::Accounting::premiumLockUntil
```

An internal variable to manage locking operations on the commerce variables.

7.1.3.15 premiumOrderNumber

```
Optional< QString > qevercloud::Accounting::premiumOrderNumber
```

The order number used by the commerce system to process recurring payments

7.1.3.16 premiumServiceSKU

```
Optional< QString > qevercloud::Accounting::premiumServiceSKU
```

The code associated with the purchase eg. monthly or annual purchase. Clients should interpret this value and localize it.

7.1.3.17 premiumServiceStart

```
Optional< Timestamp > qevercloud::Accounting::premiumServiceStart
```

The start date when this premium promotion began (this number will get overwritten if a premium service is canceled and then re-activated).

7.1.3.18 premiumServiceStatus

```
Optional< PremiumOrderStatus > qevercloud::Accounting::premiumServiceStatus
```

Indicates the phases of a premium account during the billing process.

7.1.3.19 premiumSubscriptionNumber

```
Optional< QString > qevercloud::Accounting::premiumSubscriptionNumber
```

The number number identifying the recurring subscription used to make the recurring charges.

7.1.3.20 unitDiscount

```
Optional< qint32 > qevercloud::Accounting::unitDiscount
```

discount per seat in negative amount and smallest unit of the currency (e.g. cents for USD)

7.1.3.21 unitPrice

```
Optional< qint32 > qevercloud::Accounting::unitPrice
```

charge in the smallest unit of the currency (e.g. cents for USD)

7.1.3.22 updated

```
Optional< Timestamp > qevercloud::Accounting::updated
```

The date any modification where made to this record.

7.1.3.23 uploadLimitEnd

```
Optional< Timestamp > qevercloud::Accounting::uploadLimitEnd
```

The date and time when the current upload limit expires. At this time, the monthly upload count reverts to 0 and a new limit is imposed. This date and time is exclusive, so this is effectively the start of the new month.

7.1.3.24 uploadLimitNextMonth

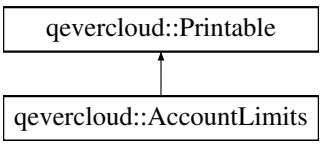
```
Optional< qint64 > qevercloud::Accounting::uploadLimitNextMonth
```

When uploadLimitEnd is reached, the service will change uploadLimit to uploadLimitNextMonth. If a premium account is canceled, this mechanism will reset the quota appropriately.

7.2 qevercloud::AccountLimits Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::AccountLimits:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const AccountLimits &other) const
- bool operator!= (const AccountLimits &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint32 > userMailLimitDaily
- Optional< qint64 > noteSizeMax
- Optional< qint64 > resourceSizeMax
- Optional< qint32 > userLinkedNotebookMax
- Optional< qint64 > uploadLimit
- Optional< qint32 > userNoteCountMax
- Optional< qint32 > userNotebookCountMax
- Optional< qint32 > userTagCountMax
- Optional< qint32 > noteTagCountMax
- Optional< qint32 > userSavedSearchesMax
- Optional< qint32 > noteResourceCountMax

7.2.1 Detailed Description

This structure is used to provide account limits that are in effect for this user.

7.2.2 Member Function Documentation

7.2.2.1 operator"!=()

```
bool qevercloud::AccountLimits::operator!= (
            const AccountLimits & other ) const  [inline]
```

7.2.2.2 operator==()

```
bool qevercloud::AccountLimits::operator== (
            const AccountLimits & other ) const  [inline]
```

7.2.2.3 print()

```
virtual void qevercloud::AccountLimits::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.2.3 Member Data Documentation

7.2.3.1 localData

```
EverCloudLocalData qevercloud::AccountLimits::localData
```

See the declaration of EverCloudLocalData for details

7.2.3.2 noteResourceCountMax

```
Optional< qint32 > qevercloud::AccountLimits::noteResourceCountMax
```

The maximum number of Resources per Note

7.2.3.3 noteSizeMax

```
Optional< qint64 > qevercloud::AccountLimits::noteSizeMax
```

Maximum total size of a Note that can be added. The size of a note is calculated as: ENML content length (in Unicode characters) plus the sum of all resource sizes (in bytes).

7.2.3.4 noteTagCountMax

`Optional< qint32 > qevercloud::AccountLimits::noteTagCountMax`

Maximum number of Tags per Note

7.2.3.5 resourceSizeMax

`Optional< qint64 > qevercloud::AccountLimits::resourceSizeMax`

Maximum size of a resource, in bytes

7.2.3.6 uploadLimit

`Optional< qint64 > qevercloud::AccountLimits::uploadLimit`

The number of bytes that can be uploaded to the account in the current month. For new notes that are created, this is the length of the note content (in Unicode characters) plus the size of each resource (in bytes). For edited notes, this is the the difference between the old length and the new length (if this is greater than 0) plus the size of each new resource.

7.2.3.7 userLinkedNotebookMax

`Optional< qint32 > qevercloud::AccountLimits::userLinkedNotebookMax`

Maximum number of linked notebooks per account.

7.2.3.8 userMailLimitDaily

`Optional< qint32 > qevercloud::AccountLimits::userMailLimitDaily`

The number of emails of any type that can be sent by a user from the service per day. If an email is sent to two different recipients, this counts as two emails.

7.2.3.9 userNotebookCountMax

`Optional< qint32 > qevercloud::AccountLimits::userNotebookCountMax`

Maximum number of Notebooks per user

7.2.3.10 userNoteCountMax

`Optional< qint32 > qevercloud::AccountLimits::userNoteCountMax`

Maximum number of Notes per user

7.2.3.11 userSavedSearchesMax

```
Optional< qint32 > qevercloud::AccountLimits::userSavedSearchesMax
```

Maximum number of SavedSearches per account

7.2.3.12 userTagCountMax

```
Optional< qint32 > qevercloud::AccountLimits::userTagCountMax
```

Maximum number of Tags per account

7.3 qevercloud::IDurableService::AsyncRequest Struct Reference

```
#include <DurableService.h>
```

Public Member Functions

- AsyncRequest (const char *name, QString description, AsyncServiceCall &&call)

Public Attributes

- const char * m_name
- QString m_description
- AsyncServiceCall m_call

7.3.1 Constructor & Destructor Documentation

7.3.1.1 AsyncRequest()

```
qevercloud::IDurableService::AsyncRequest::AsyncRequest (
            const char * name,
            QString description,
            AsyncServiceCall && call )  [inline]
```

7.3.2 Member Data Documentation

7.3.2.1 m_call

```
AsyncServiceCall qevercloud::IDurableService::AsyncRequest::m_call
```

7.3.2.2 m_description

```
QString qevercloud::IDurableService::AsyncRequest::m_description
```

7.3.2.3 m_name

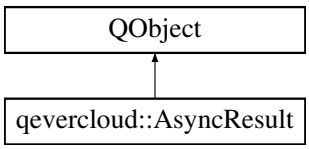
```
const char* qevercloud::IDurableService::AsyncRequest::m_name
```

7.4 qevercloud::AsyncResult Class Reference

Returned by asynchonous versions of functions.

`#include <AsyncResult.h>`

Inheritance diagram for qevercloud::AsyncResult:



Public Types

- typedef QVariant(∗ ReadFunctionType) (QByteArray replyData)

Signals

- void finished (QVariant result, EverCloudExceptionDataPtr error, IRequestContextPtr ctx)

  Emitted upon asynchronous call completition.

Public Member Functions

- AsyncResult (QString url, QByteArray postData, IRequestContextPtr ctx, ReadFunctionType readFunction=AsyncResult::asIs, bool autoDelete=true, QObject ∗parent=nullptr)
- AsyncResult (QNetworkRequest request, QByteArray postData, IRequestContextPtr ctx, ReadFunctionType readFunction=AsyncResult::asIs, bool autoDelete=true, QObject ∗parent=nullptr)
- AsyncResult (QVariant result, EverCloudExceptionDataPtr error, IRequestContextPtr ctx, bool autoDelete=true, QObject ∗parent=nullptr)
- ∼AsyncResult ()
- bool waitForFinished (int timeout=-1)

  Wait for asynchronous operation to complete.

Static Public Member Functions

- static QVariant asIs (QByteArray replyData)

Friends

- class DurableService

7.4.1 Detailed Description

Returned by asynchonous versions of functions.

Wait for AsyncResult::finished signal.

Intended usage is something like this:

```
NoteStore* ns;
Note note;
...
QObject::connect(ns->createNoteAsync(note), &AsyncResult::finished,
                 [ns](
                     QVariant result,
                     EverCloudExceptionDataPtr error,
                     IRequestContextPtr ctx)
                 {
                     if (error) {
                         // do something in case of an error
                     }
                     else {
                         Note note = result.value<Note>();
                         // process returned result
                     }
                 });
```

7.4.2 Member Typedef Documentation

7.4.2.1 ReadFunctionType

```
typedef QVariant(* qevercloud::AsyncResult::ReadFunctionType) (QByteArray replyData)
```

7.4.3 Constructor & Destructor Documentation

7.4.3.1 AsyncResult() [1/3]

```
qevercloud::AsyncResult::AsyncResult (
             QString url,
             QByteArray postData,
             IRequestContextPtr ctx,
             ReadFunctionType readFunction = AsyncResult::asIs,
             bool autoDelete = true,
             QObject * parent = nullptr )
```

7.4.3.2 AsyncResult() [2/3]

```
qevercloud::AsyncResult::AsyncResult (
            QNetworkRequest request,
            QByteArray postData,
            IRequestContextPtr ctx,
            ReadFunctionType readFunction = AsyncResult::asIs,
            bool autoDelete = true,
            QObject * parent = nullptr )
```

7.4.3.3 AsyncResult() [3/3]

```
qevercloud::AsyncResult::AsyncResult (
            QVariant result,
            EverCloudExceptionDataPtr error,
            IRequestContextPtr ctx,
            bool autoDelete = true,
            QObject * parent = nullptr )
```

Constructor accepting already prepared value and/or exception, for use in tests

7.4.3.4 ~AsyncResult()

```
qevercloud::AsyncResult::~AsyncResult ( )
```

7.4.4 Member Function Documentation

7.4.4.1 asIs()

```
static QVariant qevercloud::AsyncResult::asIs (
            QByteArray replyData )  [static]
```

7.4.4.2 finished

```
void qevercloud::AsyncResult::finished (
            QVariant result,
            EverCloudExceptionDataPtr error,
            IRequestContextPtr ctx )  [signal]
```

Emitted upon asynchronous call completition.

Parameters

result	Request result
error	Non-nullptr in case of an error. See EverCloudExceptionData for more details
ctx	Request context used to make the request

AsyncResult deletes itself after emitting this signal (if autoDelete parameter passed to its constructor was set to true). You don't have to manage it's lifetime explicitly.

7.4.4.3 waitForFinished()

```
bool qevercloud::AsyncResult::waitForFinished (
            int timeout = -1 )
```

Wait for asynchronous operation to complete.

Parameters

timeout	Maximum time to wait in milliseconds. Forever if < 0.

Returns

true if finished successfully, false in case of the timeout

7.4.5 Friends And Related Function Documentation

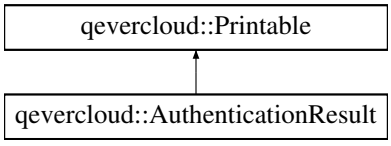
7.4.5.1 DurableService

```
friend class DurableService  [friend]
```

7.5 qevercloud::AuthenticationResult Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::AuthenticationResult:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const AuthenticationResult &other) const
- bool operator!= (const AuthenticationResult &other) const

Public Attributes

- EverCloudLocalData localData
- Timestamp currentTime = 0
- QString authenticationToken
- Timestamp expiration = 0
- Optional< User > user
- Optional< PublicUserInfo > publicUserInfo
- Optional< QString > noteStoreUrl
- Optional< QString > webApiUrlPrefix
- Optional< bool > secondFactorRequired
- Optional< QString > secondFactorDeliveryHint
- Optional< UserUrls > urls

7.5.1 Detailed Description

When an authentication (or re-authentication) is performed, this structure provides the result to the client.

7.5.2 Member Function Documentation

7.5.2.1 operator"!=()

```
bool qevercloud::AuthenticationResult::operator!= (
            const AuthenticationResult & other ) const  [inline]
```

7.5.2.2 operator==()

```
bool qevercloud::AuthenticationResult::operator== (
            const AuthenticationResult & other ) const  [inline]
```

7.5.2.3 print()

```
virtual void qevercloud::AuthenticationResult::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.5.3 Member Data Documentation

7.5.3.1 authenticationToken

```
QString qevercloud::AuthenticationResult::authenticationToken
```

Holds an opaque, ASCII-encoded token that can be used by the client to perform actions on a NoteStore.

7.5.3.2 currentTime

```
Timestamp qevercloud::AuthenticationResult::currentTime = 0
```

The server-side date and time when this result was generated.

7.5.3.3 expiration

```
Timestamp qevercloud::AuthenticationResult::expiration = 0
```

Holds the server-side date and time when the authentication token will expire. This time can be compared to "currentTime" to produce an expiration time that can be reconciled with the client's local clock.

7.5.3.4 localData

```
EverCloudLocalData qevercloud::AuthenticationResult::localData
```

See the declaration of EverCloudLocalData for details

7.5.3.5 noteStoreUrl

```
Optional< QString > qevercloud::AuthenticationResult::noteStoreUrl
```

DEPRECATED - Client applications should use urls.noteStoreUrl.

7.5.3.6 publicUserInfo

```
Optional< PublicUserInfo > qevercloud::AuthenticationResult::publicUserInfo
```

If this authentication result was achieved without full permissions to access the full User structure, this field may be set to give back a more limited public set of data.

7.5.3.7 secondFactorDeliveryHint

```
Optional< QString > qevercloud::AuthenticationResult::secondFactorDeliveryHint
```

When secondFactorRequired is set to true, this field may contain a string describing the second factor delivery method that the user has configured. This will typically be an obfuscated mobile device number, such as "(xxx) xxx-x095". This string can be displayed to the user to remind them how to obtain the required second factor.

7.5.3.8 secondFactorRequired

```
Optional< bool > qevercloud::AuthenticationResult::secondFactorRequired
```

If set to true, this field indicates that the user has enabled two-factor authentication and must enter their second factor in order to complete authentication. In this case the value of authenticationResult will be a short-lived authentication token that may only be used to make a subsequent call to completeTwoFactorAuthentication.

7.5.3.9 urls

```
Optional< UserUrls > qevercloud::AuthenticationResult::urls
```

This structure will contain all of the URLs that clients need to make requests to the Evernote service on behalf of the authenticated User.

7.5.3.10 user

```
Optional< User > qevercloud::AuthenticationResult::user
```

Holds the information about the account which was authenticated if this was a full authentication. May be absent if this particular authentication did not require user information.

7.5.3.11 webApiUrlPrefix

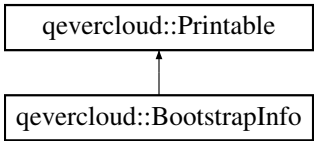
```
Optional< QString > qevercloud::AuthenticationResult::webApiUrlPrefix
```

DEPRECATED - Client applications should use urls.webApiUrlPrefix.

7.6 qevercloud::BootstrapInfo Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::BootstrapInfo:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const BootstrapInfo &other) const
- bool operator!= (const BootstrapInfo &other) const

Public Attributes

- EverCloudLocalData localData
- QList< BootstrapProfile > profiles

7.6.1 Detailed Description

This structure describes a collection of bootstrap profiles.

7.6.2 Member Function Documentation

7.6.2.1 operator"!=()

```
bool qevercloud::BootstrapInfo::operator!= (
            const BootstrapInfo & other ) const  [inline]
```

7.6.2.2 operator==()

```
bool qevercloud::BootstrapInfo::operator== (
            const BootstrapInfo & other ) const  [inline]
```

7.6.2.3 print()

```
virtual void qevercloud::BootstrapInfo::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.6.3 Member Data Documentation

7.6.3.1 localData

```
EverCloudLocalData qevercloud::BootstrapInfo::localData
```

See the declaration of EverCloudLocalData for details

7.6.3.2 profiles

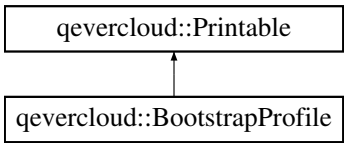
```
QList< BootstrapProfile > qevercloud::BootstrapInfo::profiles
```

List of one or more bootstrap profiles, in descending preference order.

7.7 qevercloud::BootstrapProfile Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::BootstrapProfile:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const BootstrapProfile &other) const
- bool operator!= (const BootstrapProfile &other) const

Public Attributes

- EverCloudLocalData localData
- QString name
- BootstrapSettings settings

7.7.1 Detailed Description

This structure describes a collection of bootstrap settings.

7.7.2 Member Function Documentation

7.7.2.1 operator"!=()

```
bool qevercloud::BootstrapProfile::operator!= (
            const BootstrapProfile & other ) const  [inline]
```

7.7.2.2 operator==()

```
bool qevercloud::BootstrapProfile::operator== (
            const BootstrapProfile & other ) const  [inline]
```

7.7.2.3 print()

```
virtual void qevercloud::BootstrapProfile::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.7.3 Member Data Documentation

7.7.3.1 localData

```
EverCloudLocalData qevercloud::BootstrapProfile::localData
```

See the declaration of EverCloudLocalData for details

7.7.3.2 name

```
QString qevercloud::BootstrapProfile::name
```

The unique name of the profile, which is guaranteed to remain consistent across calls to getBootstrapInfo.

7.7.3.3 settings

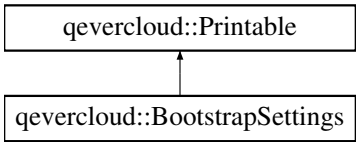
```
BootstrapSettings qevercloud::BootstrapProfile::settings
```

The settings for this profile.

7.8 qevercloud::BootstrapSettings Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::BootstrapSettings:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const BootstrapSettings &other) const
- bool operator!= (const BootstrapSettings &other) const

Public Attributes

- EverCloudLocalData localData
- QString serviceHost
- QString marketingUrl
- QString supportUrl
- QString accountEmailDomain
- Optional< bool > enableFacebookSharing
- Optional< bool > enableGiftSubscriptions
- Optional< bool > enableSupportTickets
- Optional< bool > enableSharedNotebooks
- Optional< bool > enableSingleNoteSharing
- Optional< bool > enableSponsoredAccounts
- Optional< bool > enableTwitterSharing
- Optional< bool > enableLinkedInSharing
- Optional< bool > enablePublicNotebooks
- Optional< bool > enableGoogle

7.8.1 Detailed Description

This structure describes a collection of bootstrap settings.

7.8.2 Member Function Documentation

7.8.2.1 operator"!=()

```
bool qevercloud::BootstrapSettings::operator!= (
            const BootstrapSettings & other ) const  [inline]
```

7.8.2.2 operator==()

```
bool qevercloud::BootstrapSettings::operator== (
            const BootstrapSettings & other ) const  [inline]
```

7.8.2.3 print()

```
virtual void qevercloud::BootstrapSettings::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.8.3 Member Data Documentation

7.8.3.1 accountEmailDomain

```
QString qevercloud::BootstrapSettings::accountEmailDomain
```

The domain used for an Evernote user's incoming email address, which allows notes to be emailed into an account. E.g. m.evernote.com.

7.8.3.2 enableFacebookSharing

```
Optional< bool > qevercloud::BootstrapSettings::enableFacebookSharing
```

Whether the client application should enable sharing of notes on Facebook.

7.8.3.3 enableGiftSubscriptions

```
Optional< bool > qevercloud::BootstrapSettings::enableGiftSubscriptions
```

Whether the client application should enable gift subscriptions.

7.8.3.4 enableGoogle

```
Optional< bool > qevercloud::BootstrapSettings::enableGoogle
```

Whether the client application should enable authentication with Google, for example to allow integration with a user's Gmail contacts.

7.8.3.5 enableLinkedInSharing

```
Optional< bool > qevercloud::BootstrapSettings::enableLinkedInSharing
```

NOT DOCUMENTED

7.8.3.6 enablePublicNotebooks

```
Optional< bool > qevercloud::BootstrapSettings::enablePublicNotebooks
```

NOT DOCUMENTED

7.8.3.7 enableSharedNotebooks

```
Optional< bool > qevercloud::BootstrapSettings::enableSharedNotebooks
```

Whether the client application should enable shared notebooks.

7.8.3.8 enableSingleNoteSharing

```
Optional< bool > qevercloud::BootstrapSettings::enableSingleNoteSharing
```

Whether the client application should enable single note sharing.

7.8.3.9 enableSponsoredAccounts

```
Optional< bool > qevercloud::BootstrapSettings::enableSponsoredAccounts
```

Whether the client application should enable sponsored accounts.

7.8.3.10 enableSupportTickets

```
Optional< bool > qevercloud::BootstrapSettings::enableSupportTickets
```

Whether the client application should enable in-client creation of support tickets.

7.8.3.11 enableTwitterSharing

```
Optional< bool > qevercloud::BootstrapSettings::enableTwitterSharing
```

Whether the client application should enable sharing of notes on Twitter.

7.8.3.12 localData

```
EverCloudLocalData qevercloud::BootstrapSettings::localData
```

See the declaration of EverCloudLocalData for details

7.8.3.13 marketingUrl

`QString qevercloud::BootstrapSettings::marketingUrl`

The URL stem for the Evernote corporate marketing website, e.g. `http://www.evernote.com`. This stem can be used to compose website URLs. For example, the URL of the Evernote Trunk is composed by appending "/about/trunk/" to the value of marketingUrl.

7.8.3.14 serviceHost

`QString qevercloud::BootstrapSettings::serviceHost`

The hostname and optional port for composing Evernote web service URLs. This URL can be used to access the UserStore and related services, but must not be used to compose the NoteStore URL. Client applications must handle serviceHost values that include only the hostname (e.g. www.evernote.com) or both the hostname and port (e.g. www.evernote.com:8080). If no port is specified, or if port 443 is specified, client applications must use the scheme "https" when composing URLs. Otherwise, a client must use the scheme "http".

7.8.3.15 supportUrl

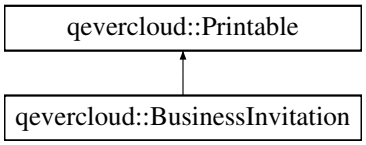
`QString qevercloud::BootstrapSettings::supportUrl`

The full URL for the Evernote customer support website, e.g. `https://support.evernote.com`.

7.9 qevercloud::BusinessInvitation Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::BusinessInvitation:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const BusinessInvitation &other) const
- bool operator!= (const BusinessInvitation &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint32 > businessId
- Optional< QString > email
- Optional< BusinessUserRole > role
- Optional< BusinessInvitationStatus > status
- Optional< UserID > requesterId
- Optional< bool > fromWorkChat
- Optional< Timestamp > created
- Optional< Timestamp > mostRecentReminder

7.9.1 Detailed Description

A structure describing an invitation to join a business account.

7.9.2 Member Function Documentation

7.9.2.1 operator"!=()

```
bool qevercloud::BusinessInvitation::operator!= (
            const BusinessInvitation & other ) const  [inline]
```

7.9.2.2 operator==()

```
bool qevercloud::BusinessInvitation::operator== (
            const BusinessInvitation & other ) const  [inline]
```

7.9.2.3 print()

```
virtual void qevercloud::BusinessInvitation::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.9.3 Member Data Documentation

7.9.3.1 businessId

```
Optional< qint32 > qevercloud::BusinessInvitation::businessId
```

The ID of the business to which the invitation grants access.

7.9.3.2 created

```
Optional< Timestamp > qevercloud::BusinessInvitation::created
```

The timestamp at which this invitation was created.

7.9.3.3 email

```
Optional< QString > qevercloud::BusinessInvitation::email
```

The email address that was invited to join the business.

7.9.3.4 fromWorkChat

```
Optional< bool > qevercloud::BusinessInvitation::fromWorkChat
```

If this invitation was created implicitly via a WorkChat, this field will be true.

7.9.3.5 localData

```
EverCloudLocalData qevercloud::BusinessInvitation::localData
```

See the declaration of EverCloudLocalData for details

7.9.3.6 mostRecentReminder

```
Optional< Timestamp > qevercloud::BusinessInvitation::mostRecentReminder
```

The timestamp at which the most recent reminder was sent.

7.9.3.7 requesterId

```
Optional< UserID > qevercloud::BusinessInvitation::requesterId
```

For invitations that were initially requested by a non-admin member of the business, this field specifies the user ID of the requestor. For all other invitations, this field will be unset.

7.9.3.8 role

```
Optional< BusinessUserRole > qevercloud::BusinessInvitation::role
```

The role to grant the user after the invitation is accepted.

7.9.3.9 status

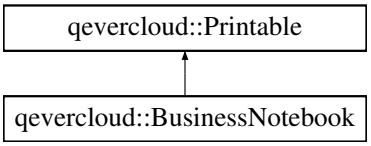
```
Optional< BusinessInvitationStatus > qevercloud::BusinessInvitation::status
```

The status of the invitation.

7.10 qevercloud::BusinessNotebook Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::BusinessNotebook:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const BusinessNotebook &other) const
- bool operator!= (const BusinessNotebook &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > notebookDescription
- Optional< SharedNotebookPrivilegeLevel > privilege
- Optional< bool > recommended

7.10.1 Detailed Description

If a Notebook contained in an Evernote Business account has been published the to business library, the Notebook will have a reference to one of these structures, which specifies how the Notebook will be represented in the library.

7.10.2 Member Function Documentation

7.10.2.1 operator"!=()

```
bool qevercloud::BusinessNotebook::operator!= (
            const BusinessNotebook & other ) const  [inline]
```

7.10.2.2 operator==()

```
bool qevercloud::BusinessNotebook::operator== (
            const BusinessNotebook & other ) const  [inline]
```

7.10.2.3 print()

```
virtual void qevercloud::BusinessNotebook::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.10.3 Member Data Documentation

7.10.3.1 localData

```
EverCloudLocalData qevercloud::BusinessNotebook::localData
```

See the declaration of EverCloudLocalData for details

7.10.3.2 notebookDescription

```
Optional< QString > qevercloud::BusinessNotebook::notebookDescription
```

A short description of the notebook's content that will be displayed in the business library user interface. The description may not begin or end with whitespace.
Length: EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MIN - EDAM_BUSINESS_NOTEBOOK_↩ DESCRIPTION_LEN_MAX
Regex: EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_REGEX

7.10.3.3 privilege

```
Optional< SharedNotebookPrivilegeLevel > qevercloud::BusinessNotebook::privilege
```

The privileges that will be granted to users who join the notebook through the business library.

7.10.3.4 recommended

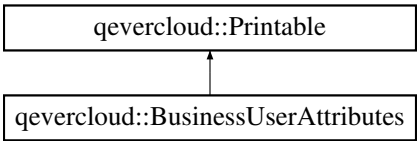
```
Optional< bool > qevercloud::BusinessNotebook::recommended
```

Whether the notebook should be "recommended" when displayed in the business library user interface.

7.11 qevercloud::BusinessUserAttributes Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::BusinessUserAttributes:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const BusinessUserAttributes &other) const
- bool operator!= (const BusinessUserAttributes &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > title
- Optional< QString > location
- Optional< QString > department
- Optional< QString > mobilePhone
- Optional< QString > linkedInProfileUrl
- Optional< QString > workPhone
- Optional< Timestamp > companyStartDate

7.11.1 Detailed Description

A structure holding the optional attributes associated with users in a business.

7.11.2 Member Function Documentation

7.11.2.1 operator"!=()

```
bool qevercloud::BusinessUserAttributes::operator!= (
            const BusinessUserAttributes & other ) const  [inline]
```

7.11.2.2 operator==()

```
bool qevercloud::BusinessUserAttributes::operator== (
            const BusinessUserAttributes & other ) const  [inline]
```

7.11.2.3 print()

```
virtual void qevercloud::BusinessUserAttributes::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.11.3 Member Data Documentation

7.11.3.1 companyStartDate

```
Optional< Timestamp > qevercloud::BusinessUserAttributes::companyStartDate
```

The date on which the user started working at their company.

7.11.3.2 department

```
Optional< QString > qevercloud::BusinessUserAttributes::department
```

Free form text of the department this user belongs to.

7.11.3.3 linkedInProfileUrl

```
Optional< QString > qevercloud::BusinessUserAttributes::linkedInProfileUrl
```

URL to user's public LinkedIn profile page. This should only contain the portion relative to the base LinkedIn URL. For example: "/pub/john-smith/".

7.11.3.4 localData

```
EverCloudLocalData qevercloud::BusinessUserAttributes::localData
```

See the declaration of EverCloudLocalData for details

7.11.3.5 location

```
Optional< QString > qevercloud::BusinessUserAttributes::location
```

City, State (for US) or City / Province for other countries

7.11.3.6 mobilePhone

```
Optional< QString > qevercloud::BusinessUserAttributes::mobilePhone
```

User's mobile phone number. Stored as plain text without any formatting.

7.11.3.7 title

```
Optional< QString > qevercloud::BusinessUserAttributes::title
```

Free form text of this user's title in the business

7.11.3.8 workPhone

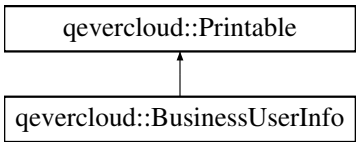
```
Optional< QString > qevercloud::BusinessUserAttributes::workPhone
```

User's work phone number. Stored as plain text without any formatting.

7.12 qevercloud::BusinessUserInfo Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::BusinessUserInfo:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const BusinessUserInfo &other) const
- bool operator!= (const BusinessUserInfo &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint32 > businessId
- Optional< QString > businessName
- Optional< BusinessUserRole > role
- Optional< QString > email
- Optional< Timestamp > updated

7.12.1 Detailed Description

This structure is used to provide information about an Evernote Business membership, for members who are part of a business.

7.12.2 Member Function Documentation

7.12.2.1 operator"!=()

```
bool qevercloud::BusinessUserInfo::operator!= (
            const BusinessUserInfo & other ) const  [inline]
```

7.12.2.2 operator==()

```
bool qevercloud::BusinessUserInfo::operator== (
            const BusinessUserInfo & other ) const  [inline]
```

7.12.2.3 print()

```
virtual void qevercloud::BusinessUserInfo::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.12.3 Member Data Documentation

7.12.3.1 businessId

```
Optional< qint32 > qevercloud::BusinessUserInfo::businessId
```

The ID of the Evernote Business account that the user is a member of.

businessName The human-readable name of the Evernote Business account that the user is a member of.

7.12.3.2 businessName

```
Optional< QString > qevercloud::BusinessUserInfo::businessName
```

NOT DOCUMENTED

7.12.3.3 email

```
Optional< QString > qevercloud::BusinessUserInfo::email
```

An e-mail address that will be used by the service in the context of your Evernote Business activities. For example, this e-mail address will be used when you e-mail a business note, when you update notes in the account of your business, etc. The business e-mail cannot be used for identification purposes such as for logging into the service.

7.12.3.4 localData

```
EverCloudLocalData qevercloud::BusinessUserInfo::localData
```

See the declaration of EverCloudLocalData for details

7.12.3.5 role

```
Optional< BusinessUserRole > qevercloud::BusinessUserInfo::role
```

The role of the user within the Evernote Business account that they are a member of.

7.12.3.6 updated

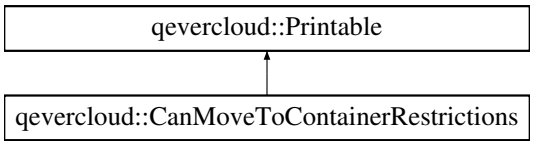
```
Optional< Timestamp > qevercloud::BusinessUserInfo::updated
```

Last time the business user or business user attributes were updated.

7.13 qevercloud::CanMoveToContainerRestrictions Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::CanMoveToContainerRestrictions:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const CanMoveToContainerRestrictions &other) const
- bool operator!= (const CanMoveToContainerRestrictions &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< CanMoveToContainerStatus > canMoveToContainer

7.13.1 Detailed Description

Specifies if the client can move a Notebook to a Workspace.

7.13.2 Member Function Documentation

7.13.2.1 operator"!=()

```
bool qevercloud::CanMoveToContainerRestrictions::operator!= (
            const CanMoveToContainerRestrictions & other ) const  [inline]
```

7.13.2.2 operator==()

```
bool qevercloud::CanMoveToContainerRestrictions::operator== (
            const CanMoveToContainerRestrictions & other ) const  [inline]
```

7.13.2.3 print()

```
virtual void qevercloud::CanMoveToContainerRestrictions::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.13.3 Member Data Documentation

7.13.3.1 canMoveToContainer

```
Optional< CanMoveToContainerStatus > qevercloud::CanMoveToContainerRestrictions::canMoveTo↩
Container
```

NOT DOCUMENTED

7.13.3.2 localData

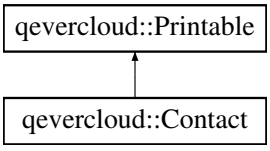
```
EverCloudLocalData qevercloud::CanMoveToContainerRestrictions::localData
```

See the declaration of EverCloudLocalData for details

7.14 qevercloud::Contact Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::Contact:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Contact &other) const
- bool operator!= (const Contact &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > name
- Optional< QString > id
- Optional< ContactType > type
- Optional< QString > photoUrl
- Optional< Timestamp > photoLastUpdated
- Optional< QByteArray > messagingPermit
- Optional< Timestamp > messagingPermitExpires

7.14.1 Detailed Description

A structure that represents contact information. Note this does not necessarily correspond to an Evernote user.

7.14.2 Member Function Documentation

7.14.2.1 operator"!=()

```
bool qevercloud::Contact::operator!= (
            const Contact & other ) const  [inline]
```

7.14.2.2 operator==()

```
bool qevercloud::Contact::operator== (
            const Contact & other ) const  [inline]
```

7.14.2.3 print()

```
virtual void qevercloud::Contact::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.14.3 Member Data Documentation

7.14.3.1 id

```
Optional< QString > qevercloud::Contact::id
```

A unique identifier for this ContactType.

7.14.3.2 localData

```
EverCloudLocalData qevercloud::Contact::localData
```

See the declaration of EverCloudLocalData for details

7.14.3.3 messagingPermit

```
Optional< QByteArray > qevercloud::Contact::messagingPermit
```

This field will only be filled by the service when it is giving a Contact record to a client, and that client does not normally have enough permission to send a new message to the person represented through this Contact. In that case, this whole Contact record could be used to send a new Message to the Contact, and the service will inspect this permit to confirm that operation was allowed.

7.14.3.4 messagingPermitExpires

```
Optional< Timestamp > qevercloud::Contact::messagingPermitExpires
```

If this field is set, then this (whole) Contact record may be used in calls to sendMessage until this time. After that time, those calls may be rejected by the service if the caller does not have direct permission to initiate a message with the represented Evernote user.

7.14.3.5 name

```
Optional< QString > qevercloud::Contact::name
```

The displayable name of this contact. This field is filled in by the service and is read-only to clients.

7.14.3.6 photoLastUpdated

```
Optional< Timestamp > qevercloud::Contact::photoLastUpdated
```

timestamp when the profile photo at 'photoUrl' was last updated. This field will be null if the user has never set a profile photo. This field is filled in by the service and is read-only to clients.

7.14.3.7 photoUrl

```
Optional< QString > qevercloud::Contact::photoUrl
```

A URL of a profile photo representing this Contact. This field is filled in by the service and is read-only to clients.

7.14.3.8 type

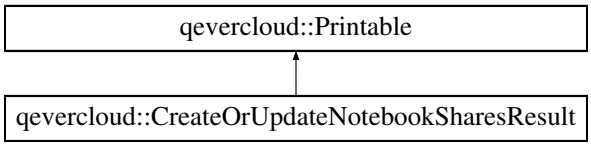
```
Optional< ContactType > qevercloud::Contact::type
```

What service does this contact come from?

7.15 qevercloud::CreateOrUpdateNotebookSharesResult Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::CreateOrUpdateNotebookSharesResult:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const CreateOrUpdateNotebookSharesResult &other) const
- bool operator!= (const CreateOrUpdateNotebookSharesResult &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint32 > updateSequenceNum
- Optional< QList< SharedNotebook > > matchingShares

Properties

- OptionalQList< SharedNotebook > matchingShares

7.15.1 Detailed Description

A structure containing the results of a call to createOrUpdateNotebookShares.

7.15.2 Member Function Documentation

7.15.2.1 operator"!=()

```
bool qevercloud::CreateOrUpdateNotebookSharesResult::operator!= (
            const CreateOrUpdateNotebookSharesResult & other ) const  [inline]
```

7.15.2.2 operator==()

```
bool qevercloud::CreateOrUpdateNotebookSharesResult::operator== (
            const CreateOrUpdateNotebookSharesResult & other ) const  [inline]
```

7.15.2.3 print()

```
virtual void qevercloud::CreateOrUpdateNotebookSharesResult::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.15.3 Member Data Documentation

7.15.3.1 localData

```
EverCloudLocalData qevercloud::CreateOrUpdateNotebookSharesResult::localData
```

See the declaration of EverCloudLocalData for details

7.15.3.2 matchingShares

```
Optional<QList<SharedNotebook> > qevercloud::CreateOrUpdateNotebookSharesResult::matching↩
Shares
```

A list of SharedNotebook records that match the desired recipients. These records may have been either created or updated by the call to createOrUpdateNotebookShares, or they may have been at the desired privilege privilege level prior to the call.

7.15.3.3 updateSequenceNum

```
Optional< qint32 > qevercloud::CreateOrUpdateNotebookSharesResult::updateSequenceNum
```

The USN of the notebook after the call.

7.15.4 Property Documentation

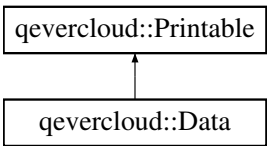
7.15.4.1 matchingShares

```
OptionalQList<SharedNotebook> qevercloud::CreateOrUpdateNotebookSharesResult::matchingShares
```

7.16 qevercloud::Data Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::Data:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Data &other) const
- bool operator!= (const Data &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QByteArray > bodyHash
- Optional< qint32 > size
- Optional< QByteArray > body

7.16.1 Detailed Description

In several places, EDAM exchanges blocks of bytes of data for a component which may be relatively large. For example: the contents of a clipped HTML note, the bytes of an embedded image, or the recognition XML for a large image. This structure is used in the protocol to represent any of those large blocks of data when they are transmitted or when they are only referenced their metadata.

7.16.2 Member Function Documentation

7.16.2.1 operator"!=()

```
bool qevercloud::Data::operator!= (
            const Data & other ) const  [inline]
```

7.16.2.2 operator==()

```
bool qevercloud::Data::operator== (
            const Data & other ) const  [inline]
```

7.16.2.3 print()

```
virtual void qevercloud::Data::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.16.3 Member Data Documentation

7.16.3.1 body

```
Optional< QByteArray > qevercloud::Data::body
```

This field is set to contain the binary contents of the data whenever the resource is being transferred. If only metadata is being exchanged, this field will be empty. For example, a client could notify the service about the change to an attribute for a resource without transmitting the binary resource contents.

7.16.3.2 bodyHash

```
Optional< QByteArray > qevercloud::Data::bodyHash
```

This field carries a one-way hash of the contents of the data body, in binary form. The hash function is MD5 Length: EDAM_HASH_LEN (exactly)

7.16.3.3 localData

```
EverCloudLocalData qevercloud::Data::localData
```

See the declaration of EverCloudLocalData for details

7.16.3.4 size

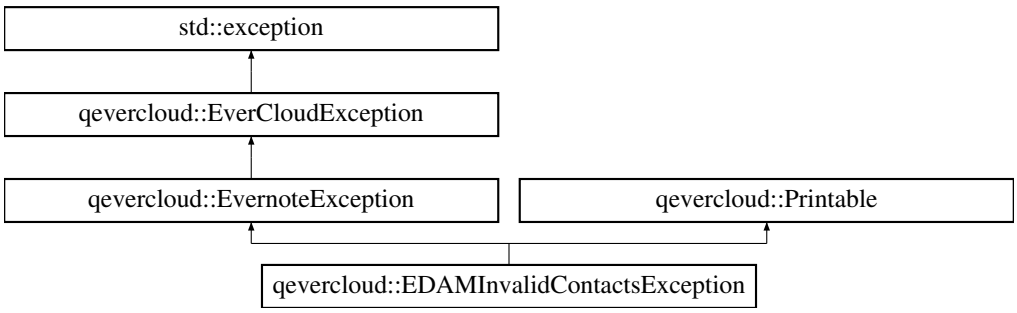
```
Optional< qint32 > qevercloud::Data::size
```

The length, in bytes, of the data body.

7.17 qevercloud::EDAMInvalidContactsException Class Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::EDAMInvalidContactsException:



Public Member Functions

- EDAMInvalidContactsException ()
- virtual ~EDAMInvalidContactsException () noexcept override
- EDAMInvalidContactsException (const EDAMInvalidContactsException &other)
- const char * what () const noexcept override
- virtual EverCloudExceptionDataPtr exceptionData () const override
- virtual void print (QTextStream &strm) const override
- bool operator== (const EDAMInvalidContactsException &other) const
- bool operator!= (const EDAMInvalidContactsException &other) const

Public Attributes

- QList< Contact > contacts
- Optional< QString > parameter
- Optional< QList< EDAMInvalidContactReason > > reasons

Properties

- OptionalQList< EDAMInvalidContactReason > reasons

Additional Inherited Members

7.17.1 Detailed Description

An exception thrown when the provided Contacts fail validation. For instance, email domains could be invalid, phone numbers might not be valid for SMS, etc.

We will not provide individual reasons for each Contact's validation failure. The presence of the Contact in this exception means that the user must figure out how to take appropriate action to fix this Contact.

contacts The list of Contacts that are considered invalid by the service

parameter If the error applied to a particular input parameter, this will indicate which parameter.

reasons If supplied, the list of reasons why the server considered a contact invalid, matching, in order, the list returned in the contacts field.

7.17.2 Constructor & Destructor Documentation

7.17.2.1 EDAMInvalidContactsException() [1/2]

```
qevercloud::EDAMInvalidContactsException::EDAMInvalidContactsException ( )
```

7.17.2.2 ~EDAMInvalidContactsException()

```
virtual qevercloud::EDAMInvalidContactsException::~EDAMInvalidContactsException ( )  [override],
[virtual], [noexcept]
```

7.17.2.3 EDAMInvalidContactsException() [2/2]

```
qevercloud::EDAMInvalidContactsException::EDAMInvalidContactsException (
            const EDAMInvalidContactsException & other )
```

7.17.3 Member Function Documentation

7.17.3.1 exceptionData()

```
virtual EverCloudExceptionDataPtr qevercloud::EDAMInvalidContactsException::exceptionData ( )
const  [override], [virtual]
```

Reimplemented from qevercloud::EvernoteException.

7.17.3.2 operator"!=()

```
bool qevercloud::EDAMInvalidContactsException::operator!= (
            const EDAMInvalidContactsException & other ) const  [inline]
```

7.17.3.3 operator==()

```
bool qevercloud::EDAMInvalidContactsException::operator== (
            const EDAMInvalidContactsException & other ) const  [inline]
```

7.17.3.4 print()

```
virtual void qevercloud::EDAMInvalidContactsException::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.17.3.5 what()

```
const char * qevercloud::EDAMInvalidContactsException::what ( ) const  [override], [virtual],
[noexcept]
```

Reimplemented from qevercloud::EverCloudException.

7.17.4 Member Data Documentation

7.17.4.1 contacts

```
QList< Contact > qevercloud::EDAMInvalidContactsException::contacts
```

7.17.4.2 parameter

```
Optional< QString > qevercloud::EDAMInvalidContactsException::parameter
```

7.17.4.3 reasons

```
Optional<QList<EDAMInvalidContactReason> > qevercloud::EDAMInvalidContactsException::reasons
```

7.17.5 Property Documentation

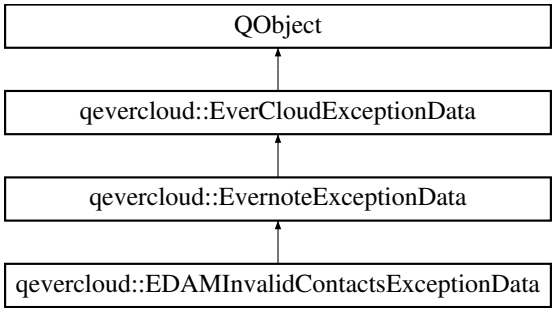
7.17.5.1 reasons

```
OptionalQList<EDAMInvalidContactReason> qevercloud::EDAMInvalidContactsException::reasons
```

7.18 qevercloud::EDAMInvalidContactsExceptionData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMInvalidContactsExceptionData:



Public Member Functions

- EDAMInvalidContactsExceptionData (QList< Contact > contacts, Optional< QString > parameter, Optional< QList< EDAMInvalidContactReason > > reasons)
- virtual void throwException () const override

Protected Attributes

- QList< Contact > m_contacts
- Optional< QString > m_parameter
- Optional< QList< EDAMInvalidContactReason > > m_reasons

Additional Inherited Members

7.18.1 Detailed Description

Asynchronous API counterpart of EDAMInvalidContactsException. See EverCloudExceptionData for more details.

7.18.2 Constructor & Destructor Documentation

7.18.2.1 EDAMInvalidContactsExceptionData()

```
qevercloud::EDAMInvalidContactsExceptionData::EDAMInvalidContactsExceptionData (
            QList< Contact > contacts,
            Optional< QString > parameter,
            Optional< QList< EDAMInvalidContactReason > > reasons )  [explicit]
```

7.18.3 Member Function Documentation

7.18.3.1 throwException()

```
virtual void qevercloud::EDAMInvalidContactsExceptionData::throwException ( ) const  [override],
[virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EvernoteExceptionData.

7.18.4 Member Data Documentation

7.18.4.1 m_contacts

```
QList<Contact> qevercloud::EDAMInvalidContactsExceptionData::m_contacts  [protected]
```

7.18.4.2 m_parameter

```
Optional<QString> qevercloud::EDAMInvalidContactsExceptionData::m_parameter  [protected]
```

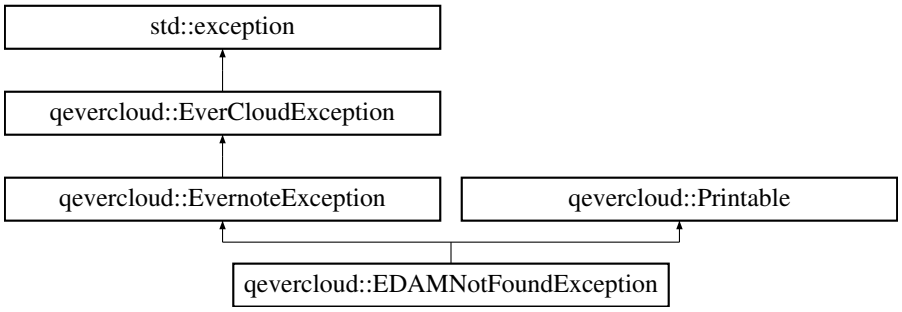
7.18.4.3 m_reasons

```
Optional<QList<EDAMInvalidContactReason> > qevercloud::EDAMInvalidContactsExceptionData::m_↩
reasons  [protected]
```

7.19 qevercloud::EDAMNotFoundException Class Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::EDAMNotFoundException:



Public Member Functions

- EDAMNotFoundException ()
- virtual ~EDAMNotFoundException () noexcept override
- EDAMNotFoundException (const EDAMNotFoundException &other)
- const char * what () const noexcept override
- virtual EverCloudExceptionDataPtr exceptionData () const override
- virtual void print (QTextStream &strm) const override
- bool operator== (const EDAMNotFoundException &other) const
- bool operator!= (const EDAMNotFoundException &other) const

Public Attributes

- Optional< QString > identifier
- Optional< QString > key

Additional Inherited Members

7.19.1 Detailed Description

This exception is thrown by EDAM procedures when a caller asks to perform an operation on an object that does not exist. This may be thrown based on an invalid primary identifier (e.g. a bad GUID), or when the caller refers to an object by another unique identifier (e.g. a User's email address).

identifier: A description of the object that was not found on the server. For example, "Note.notebookGuid" when a caller attempts to create a note in a notebook that does not exist in the user's account.

key: The value passed from the client in the identifier, which was not found. For example, the GUID that was not found.

7.19.2 Constructor & Destructor Documentation

7.19.2.1 EDAMNotFoundException() [1/2]

```
qevercloud::EDAMNotFoundException::EDAMNotFoundException ( )
```

7.19.2.2 ~EDAMNotFoundException()

```
virtual qevercloud::EDAMNotFoundException::~EDAMNotFoundException ( )  [override], [virtual],
[noexcept]
```

7.19.2.3 EDAMNotFoundException() [2/2]

```
qevercloud::EDAMNotFoundException::EDAMNotFoundException (
            const EDAMNotFoundException & other )
```

7.19.3 Member Function Documentation

7.19.3.1 exceptionData()

```
virtual EverCloudExceptionDataPtr qevercloud::EDAMNotFoundException::exceptionData ( ) const
[override], [virtual]
```

Reimplemented from qevercloud::EvernoteException.

7.19.3.2 operator"!=()

```
bool qevercloud::EDAMNotFoundException::operator!= (
            const EDAMNotFoundException & other ) const  [inline]
```

7.19.3.3 operator==()

```
bool qevercloud::EDAMNotFoundException::operator== (
            const EDAMNotFoundException & other ) const  [inline]
```

7.19.3.4 print()

```
virtual void qevercloud::EDAMNotFoundException::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.19.3.5 what()

```
const char * qevercloud::EDAMNotFoundException::what ( ) const  [override], [virtual], [noexcept]
```

Reimplemented from qevercloud::EverCloudException.

7.19.4 Member Data Documentation

7.19.4.1 identifier

```
Optional< QString > qevercloud::EDAMNotFoundException::identifier
```

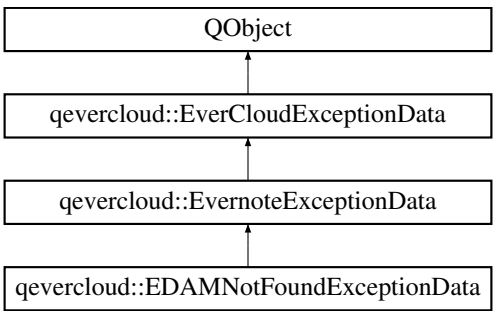
7.19.4.2 key

```
Optional< QString > qevercloud::EDAMNotFoundException::key
```

7.20 qevercloud::EDAMNotFoundExceptionData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMNotFoundExceptionData:



Public Member Functions

- EDAMNotFoundExceptionData (QString error, Optional< QString > identifier, Optional< QString > key)
- virtual void throwException () const override

Protected Attributes

- Optional< QString > m_identifier
- Optional< QString > m_key

Additional Inherited Members

7.20.1 Detailed Description

Asynchronous API counterpart of EDAMNotFoundException. See EverCloudExceptionData for more details.

7.20.2 Constructor & Destructor Documentation

7.20.2.1 EDAMNotFoundExceptionData()

```
qevercloud::EDAMNotFoundExceptionData::EDAMNotFoundExceptionData (
            QString error,
            Optional< QString > identifier,
            Optional< QString > key )  [explicit]
```

7.20.3 Member Function Documentation

7.20.3.1 throwException()

```
virtual void qevercloud::EDAMNotFoundExceptionData::throwException ( ) const  [override],
[virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EvernoteExceptionData.

7.20.4 Member Data Documentation

7.20.4.1 m_identifier

```
Optional<QString> qevercloud::EDAMNotFoundExceptionData::m_identifier  [protected]
```

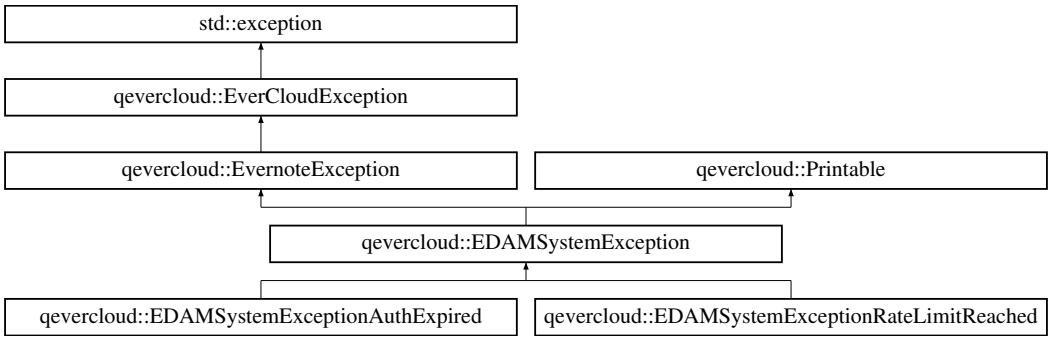
7.20.4.2 m_key

```
Optional<QString> qevercloud::EDAMNotFoundExceptionData::m_key  [protected]
```

7.21 qevercloud::EDAMSystemException Class Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::EDAMSystemException:



Public Member Functions

- EDAMSystemException ()
- virtual ~EDAMSystemException () noexcept override
- EDAMSystemException (const EDAMSystemException &other)
- const char * what () const noexcept override
- virtual EverCloudExceptionDataPtr exceptionData () const override
- virtual void print (QTextStream &strm) const override
- bool operator== (const EDAMSystemException &other) const
- bool operator!= (const EDAMSystemException &other) const

Public Attributes

- EDAMErrorCode errorCode
- Optional< QString > message
- Optional< qint32 > rateLimitDuration

Additional Inherited Members

7.21.1 Detailed Description

This exception is thrown by EDAM procedures when a call fails as a result of a problem in the service that could not be changed through caller action.

errorCode: The numeric code indicating the type of error that occurred. must be one of the values of EDAMError↩ Code.

message: This may contain additional information about the error

rateLimitDuration: Indicates the minimum number of seconds that an application should expect subsequent API calls for this user to fail. The application should not retry API requests for the user until at least this many seconds have passed. Present only when errorCode is RATE_LIMIT_REACHED,

7.21.2 Constructor & Destructor Documentation

7.21.2.1 EDAMSystemException() [1/2]

```
qevercloud::EDAMSystemException::EDAMSystemException ( )
```

7.21.2.2 ~EDAMSystemException()

```
virtual qevercloud::EDAMSystemException::~EDAMSystemException ( )  [override], [virtual],
[noexcept]
```

7.21.2.3 EDAMSystemException() [2/2]

```
qevercloud::EDAMSystemException::EDAMSystemException (
            const EDAMSystemException & other )
```

7.21.3 Member Function Documentation

7.21.3.1 exceptionData()

```
virtual EverCloudExceptionDataPtr qevercloud::EDAMSystemException::exceptionData ( ) const
[override], [virtual]
```

Reimplemented from qevercloud::EvernoteException.

Reimplemented in qevercloud::EDAMSystemExceptionRateLimitReached, and qevercloud::EDAMSystemExceptionAuthExpired.

7.21.3.2 operator"!=()

```
bool qevercloud::EDAMSystemException::operator!= (
            const EDAMSystemException & other ) const  [inline]
```

7.21.3.3 operator==()

```
bool qevercloud::EDAMSystemException::operator== (
            const EDAMSystemException & other ) const  [inline]
```

7.21.3.4 print()

```
virtual void qevercloud::EDAMSystemException::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.21.3.5 what()

```
const char * qevercloud::EDAMSystemException::what ( ) const  [override], [virtual], [noexcept]
```

Reimplemented from qevercloud::EverCloudException.

7.21.4 Member Data Documentation

7.21.4.1 errorCode

```
EDAMErrorCode qevercloud::EDAMSystemException::errorCode
```

7.21.4.2 message

```
Optional< QString > qevercloud::EDAMSystemException::message
```

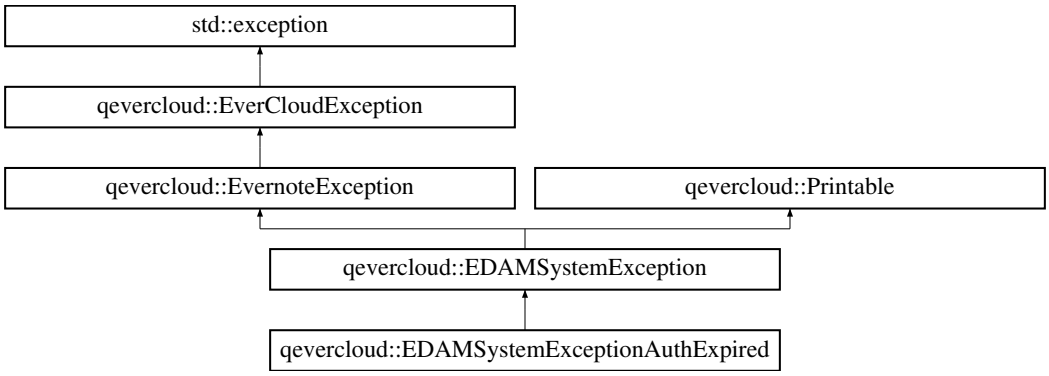
7.21.4.3 rateLimitDuration

```
Optional< qint32 > qevercloud::EDAMSystemException::rateLimitDuration
```

7.22 qevercloud::EDAMSystemExceptionAuthExpired Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMSystemExceptionAuthExpired:



Public Member Functions

- virtual EverCloudExceptionDataPtr exceptionData () const override

Additional Inherited Members

7.22.1 Detailed Description

EDAMSystemException for `errorCode = AUTH_EXPIRED`

7.22.2 Member Function Documentation

7.22.2.1 exceptionData()

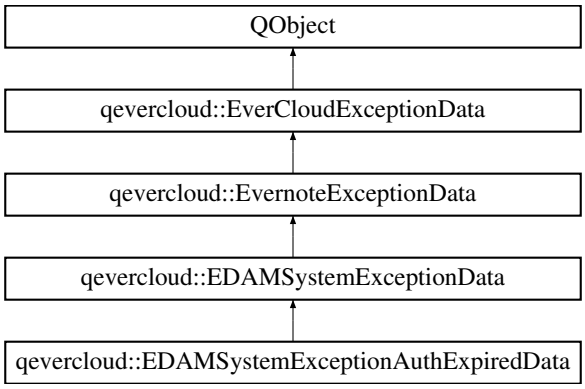
```
virtual EverCloudExceptionDataPtr qevercloud::EDAMSystemExceptionAuthExpired::exceptionData (
) const  [override], [virtual]
```

Reimplemented from qevercloud::EDAMSystemException.

7.23 qevercloud::EDAMSystemExceptionAuthExpiredData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMSystemExceptionAuthExpiredData:



Public Member Functions

- EDAMSystemExceptionAuthExpiredData (QString error, EDAMErrorCode errorCode, Optional< QString > message, Optional< qint32 > rateLimitDuration)
- virtual void throwException () const override

Additional Inherited Members

7.23.1 Detailed Description

Asynchronous API counterpart of EDAMSystemExceptionAuthExpired. See EverCloudExceptionData for more details.

7.23.2 Constructor & Destructor Documentation

7.23.2.1 EDAMSystemExceptionAuthExpiredData()

```
qevercloud::EDAMSystemExceptionAuthExpiredData::EDAMSystemExceptionAuthExpiredData (
            QString error,
            EDAMErrorCode errorCode,
            Optional< QString > message,
            Optional< qint32 > rateLimitDuration )  [explicit]
```

7.23.3 Member Function Documentation

7.23.3.1 throwException()

```
virtual void qevercloud::EDAMSystemExceptionAuthExpiredData::throwException ( ) const  [override],
[virtual]
```

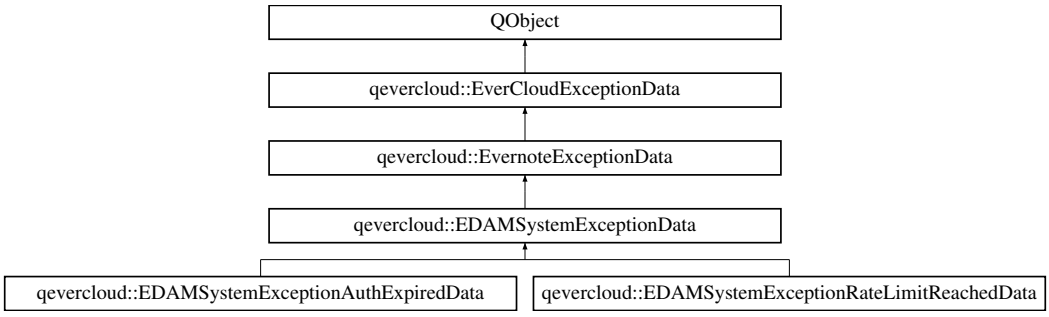
If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EDAMSystemExceptionData.

7.24 qevercloud::EDAMSystemExceptionData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMSystemExceptionData:



Public Member Functions

- EDAMSystemExceptionData (QString err, EDAMErrorCode errorCode, Optional< QString > message, Optional< qint32 > rateLimitDuration)
- virtual void throwException () const override

Protected Attributes

- EDAMErrorCode m_errorCode
- Optional< QString > m_message
- Optional< qint32 > m_rateLimitDuration

Additional Inherited Members

7.24.1 Detailed Description

Asynchronous API counterpart of EDAMSystemException. See EverCloudExceptionData for more details.

7.24.2 Constructor & Destructor Documentation

7.24.2.1 EDAMSystemExceptionData()

```
qevercloud::EDAMSystemExceptionData::EDAMSystemExceptionData (
            QString err,
            EDAMErrorCode errorCode,
            Optional< QString > message,
            Optional< qint32 > rateLimitDuration )  [explicit]
```

7.24.3 Member Function Documentation

7.24.3.1 throwException()

```
virtual void qevercloud::EDAMSystemExceptionData::throwException ( ) const  [override], [virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EvernoteExceptionData.

Reimplemented in qevercloud::EDAMSystemExceptionRateLimitReachedData, and qevercloud::EDAMSystemExceptionAuthExpiredD

7.24.4 Member Data Documentation

7.24.4.1 m_errorCode

```
EDAMErrorCode qevercloud::EDAMSystemExceptionData::m_errorCode  [protected]
```

7.24.4.2 m_message

```
Optional<QString> qevercloud::EDAMSystemExceptionData::m_message  [protected]
```

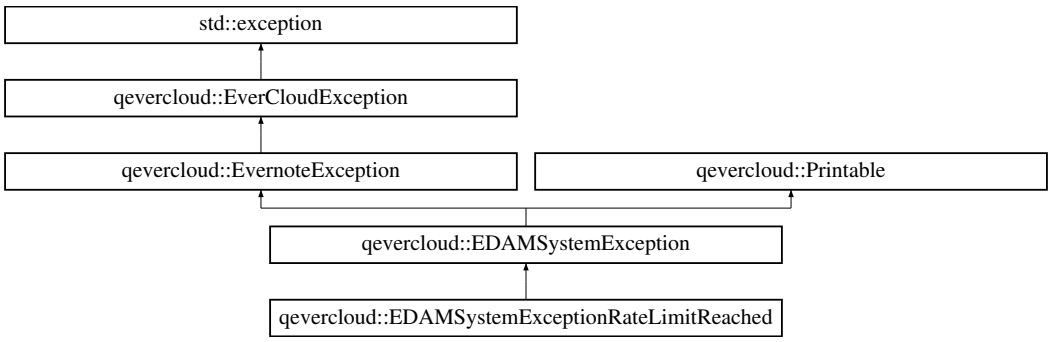
7.24.4.3 m_rateLimitDuration

```
Optional<qint32> qevercloud::EDAMSystemExceptionData::m_rateLimitDuration  [protected]
```

7.25 qevercloud::EDAMSystemExceptionRateLimitReached Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMSystemExceptionRateLimitReached:



Public Member Functions

- virtual EverCloudExceptionDataPtr exceptionData () const override

Additional Inherited Members

7.25.1 Detailed Description

EDAMSystemException for `errorCode = RATE_LIMIT_REACHED`

7.25.2 Member Function Documentation

7.25.2.1 exceptionData()

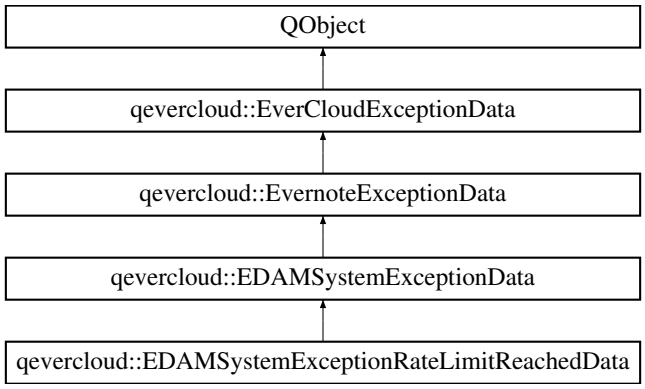
```
virtual EverCloudExceptionDataPtr qevercloud::EDAMSystemExceptionRateLimitReached::exception↩
Data ( ) const  [override], [virtual]
```

Reimplemented from qevercloud::EDAMSystemException.

7.26 qevercloud::EDAMSystemExceptionRateLimitReachedData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMSystemExceptionRateLimitReachedData:



Public Member Functions

- EDAMSystemExceptionRateLimitReachedData (QString error, EDAMErrorCode errorCode, Optional< QString > message, Optional< qint32 > rateLimitDuration)
- virtual void throwException () const override

Additional Inherited Members

7.26.1 Detailed Description

Asynchronous API counterpart of EDAMSystemExceptionRateLimitReached. See EverCloudExceptionData for more details.

7.26.2 Constructor & Destructor Documentation

7.26.2.1 EDAMSystemExceptionRateLimitReachedData()

```
qevercloud::EDAMSystemExceptionRateLimitReachedData::EDAMSystemExceptionRateLimitReachedData (
            QString error,
            EDAMErrorCode errorCode,
            Optional< QString > message,
            Optional< qint32 > rateLimitDuration )  [explicit]
```

7.26.3 Member Function Documentation

7.26.3.1 throwException()

```
virtual void qevercloud::EDAMSystemExceptionRateLimitReachedData::throwException ( ) const
[override], [virtual]
```

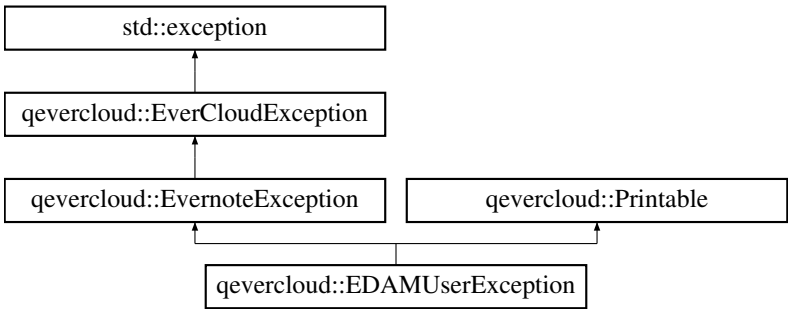
If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EDAMSystemExceptionData.

7.27 qevercloud::EDAMUserException Class Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::EDAMUserException:



Public Member Functions

- EDAMUserException ()
- virtual ~EDAMUserException () noexcept override
- EDAMUserException (const EDAMUserException &other)
- const char * what () const noexcept override
- virtual EverCloudExceptionDataPtr exceptionData () const override
- virtual void print (QTextStream &strm) const override
- bool operator== (const EDAMUserException &other) const
- bool operator!= (const EDAMUserException &other) const

Public Attributes

- EDAMErrorCode errorCode
- Optional< QString > parameter

Additional Inherited Members

7.27.1 Detailed Description

This exception is thrown by EDAM procedures when a call fails as a result of a problem that a caller may be able to resolve. For example, if the user attempts to add a note to their account which would exceed their storage quota, this type of exception may be thrown to indicate the source of the error so that they can choose an alternate action.

This exception would not be used for internal system errors that do not reflect user actions, but rather reflect a problem within the service that the user cannot resolve.

errorCode: The numeric code indicating the type of error that occurred. must be one of the values of EDAMError↩ Code.

parameter: If the error applied to a particular input parameter, this will indicate which parameter. For some errors (USER_NOT_ASSOCIATED, USER_NOT_REGISTERED, SSO_AUTHENTICATION_REQUIRED), this is the user's email.

7.27.2 Constructor & Destructor Documentation

7.27.2.1 EDAMUserException() [1/2]

```
qevercloud::EDAMUserException::EDAMUserException ( )
```

7.27.2.2 ~EDAMUserException()

```
virtual qevercloud::EDAMUserException::~EDAMUserException ( )  [override], [virtual], [noexcept]
```

7.27.2.3 EDAMUserException() [2/2]

```
qevercloud::EDAMUserException::EDAMUserException (
            const EDAMUserException & other )
```

7.27.3 Member Function Documentation

7.27.3.1 exceptionData()

```
virtual EverCloudExceptionDataPtr qevercloud::EDAMUserException::exceptionData ( ) const  [override],
[virtual]
```

Reimplemented from qevercloud::EvernoteException.

7.27.3.2 operator"!=()

```
bool qevercloud::EDAMUserException::operator!= (
            const EDAMUserException & other ) const  [inline]
```

7.27.3.3 operator==()

```
bool qevercloud::EDAMUserException::operator== (
            const EDAMUserException & other ) const  [inline]
```

7.27.3.4 print()

```
virtual void qevercloud::EDAMUserException::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.27.3.5 what()

```
const char * qevercloud::EDAMUserException::what ( ) const  [override], [virtual], [noexcept]
```

Reimplemented from qevercloud::EverCloudException.

7.27.4 Member Data Documentation

7.27.4.1 errorCode

```
EDAMErrorCode qevercloud::EDAMUserException::errorCode
```

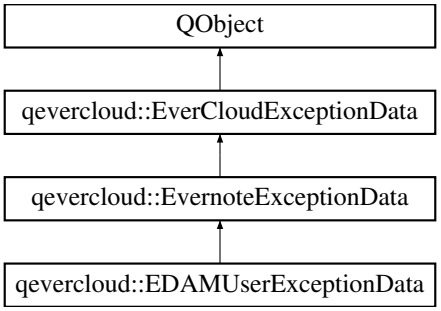
7.27.4.2 parameter

```
Optional< QString > qevercloud::EDAMUserException::parameter
```

7.28 qevercloud::EDAMUserExceptionData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::EDAMUserExceptionData:



Public Member Functions

- EDAMUserExceptionData (QString error, EDAMErrorCode errorCode, Optional< QString > parameter)
- virtual void throwException () const override

Protected Attributes

- EDAMErrorCode m_errorCode
- Optional< QString > m_parameter

Additional Inherited Members

7.28.1 Detailed Description

Asynchronous API counterpart of EDAMUserException. See EverCloudExceptionData for more details.

7.28.2 Constructor & Destructor Documentation

7.28.2.1 EDAMUserExceptionData()

```
qevercloud::EDAMUserExceptionData::EDAMUserExceptionData (
            QString error,
            EDAMErrorCode errorCode,
            Optional< QString > parameter )  [explicit]
```

7.28.3 Member Function Documentation

7.28.3.1 throwException()

```
virtual void qevercloud::EDAMUserExceptionData::throwException ( ) const  [override], [virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EvernoteExceptionData.

7.28.4 Member Data Documentation

7.28.4.1 m_errorCode

```
EDAMErrorCode qevercloud::EDAMUserExceptionData::m_errorCode  [protected]
```

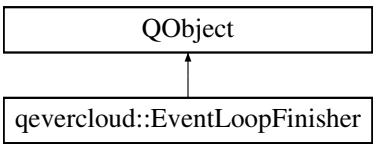
7.28.4.2 m_parameter

```
Optional<QString> qevercloud::EDAMUserExceptionData::m_parameter  [protected]
```

7.29 qevercloud::EventLoopFinisher Class Reference

```
#include <EventLoopFinisher.h>
```

Inheritance diagram for qevercloud::EventLoopFinisher:



Public Slots

- void stopEventLoop ()

Public Member Functions

- EventLoopFinisher (QEventLoop ∗loop, int exitCode, QObject ∗parent=Q_NULLPTR)
- ∼EventLoopFinisher ()

7.29.1 Constructor & Destructor Documentation

7.29.1.1 EventLoopFinisher()

```
qevercloud::EventLoopFinisher::EventLoopFinisher (
            QEventLoop * loop,
            int exitCode,
            QObject * parent = Q_NULLPTR )  [explicit]
```

7.29.1.2 ∼EventLoopFinisher()

```
qevercloud::EventLoopFinisher::~EventLoopFinisher ( )
```

7.29.2 Member Function Documentation

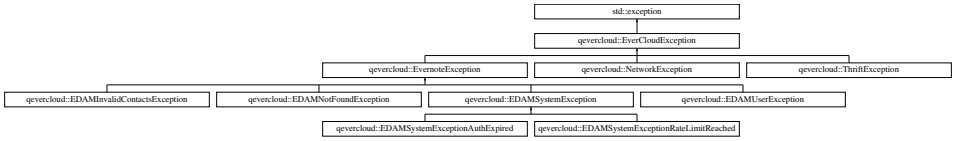
7.29.2.1 stopEventLoop

```
void qevercloud::EventLoopFinisher::stopEventLoop ( )  [slot]
```

7.30 qevercloud::EverCloudException Class Reference

```
#include <EverCloudException.h>
```

Inheritance diagram for qevercloud::EverCloudException:



Public Member Functions

- EverCloudException ()
- EverCloudException (QString error)
- EverCloudException (const std::string &error)
- EverCloudException (const char *error)
- virtual ~EverCloudException () noexcept override
- virtual const char * what () const noexcept override
- virtual std::shared_ptr< EverCloudExceptionData > exceptionData () const

Protected Attributes

- QByteArray m_error

7.30.1 Detailed Description

All exceptions thrown by the library are of this class or its descendants.

7.30.2 Constructor & Destructor Documentation

7.30.2.1 EverCloudException() [1/4]

```
qevercloud::EverCloudException::EverCloudException ( )  [explicit]
```

7.30.2.2 EverCloudException() [2/4]

```
qevercloud::EverCloudException::EverCloudException (
            QString error )  [explicit]
```

7.30.2.3 EverCloudException() [3/4]

```
qevercloud::EverCloudException::EverCloudException (
            const std::string & error )  [explicit]
```

7.30.2.4 EverCloudException() [4/4]

```
qevercloud::EverCloudException::EverCloudException (
            const char * error )  [explicit]
```

7.30.2.5 ~EverCloudException()

```
virtual qevercloud::EverCloudException::~EverCloudException ( )  [override], [virtual], [noexcept]
```

7.30.3 Member Function Documentation

7.30.3.1 exceptionData()

```
virtual std::shared_ptr< EverCloudExceptionData > qevercloud::EverCloudException::exception↩
Data ( ) const  [virtual]
```

Reimplemented in qevercloud::EvernoteException, qevercloud::NetworkException, qevercloud::ThriftException, qevercloud::EDAMSystemExceptionRateLimitReached, qevercloud::EDAMSystemExceptionAuthExpired, qevercloud::EDAMUserExc qevercloud::EDAMSystemException, qevercloud::EDAMNotFoundException, and qevercloud::EDAMInvalidContactsException.

7.30.3.2 what()

```
virtual const char * qevercloud::EverCloudException::what ( ) const  [override], [virtual],
[noexcept]
```

Reimplemented in qevercloud::NetworkException, qevercloud::ThriftException, qevercloud::EDAMUserException, qevercloud::EDAMSystemException, qevercloud::EDAMNotFoundException, and qevercloud::EDAMInvalidContactsException.

7.30.4 Member Data Documentation

7.30.4.1 m_error

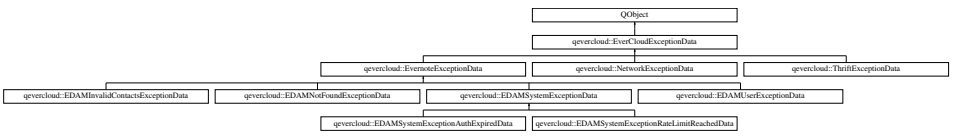
```
QByteArray qevercloud::EverCloudException::m_error  [mutable], [protected]
```

7.31 qevercloud::EverCloudExceptionData Class Reference

EverCloudException counterpart for asynchronous API.

```
#include <EverCloudException.h>
```

Inheritance diagram for qevercloud::EverCloudExceptionData:



Public Member Functions

- EverCloudExceptionData (QString error)
- virtual void throwException () const

Public Attributes

- QString errorMessage

7.31.1 Detailed Description

EverCloudException counterpart for asynchronous API.

Asynchronous functions cannot throw exceptions so descendants of EverCloudExceptionData are retunded instead in case of an error. Every exception class has its own counterpart. The EverCloudExceptionData descendants hierarchy is a copy of the EverCloudException descendants hierarchy.

The main reason not to use exception classes directly is that dynamic_cast does not work across module (exe, dll, etc) boundaries in general, while `qobject_cast` do work as expected. That's why I decided to inherit my error classes from QObject.

In general error checking in asynchronous API look like this:

```
NoteStore* ns;
...
QObject::connect(ns->getNotebook(notebookGuid), &AsyncResult::finished,
                 [](QVariant result, EverCloudExceptionData error)
                 {
                     if (!error.isNull())
                     {
                         auto errorNotFound =
                            std::dynamic_pointer_cast<EDAMNotFoundExceptionData>(
                                error);
                         auto errorUser =
                            std::dynamic_pointer_cast<EDAMUserExceptionData>(
                                error);
                         auto errorSystem =
                            std::dynamic_pointer_cast<EDAMSystemExceptionData>(
                                error);
                         if (!errorNotFound.isNull())
                         {
                             qDebug() << "notebook not found"
                                 << errorNotFound.identifier << errorNotFound.key;
                         }
                         else if (!errorUser.isNull())
                         {
                             qDebug() << errorUser.errorMessage;
                         }
                         else if (!errorSystem.isNull())
                         {
                             if (errorSystem.errorCode ==
                                EDAMErrorCode::RATE_LIMIT_REACHED)
                             {
                                 qDebug() << "Evernote API rate limits are reached";
                             }
                             else if (errorSystem.errorCode ==
                                      EDAMErrorCode::AUTH_EXPIRED)
                             {
                                 qDebug() << "Authorization token is inspired";
                             }
                             else
                             {
                                 // some other Evernote trouble
                                 qDebug() << errorSystem.errorMessage;
                             }
                         }
                         else
                         {
                             // some unexpected error
                             qDebug() << error.errorMessage;
                         }
                     }
                     else
                     {
                         // success
                     }
                 });
```

7.31.2 Constructor & Destructor Documentation

7.31.2.1 EverCloudExceptionData()

```
qevercloud::EverCloudExceptionData::EverCloudExceptionData (
            QString error )  [explicit]
```

7.31.3 Member Function Documentation

7.31.3.1 throwException()

```
virtual void qevercloud::EverCloudExceptionData::throwException ( ) const  [virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented in qevercloud::EvernoteExceptionData, qevercloud::NetworkExceptionData, qevercloud::ThriftExceptionData, qevercloud::EDAMUserExceptionData, qevercloud::EDAMSystemExceptionData, qevercloud::EDAMNotFoundExceptionData, qevercloud::EDAMInvalidContactsExceptionData, qevercloud::EDAMSystemExceptionRateLimitReachedData, and qevercloud::EDAMSystemExceptionAuthExpiredData.

7.31.4 Member Data Documentation

7.31.4.1 errorMessage

```
QString qevercloud::EverCloudExceptionData::errorMessage
```

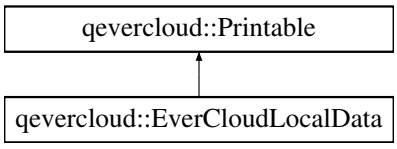
Contains an error message. It's the std::exception::what() counterpart.

7.32 qevercloud::EverCloudLocalData Class Reference

The EverCloudLocalData class contains several data elements which are not synchronized with Evernote service but which are nevertheless useful in applications using QEverCloud to implement feature rich full sync Evernote clients. Values of this class' types are contained within QEverCloud types corresponding to actual Evernote API types.

```
#include <Types.h>
```

Inheritance diagram for qevercloud::EverCloudLocalData:



Public Types

- using Dict = QHash< QString, QVariant >

Public Member Functions

- EverCloudLocalData ()
- virtual ~EverCloudLocalData () noexcept override
- virtual void print (QTextStream &strm) const override
- bool operator== (const EverCloudLocalData &other) const
- bool operator!= (const EverCloudLocalData &other) const

Public Attributes

- QString id

  id property can be used as a local unique identifier for any data item before it has been synchronized with Evernote and thus before it can be identified using its guid.
- bool dirty = false

  dirty property can be used to keep track which objects have been modified locally and thus need to be synchronized with Evernote service
- bool = false

  local property can be used to keep track which data items are meant to be local only and thus never be synchronized with Evernote service
- bool favorited = false

  favorited property can be used to keep track which data items were favorited in the client. Unfortunately, Evernote has never provided a way to synchronize such property between different clients
- QHash< QString, QVariant > dict

  dict can be used for storage of any other auxiliary values associated with objects of QEverCloud types

Properties

- bool local
- Dict dict

7.32.1 Detailed Description

The EverCloudLocalData class contains several data elements which are not synchronized with Evernote service but which are nevertheless useful in applications using QEverCloud to implement feature rich full sync Evernote clients. Values of this class' types are contained within QEverCloud types corresponding to actual Evernote API types.

7.32.2 Member Typedef Documentation

7.32.2.1 Dict

```
using qevercloud::EverCloudLocalData::Dict = QHash<QString, QVariant>
```

7.32.3 Constructor & Destructor Documentation

7.32.3.1 EverCloudLocalData()

```
qevercloud::EverCloudLocalData::EverCloudLocalData ( )
```

7.32.3.2 ~EverCloudLocalData()

```
virtual qevercloud::EverCloudLocalData::~EverCloudLocalData ( )  [override], [virtual], [noexcept]
```

7.32.4 Member Function Documentation

7.32.4.1 operator"!=()

```
bool qevercloud::EverCloudLocalData::operator!= (
            const EverCloudLocalData & other ) const
```

7.32.4.2 operator==()

```
bool qevercloud::EverCloudLocalData::operator== (
            const EverCloudLocalData & other ) const
```

7.32.4.3 print()

```
virtual void qevercloud::EverCloudLocalData::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.32.5 Member Data Documentation

7.32.5.1 bool

```
qevercloud::EverCloudLocalData::bool = false
```

local property can be used to keep track which data items are meant to be local only and thus never be synchronized with Evernote service

7.32.5.2 dict

```
QHash<QString, QVariant> qevercloud::EverCloudLocalData::dict
```

dict can be used for storage of any other auxiliary values associated with objects of QEverCloud types

7.32.5.3 dirty

```
bool qevercloud::EverCloudLocalData::dirty = false
```

dirty property can be used to keep track which objects have been modified locally and thus need to be synchronized with Evernote service

7.32.5.4 favorited

```
bool qevercloud::EverCloudLocalData::favorited = false
```

favorited property can be used to keep track which data items were favorited in the client. Unfortunately, Evernote has never provided a way to synchronize such property between different clients

7.32.5.5 id

```
QString qevercloud::EverCloudLocalData::id
```

id property can be used as a local unique identifier for any data item before it has been synchronized with Evernote and thus before it can be identified using its guid.

id property is generated automatically on EverCloudLocalData construction for convenience but can be overridden manually

7.32.6 Property Documentation

7.32.6.1 dict

```
Dict qevercloud::EverCloudLocalData::dict
```

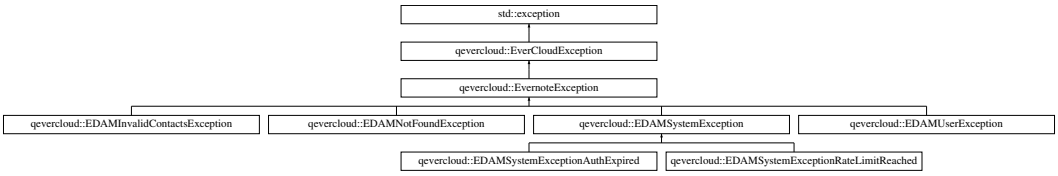
7.32.6.2 local

```
bool qevercloud::EverCloudLocalData::local
```

7.33 qevercloud::EvernoteException Class Reference

```
#include <EverCloudException.h>
```

Inheritance diagram for qevercloud::EvernoteException:



Public Member Functions

- EvernoteException ()
- EvernoteException (QString error)
- EvernoteException (const std::string &error)
- EvernoteException (const char ∗error)
- virtual EverCloudExceptionDataPtr exceptionData () const override

Additional Inherited Members

7.33.1 Detailed Description

All exception sent by Evernote servers (as opposed to other error conditions, for example http errors) are descendants of this class.

7.33.2 Constructor & Destructor Documentation

7.33.2.1 EvernoteException() [1/4]

```
qevercloud::EvernoteException::EvernoteException ( )  [explicit]
```

7.33.2.2 EvernoteException() [2/4]

```
qevercloud::EvernoteException::EvernoteException (
            QString error )  [explicit]
```

7.33.2.3 EvernoteException() [3/4]

```
qevercloud::EvernoteException::EvernoteException (
            const std::string & error )  [explicit]
```

7.33.2.4 EvernoteException() [4/4]

```
qevercloud::EvernoteException::EvernoteException (
            const char * error )  [explicit]
```

7.33.3 Member Function Documentation

7.33.3.1 exceptionData()

```
virtual EverCloudExceptionDataPtr qevercloud::EvernoteException::exceptionData ( ) const  [override],
[virtual]
```

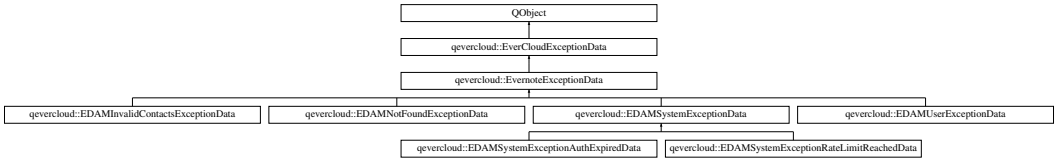
Reimplemented from qevercloud::EverCloudException.

Reimplemented in qevercloud::EDAMSystemExceptionRateLimitReached, qevercloud::EDAMSystemExceptionAuthExpired, qevercloud::EDAMUserException, qevercloud::EDAMSystemException, qevercloud::EDAMNotFoundException, and qevercloud::EDAMInvalidContactsException.

7.34 qevercloud::EvernoteExceptionData Class Reference

```
#include <EverCloudException.h>
```

Inheritance diagram for qevercloud::EvernoteExceptionData:



Public Member Functions

- EvernoteExceptionData (QString error)
- virtual void throwException () const override

Additional Inherited Members

7.34.1 Detailed Description

Asynchronous API conterpart of EvernoteException. See EverCloudExceptionData for more details.

7.34.2 Constructor & Destructor Documentation

7.34.2.1 EvernoteExceptionData()

```
qevercloud::EvernoteExceptionData::EvernoteExceptionData (
            QString error )  [explicit]
```

7.34.3 Member Function Documentation

7.34.3.1 throwException()

```
virtual void qevercloud::EvernoteExceptionData::throwException ( ) const  [override], [virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EverCloudExceptionData.

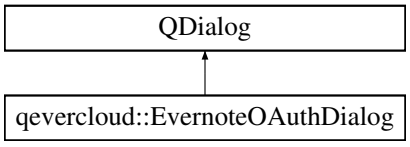
Reimplemented in qevercloud::EDAMUserExceptionData, qevercloud::EDAMSystemExceptionData, qevercloud::EDAMNotFoundExc
qevercloud::EDAMInvalidContactsExceptionData, qevercloud::EDAMSystemExceptionRateLimitReachedData, and
qevercloud::EDAMSystemExceptionAuthExpiredData.

7.35 qevercloud::EvernoteOAuthDialog Class Reference

Authorizes your app with the Evernote service by means of OAuth authentication.

```
#include <OAuth.h>
```

Inheritance diagram for qevercloud::EvernoteOAuthDialog:



Public Types

- using OAuthResult = EvernoteOAuthWebView::OAuthResult

Public Member Functions

- EvernoteOAuthDialog (QString consumerKey, QString consumerSecret, QString host=QString↩ Literal("www.evernote.com"), QWidget ∗parent=Q_NULLPTR)
- virtual ∼EvernoteOAuthDialog () override
- void setWebViewSizeHint (QSize sizeHint)
- bool isSucceeded () const
- QString oauthError () const
- OAuthResult oauthResult () const
- virtual int exec () override
- virtual void open () override

7.35.1 Detailed Description

Authorizes your app with the Evernote service by means of OAuth authentication.

Intended usage:

```
#include <QEverCloudOAuth.h>
EvernoteOAuthDialog d(myConsumerKey, myConsumerSecret);
if(d.exec() == QDialog::Accepted) {
    EvernoteOAuthDialog::OAuthResult res = d.oauthResult();
    // Connect to Evernote
    ...
} else {
    QString errorText = d.oauthError();
    // handle an authentication error
    ...
}
```

Note that you have to include QEverCloudOAuth.h header.

By default EvernoteOAuthDialog uses qrand() for generating nonce so do not forget to call qsrand() in your application. See setNonceGenerator If you want more control over nonce generation.

7.35.2 Member Typedef Documentation

7.35.2.1 OAuthResult

```
using qevercloud::EvernoteOAuthDialog::OAuthResult = EvernoteOAuthWebView::OAuthResult
```

7.35.3 Constructor & Destructor Documentation

7.35.3.1 EvernoteOAuthDialog()

```
qevercloud::EvernoteOAuthDialog::EvernoteOAuthDialog (
            QString consumerKey,
            QString consumerSecret,
            QString host = QStringLiteral("www.evernote.com"),
            QWidget * parent = Q_NULLPTR )
```

Constructs the dialog.

Parameters

host	Evernote host to authorize with. You need one of this: • "www.evernote.com" - the production service. It's the default value. • "sandox.evernote.com" - the developers "sandbox" service
consumerKey	get it from the Evernote
consumerSecret	along with this

7.35.3.2 ~EvernoteOAuthDialog()

```
virtual qevercloud::EvernoteOAuthDialog::~EvernoteOAuthDialog ( )  [override], [virtual]
```

7.35.4 Member Function Documentation

7.35.4.1 exec()

```
virtual int qevercloud::EvernoteOAuthDialog::exec ( )  [override], [virtual]
```

Returns

QDialog::Accepted on a successful authentication.

7.35.4.2 isSucceeded()

```
bool qevercloud::EvernoteOAuthDialog::isSucceeded ( ) const
```

Returns

true in case of a successful authentication. You probably better check exec() return value instead.

7.35.4.3 oauthError()

```
QString qevercloud::EvernoteOAuthDialog::oauthError ( ) const
```

Returns

In case of an authentification error may return some information about the error.

7.35.4.4 oauthResult()

```
OAuthResult qevercloud::EvernoteOAuthDialog::oauthResult ( ) const
```

Returns

the result of a successful authentication.

7.35.4.5 open()

```
virtual void qevercloud::EvernoteOAuthDialog::open ( )  [override], [virtual]
```

Shows the dialog as a window modal dialog, returning immediately.

7.35.4.6 setWebViewSizeHint()

```
void qevercloud::EvernoteOAuthDialog::setWebViewSizeHint (
            QSize sizeHint )
```

The dialog adjusts its initial size automatically based on the contained QWebView preffered size. Use this method to set the size.

Parameters

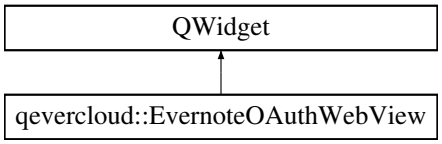
sizeHint	will be used as the preffered size of the contained QWebView.

7.36 qevercloud::EvernoteOAuthWebView Class Reference

The class is tailored specifically for OAuth authorization with Evernote.

```
#include <OAuth.h>
```

Inheritance diagram for qevercloud::EvernoteOAuthWebView:



Classes

- struct OAuthResult

Signals

- void authenticationFinished (bool success)
- void authenticationSuceeded ()
- void authenticationFailed ()

Public Member Functions

- EvernoteOAuthWebView (QWidget *parent=Q_NULLPTR)
- void authenticate (QString host, QString consumerKey, QString consumerSecret, const qint64 timeoutMsec=30000)
- bool isSucceeded () const
- QString oauthError () const
- OAuthResult oauthResult () const
- void setSizeHint (QSize sizeHint)
- QSize sizeHint () const override

7.36.1 Detailed Description

The class is tailored specifically for OAuth authorization with Evernote.

While it is functional by itself you probably will prefer to use EvernoteOAuthDialog.

Note that you have to include OAuth.h header.

By default EvernoteOAuthWebView uses qrand() for generating nonce so do not forget to call qsrand() in your application. See setNonceGenerator If you want more control over nonce generation.

7.36.2 Constructor & Destructor Documentation

7.36.2.1 EvernoteOAuthWebView()

```
qevercloud::EvernoteOAuthWebView::EvernoteOAuthWebView (
            QWidget * parent = Q_NULLPTR )
```

7.36.3 Member Function Documentation

7.36.3.1 authenticate()

```
void qevercloud::EvernoteOAuthWebView::authenticate (
            QString host,
            QString consumerKey,
            QString consumerSecret,
            const qint64 timeoutMsec = 30000 )
```

This function starts the OAuth sequence. In the end of the sequence will be emitted one of the signals: authenticationSuceeded or authenticationFailed.

Do not call the function while its call is in effect, i.e. one of the signals is not emitted.

Parameters

host	Evernote host to authorize with. You need one of this: • "www.evernote.com" - the production service. It's the default value. • "sandox.evernote.com" - the developers "sandbox" service
consumerKey	get it from the Evernote
consumerSecret	along with this
timeoutMsec	Timeout for network requests in milliseconds

7.36.3.2 authenticationFailed

```
void qevercloud::EvernoteOAuthWebView::authenticationFailed ( )  [signal]
```

Emitted when the OAuth sequence is finished with a failure. Some error info may be available with errorText().

7.36.3.3 authenticationFinished

```
void qevercloud::EvernoteOAuthWebView::authenticationFinished (
            bool success )  [signal]
```

Emitted when the OAuth sequence started with authenticate() call is finished

7.36.3.4 authenticationSuceeded

```
void qevercloud::EvernoteOAuthWebView::authenticationSuceeded ( )  [signal]
```

Emitted when the OAuth sequence is successfully finished. Call oauthResult() to get the data.

7.36.3.5 isSucceeded()

```
bool qevercloud::EvernoteOAuthWebView::isSucceeded ( ) const
```

Returns

true if the last call to authenticate resulted in a successful authentication.

7.36.3.6 oauthError()

```
QString qevercloud::EvernoteOAuthWebView::oauthError ( ) const
```

Returns

error message resulted from the last call to authenticate

7.36.3.7 oauthResult()

```
OAuthResult qevercloud::EvernoteOAuthWebView::oauthResult ( ) const
```

Returns

the result of the last authentication, i.e. authenticate() call.

7.36.3.8 setSizeHint()

```
void qevercloud::EvernoteOAuthWebView::setSizeHint (
            QSize sizeHint )
```

The method is useful to specify default size for a EverOAuthWebView.

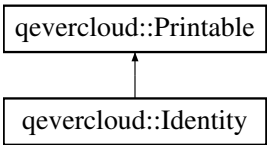
7.36.3.9 sizeHint()

```
QSize qevercloud::EvernoteOAuthWebView::sizeHint ( ) const  [override]
```

7.37 qevercloud::Identity Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::Identity:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Identity &other) const
- bool operator!= (const Identity &other) const

Public Attributes

- EverCloudLocalData localData
- IdentityID id = 0
- Optional< Contact > contact
- Optional< UserID > userId
- Optional< bool > deactivated
- Optional< bool > sameBusiness
- Optional< bool > blocked
- Optional< bool > userConnected
- Optional< MessageEventID > eventId

7.37.1 Detailed Description

An object that represents the relationship between a Contact that possibly belongs to an Evernote User.

7.37.2 Member Function Documentation

7.37.2.1 operator"!=()

```
bool qevercloud::Identity::operator!= (
            const Identity & other ) const  [inline]
```

7.37.2.2 operator==()

```
bool qevercloud::Identity::operator== (
            const Identity & other ) const  [inline]
```

7.37.2.3 print()

```
virtual void qevercloud::Identity::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.37.3 Member Data Documentation

7.37.3.1 blocked

```
Optional< bool > qevercloud::Identity::blocked
```

Has the caller blocked the Evernote user this Identity represents?

7.37.3.2 contact

```
Optional< Contact > qevercloud::Identity::contact
```

NOT DOCUMENTED

7.37.3.3 deactivated

```
Optional< bool > qevercloud::Identity::deactivated
```

Indicates that the contact for this identity is no longer active and should not be used when creating new threads using Destination.recipients, unless you know of another Identity instance with the same contact information that is active. If you are connected to the user (see userConnected), you can still create threads using their Evernote-type contact.

7.37.3.4 eventId

```
Optional< MessageEventID > qevercloud::Identity::eventId
```

A server-assigned sequence number for the events in the messages subsystem.

7.37.3.5 id

```
IdentityID qevercloud::Identity::id = 0
```

The unique identifier for this mapping.

7.37.3.6 localData

```
EverCloudLocalData qevercloud::Identity::localData
```

See the declaration of EverCloudLocalData for details

7.37.3.7 sameBusiness

```
Optional< bool > qevercloud::Identity::sameBusiness
```

Does this Identity belong to someone who is in the same business as the caller?

7.37.3.8 userConnected

```
Optional< bool > qevercloud::Identity::userConnected
```

Indicates that the caller is "connected" to the user of this identity via this identity. When you have a connection via an identity, you should always create new threads using the Evernote-type contact (see ContactType) using the userId field from a connected Identity. On the Evernote service, the Evernote-type contact is the most durable. Phone numbers and e-mail addresses can get re-assigned but your Evernote account user ID will remain the same. A connection exists when both of you are in the same business or the user has replied to a thread that you are on. When connected, you will also get to see more information about the user who has claimed the identity. Note that you are never connected to yourself since you won't be sending messages to yourself, but you will obviously see your own profile information.

7.37.3.9 userId

```
Optional< UserID > qevercloud::Identity::userId
```

The Evernote User id that is connected to the Contact. May be unset if this identity has not yet been claimed, or the caller is not connected to this identity.

7.38 qevercloud::IDurableService Class Reference

```
#include <DurableService.h>
```

Classes

- struct AsyncRequest
- struct SyncRequest

Public Types

- using SyncResult = std::pair< QVariant, EverCloudExceptionDataPtr >
- using SyncServiceCall = std::function< SyncResult(IRequestContextPtr)>
- using AsyncServiceCall = std::function< AsyncResult *(IRequestContextPtr)>

Public Member Functions

- virtual SyncResult executeSyncRequest (SyncRequest &&syncRequest, IRequestContextPtr ctx)=0
- virtual AsyncResult * executeAsyncRequest (AsyncRequest &&asyncRequest, IRequestContextPtr ctx)=0

7.38.1 Member Typedef Documentation

7.38.1.1 AsyncServiceCall

```
using qevercloud::IDurableService::AsyncServiceCall = std::function<AsyncResult*(IRequestContextPtr)>
```

7.38.1.2 SyncResult

```
using qevercloud::IDurableService::SyncResult = std::pair<QVariant,EverCloudExceptionDataPtr>
```

7.38.1.3 SyncServiceCall

```
using qevercloud::IDurableService::SyncServiceCall = std::function<SyncResult(IRequestContextPtr)>
```

7.38.2 Member Function Documentation

7.38.2.1 executeAsyncRequest()

```
virtual AsyncResult * qevercloud::IDurableService::executeAsyncRequest (
            AsyncRequest && asyncRequest,
            IRequestContextPtr ctx )  [pure virtual]
```

7.38.2.2 executeSyncRequest()

```
virtual SyncResult qevercloud::IDurableService::executeSyncRequest (
            SyncRequest && syncRequest,
            IRequestContextPtr ctx )  [pure virtual]
```

7.39 qevercloud::ILogger Class Reference

```
#include <Log.h>
```

Public Member Functions

- virtual bool shouldLog (const LogLevel level, const char ∗component) const =0
- virtual void log (const LogLevel level, const char ∗component, const char ∗fileName, const quint32 line↩ Number, const qint64 timestamp, const QString &message)=0
- virtual void setLevel (const LogLevel level)=0
- virtual LogLevel level () const =0

7.39.1 Member Function Documentation

7.39.1.1 level()

```
virtual LogLevel qevercloud::ILogger::level ( ) const  [pure virtual]
```

7.39.1.2 log()

```
virtual void qevercloud::ILogger::log (
            const LogLevel level,
            const char * component,
            const char * fileName,
            const quint32 lineNumber,
            const qint64 timestamp,
            const QString & message )  [pure virtual]
```

7.39.1.3 setLevel()

```
virtual void qevercloud::ILogger::setLevel (
            const LogLevel level )  [pure virtual]
```

7.39.1.4 shouldLog()

```
virtual bool qevercloud::ILogger::shouldLog (
            const LogLevel level,
            const char * component ) const  [pure virtual]
```

7.40 qevercloud::InkNoteImageDownloader Class Reference

the InkNoteImageDownloader class is for downloading the images of ink notes which can be created with the official Evernote client on Windows (only with it, at least at the time of this writing).

```
#include <InkNoteImageDownloader.h>
```

Public Member Functions

- InkNoteImageDownloader ()

  Default constructor.
- InkNoteImageDownloader (QString host, QString shardId, QString authenticationToken, int width, int height)

  Constructs InkNoteImageDownloader.
- virtual ~InkNoteImageDownloader ()
- InkNoteImageDownloader & setHost (QString host)
- InkNoteImageDownloader & setShardId (QString shardId)
- InkNoteImageDownloader & setAuthenticationToken (QString authenticationToken)
- InkNoteImageDownloader & setWidth (int width)
- InkNoteImageDownloader & setHeight (int height)
- QByteArray download (Guid guid, const bool isPublic=false, const qint64 timeoutMsec=30000)

  Downloads the image for the ink note.

7.40.1 Detailed Description

the InkNoteImageDownloader class is for downloading the images of ink notes which can be created with the official Evernote client on Windows (only with it, at least at the time of this writing).

On all other platforms the most one can get instead of the actual ink note is its non-editable image. This class retrieves just these, exclusively in PNG format.

NOTE: almost the entirety of this class' content represents an ad-hoc solution to a completely undocumented feature of Evernote service. A very small glimpse of information was once available on Evernote forums but it's deleted now... I collected an even smaller glimpse of information in this SO question: https://stackoverflow.com/q/39179012/1217285. For all practical purposes it is the only piece of information on this feature in existence now.

7.40.2 Constructor & Destructor Documentation

7.40.2.1 InkNoteImageDownloader() [1/2]

```
qevercloud::InkNoteImageDownloader::InkNoteImageDownloader ( )
```

Default constructor.

host, shardId, authenticationToken, width, height have to be specified before calling download or createPostRequest

7.40.2.2 InkNoteImageDownloader() [2/2]

```
qevercloud::InkNoteImageDownloader::InkNoteImageDownloader (
            QString host,
            QString shardId,
            QString authenticationToken,
            int width,
            int height )
```

Constructs InkNoteImageDownloader.

Parameters

host	www.evernote.com or sandbox.evernote.com
shardId	You can get the value from UserStore service or as a result of an authentication.
authenticationToken	For working private ink notes you must supply a valid authentication token. For public resources the value specified is not used.
width	Width of the ink note's resource
height	Height of the ink note's resource

7.40.2.3 ~InkNoteImageDownloader()

```
virtual qevercloud::InkNoteImageDownloader::~InkNoteImageDownloader ( )  [virtual]
```

7.40.3 Member Function Documentation

7.40.3.1 download()

```
QByteArray qevercloud::InkNoteImageDownloader::download (
            Guid guid,
            const bool isPublic = false,
            const qint64 timeoutMsec = 30000 )
```

Downloads the image for the ink note.

Unlike other pieces of QEverCloud API, downloading of ink note images is currently synchronous only. The reason for that is that AsyncResult is bounded to a single QNetworkRequest object but downloading of the ink note image might take multiple requests for several ink note image's vertical stripes which are then merged together to form a single image. Downloading the entire ink note's image via a single request works sometimes but sometimes Evernote replies to such request with messed up data which cannot be loaded into a QImage. The reason for that behaviour is unknown at the moment, and, given the state of official documentation

- missing - it is likely to stay so. if someone has an idea how to make it more reliable, please let me know.

Parameters

guid	The guid of the ink note's resource
isPublic	Specify true for public ink notes. In this case authentication token is not sent to with the request as it should be according to the docs.
timeoutMsec	Timeout for download request in milliseconds

Returns

downloaded data.

7.40.3.2 setAuthenticationToken()

```
InkNoteImageDownloader & qevercloud::InkNoteImageDownloader::setAuthenticationToken (
            QString authenticationToken )
```

Parameters

authenticationToken	For working private ink notes you must supply a valid authentication token. For public resources the value specified is not used.

7.40.3.3 setHeight()

```
InkNoteImageDownloader & qevercloud::InkNoteImageDownloader::setHeight (
            int height )
```

Parameters

height	Height of the ink note's resource

7.40.3.4 setHost()

```
InkNoteImageDownloader & qevercloud::InkNoteImageDownloader::setHost (
            QString host )
```

Parameters

host	www.evernote.com or sandbox.evernote.com

7.40.3.5 setShardId()

```
InkNoteImageDownloader & qevercloud::InkNoteImageDownloader::setShardId (
            QString shardId )
```

Parameters

shardId	You can get the value from UserStore service or as a result of an authentication.

7.40.3.6 setWidth()

```
InkNoteImageDownloader & qevercloud::InkNoteImageDownloader::setWidth (
            int width )
```

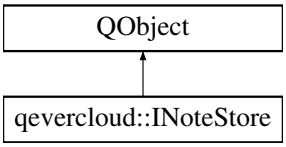
Parameters

width	Width of the ink note's resource

7.41 qevercloud::INoteStore Class Reference

`#include <Services.h>`

Inheritance diagram for qevercloud::INoteStore:



Public Member Functions

- virtual QString noteStoreUrl () const =0
- virtual void setNoteStoreUrl (QString url)=0
- virtual SyncState getSyncState (IRequestContextPtr ctx={})=0
- virtual AsyncResult * getSyncStateAsync (IRequestContextPtr ctx={})=0
- virtual SyncChunk getFilteredSyncChunk (qint32 afterUSN, qint32 maxEntries, const SyncChunkFilter &filter, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getFilteredSyncChunkAsync (qint32 afterUSN, qint32 maxEntries, const SyncChunkFilter &filter, IRequestContextPtr ctx={})=0
- virtual SyncState getLinkedNotebookSyncState (const LinkedNotebook &linkedNotebook, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getLinkedNotebookSyncStateAsync (const LinkedNotebook &linkedNotebook, IRequestContextPtr ctx={})=0
- virtual SyncChunk getLinkedNotebookSyncChunk (const LinkedNotebook &linkedNotebook, qint32 afterUSN, qint32 maxEntries, bool fullSyncOnly, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getLinkedNotebookSyncChunkAsync (const LinkedNotebook &linkedNotebook, qint32 afterUSN, qint32 maxEntries, bool fullSyncOnly, IRequestContextPtr ctx={})=0
- virtual QList< Notebook > listNotebooks (IRequestContextPtr ctx={})=0
- virtual AsyncResult * listNotebooksAsync (IRequestContextPtr ctx={})=0
- virtual QList< Notebook > listAccessibleBusinessNotebooks (IRequestContextPtr ctx={})=0
- virtual AsyncResult * listAccessibleBusinessNotebooksAsync (IRequestContextPtr ctx={})=0
- virtual Notebook getNotebook (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNotebookAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual Notebook getDefaultNotebook (IRequestContextPtr ctx={})=0
- virtual AsyncResult * getDefaultNotebookAsync (IRequestContextPtr ctx={})=0
- virtual Notebook createNotebook (const Notebook &notebook, IRequestContextPtr ctx={})=0
- virtual AsyncResult * createNotebookAsync (const Notebook &notebook, IRequestContextPtr ctx={})=0
- virtual qint32 updateNotebook (const Notebook &notebook, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateNotebookAsync (const Notebook &notebook, IRequestContextPtr ctx={})=0
- virtual qint32 expungeNotebook (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * expungeNotebookAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual QList< Tag > listTags (IRequestContextPtr ctx={})=0
- virtual AsyncResult * listTagsAsync (IRequestContextPtr ctx={})=0
- virtual QList< Tag > listTagsByNotebook (Guid notebookGuid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * listTagsByNotebookAsync (Guid notebookGuid, IRequestContextPtr ctx={})=0
- virtual Tag getTag (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getTagAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual Tag createTag (const Tag &tag, IRequestContextPtr ctx={})=0
- virtual AsyncResult * createTagAsync (const Tag &tag, IRequestContextPtr ctx={})=0
- virtual qint32 updateTag (const Tag &tag, IRequestContextPtr ctx={})=0

- virtual AsyncResult * updateTagAsync (const Tag &tag, IRequestContextPtr ctx={})=0
- virtual void untagAll (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * untagAllAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual qint32 expungeTag (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * expungeTagAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual QList< SavedSearch > listSearches (IRequestContextPtr ctx={})=0
- virtual AsyncResult * listSearchesAsync (IRequestContextPtr ctx={})=0
- virtual SavedSearch getSearch (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getSearchAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual SavedSearch createSearch (const SavedSearch &search, IRequestContextPtr ctx={})=0
- virtual AsyncResult * createSearchAsync (const SavedSearch &search, IRequestContextPtr ctx={})=0
- virtual qint32 updateSearch (const SavedSearch &search, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateSearchAsync (const SavedSearch &search, IRequestContextPtr ctx={})=0
- virtual qint32 expungeSearch (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * expungeSearchAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual qint32 findNoteOffset (const NoteFilter &filter, Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * findNoteOffsetAsync (const NoteFilter &filter, Guid guid, IRequestContextPtr ctx={})=0
- virtual NotesMetadataList findNotesMetadata (const NoteFilter &filter, qint32 offset, qint32 maxNotes, const NotesMetadataResultSpec &resultSpec, IRequestContextPtr ctx={})=0
- virtual AsyncResult * findNotesMetadataAsync (const NoteFilter &filter, qint32 offset, qint32 maxNotes, const NotesMetadataResultSpec &resultSpec, IRequestContextPtr ctx={})=0
- virtual NoteCollectionCounts findNoteCounts (const NoteFilter &filter, bool withTrash, IRequestContextPtr ctx={})=0
- virtual AsyncResult * findNoteCountsAsync (const NoteFilter &filter, bool withTrash, IRequestContextPtr ctx={})=0
- virtual Note getNoteWithResultSpec (Guid guid, const NoteResultSpec &resultSpec, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteWithResultSpecAsync (Guid guid, const NoteResultSpec &resultSpec, IRequestContextPtr ctx={})=0
- virtual Note getNote (Guid guid, bool withContent, bool withResourcesData, bool withResourcesRecognition, bool withResourcesAlternateData, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteAsync (Guid guid, bool withContent, bool withResourcesData, bool with↩ ResourcesRecognition, bool withResourcesAlternateData, IRequestContextPtr ctx={})=0
- virtual LazyMap getNoteApplicationData (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteApplicationDataAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual QString getNoteApplicationDataEntry (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteApplicationDataEntryAsync (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual qint32 setNoteApplicationDataEntry (Guid guid, QString key, QString value, IRequestContextPtr ctx={})=0
- virtual AsyncResult * setNoteApplicationDataEntryAsync (Guid guid, QString key, QString value, IRequestContextPtr ctx={})=0
- virtual qint32 unsetNoteApplicationDataEntry (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual AsyncResult * unsetNoteApplicationDataEntryAsync (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual QString getNoteContent (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteContentAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual QString getNoteSearchText (Guid guid, bool noteOnly, bool tokenizeForIndexing, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteSearchTextAsync (Guid guid, bool noteOnly, bool tokenizeForIndexing, IRequestContextPtr ctx={})=0
- virtual QString getResourceSearchText (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceSearchTextAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual QStringList getNoteTagNames (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteTagNamesAsync (Guid guid, IRequestContextPtr ctx={})=0

- virtual Note createNote (const Note &note, IRequestContextPtr ctx={})=0
- virtual AsyncResult * createNoteAsync (const Note &note, IRequestContextPtr ctx={})=0
- virtual Note updateNote (const Note &note, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateNoteAsync (const Note &note, IRequestContextPtr ctx={})=0
- virtual qint32 deleteNote (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * deleteNoteAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual qint32 expungeNote (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * expungeNoteAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual Note copyNote (Guid noteGuid, Guid toNotebookGuid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * copyNoteAsync (Guid noteGuid, Guid toNotebookGuid, IRequestContextPtr ctx={})=0
- virtual QList< NoteVersionId > listNoteVersions (Guid noteGuid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * listNoteVersionsAsync (Guid noteGuid, IRequestContextPtr ctx={})=0
- virtual Note getNoteVersion (Guid noteGuid, qint32 updateSequenceNum, bool withResourcesData, bool withResourcesRecognition, bool withResourcesAlternateData, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNoteVersionAsync (Guid noteGuid, qint32 updateSequenceNum, bool withResourcesData, bool withResourcesRecognition, bool withResourcesAlternateData, IRequestContextPtr ctx={})=0
- virtual Resource getResource (Guid guid, bool withData, bool withRecognition, bool withAttributes, bool withAlternateData, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceAsync (Guid guid, bool withData, bool withRecognition, bool withAttributes, bool withAlternateData, IRequestContextPtr ctx={})=0
- virtual LazyMap getResourceApplicationData (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceApplicationDataAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual QString getResourceApplicationDataEntry (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceApplicationDataEntryAsync (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual qint32 setResourceApplicationDataEntry (Guid guid, QString key, QString value, IRequestContextPtr ctx={})=0
- virtual AsyncResult * setResourceApplicationDataEntryAsync (Guid guid, QString key, QString value, IRequestContextPtr ctx={})=0
- virtual qint32 unsetResourceApplicationDataEntry (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual AsyncResult * unsetResourceApplicationDataEntryAsync (Guid guid, QString key, IRequestContextPtr ctx={})=0
- virtual qint32 updateResource (const Resource &resource, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateResourceAsync (const Resource &resource, IRequestContextPtr ctx={})=0
- virtual QByteArray getResourceData (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceDataAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual Resource getResourceByHash (Guid noteGuid, QByteArray contentHash, bool withData, bool withRecognition, bool withAlternateData, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceByHashAsync (Guid noteGuid, QByteArray contentHash, bool withData, bool withRecognition, bool withAlternateData, IRequestContextPtr ctx={})=0
- virtual QByteArray getResourceRecognition (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceRecognitionAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual QByteArray getResourceAlternateData (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceAlternateDataAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual ResourceAttributes getResourceAttributes (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getResourceAttributesAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual Notebook getPublicNotebook (UserID userId, QString publicUri, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getPublicNotebookAsync (UserID userId, QString publicUri, IRequestContextPtr ctx={})=0
- virtual SharedNotebook shareNotebook (const SharedNotebook &sharedNotebook, QString message, IRequestContextPtr ctx={})=0
- virtual AsyncResult * shareNotebookAsync (const SharedNotebook &sharedNotebook, QString message, IRequestContextPtr ctx={})=0
- virtual CreateOrUpdateNotebookSharesResult createOrUpdateNotebookShares (const NotebookShareTemplate &shareTemplate, IRequestContextPtr ctx={})=0

- virtual AsyncResult * createOrUpdateNotebookSharesAsync (const NotebookShareTemplate &share↩ Template, IRequestContextPtr ctx={})=0
- virtual qint32 updateSharedNotebook (const SharedNotebook &sharedNotebook, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateSharedNotebookAsync (const SharedNotebook &sharedNotebook, IRequestContextPtr ctx={})=0
- virtual Notebook setNotebookRecipientSettings (QString notebookGuid, const NotebookRecipientSettings &recipientSettings, IRequestContextPtr ctx={})=0
- virtual AsyncResult * setNotebookRecipientSettingsAsync (QString notebookGuid, const NotebookRecipientSettings &recipientSettings, IRequestContextPtr ctx={})=0
- virtual QList< SharedNotebook > listSharedNotebooks (IRequestContextPtr ctx={})=0
- virtual AsyncResult * listSharedNotebooksAsync (IRequestContextPtr ctx={})=0
- virtual LinkedNotebook createLinkedNotebook (const LinkedNotebook &linkedNotebook, IRequestContextPtr ctx={})=0
- virtual AsyncResult * createLinkedNotebookAsync (const LinkedNotebook &linkedNotebook, IRequestContextPtr ctx={})=0
- virtual qint32 updateLinkedNotebook (const LinkedNotebook &linkedNotebook, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateLinkedNotebookAsync (const LinkedNotebook &linkedNotebook, IRequestContextPtr ctx={})=0
- virtual QList< LinkedNotebook > listLinkedNotebooks (IRequestContextPtr ctx={})=0
- virtual AsyncResult * listLinkedNotebooksAsync (IRequestContextPtr ctx={})=0
- virtual qint32 expungeLinkedNotebook (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * expungeLinkedNotebookAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual AuthenticationResult authenticateToSharedNotebook (QString shareKeyOrGlobalId, IRequestContextPtr ctx={})=0
- virtual AsyncResult * authenticateToSharedNotebookAsync (QString shareKeyOrGlobalId, IRequestContextPtr ctx={})=0
- virtual SharedNotebook getSharedNotebookByAuth (IRequestContextPtr ctx={})=0
- virtual AsyncResult * getSharedNotebookByAuthAsync (IRequestContextPtr ctx={})=0
- virtual void emailNote (const NoteEmailParameters &parameters, IRequestContextPtr ctx={})=0
- virtual AsyncResult * emailNoteAsync (const NoteEmailParameters &parameters, IRequestContextPtr ctx={})=0
- virtual QString shareNote (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * shareNoteAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual void stopSharingNote (Guid guid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * stopSharingNoteAsync (Guid guid, IRequestContextPtr ctx={})=0
- virtual AuthenticationResult authenticateToSharedNote (QString guid, QString noteKey, IRequestContextPtr ctx={})=0
- virtual AsyncResult * authenticateToSharedNoteAsync (QString guid, QString noteKey, IRequestContextPtr ctx={})=0
- virtual RelatedResult findRelated (const RelatedQuery &query, const RelatedResultSpec &resultSpec, IRequestContextPtr ctx={})=0
- virtual AsyncResult * findRelatedAsync (const RelatedQuery &query, const RelatedResultSpec &resultSpec, IRequestContextPtr ctx={})=0
- virtual UpdateNoteIfUsnMatchesResult updateNoteIfUsnMatches (const Note &note, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateNoteIfUsnMatchesAsync (const Note &note, IRequestContextPtr ctx={})=0
- virtual ManageNotebookSharesResult manageNotebookShares (const ManageNotebookSharesParameters &parameters, IRequestContextPtr ctx={})=0
- virtual AsyncResult * manageNotebookSharesAsync (const ManageNotebookSharesParameters &parameters, IRequestContextPtr ctx={})=0
- virtual ShareRelationships getNotebookShares (QString notebookGuid, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getNotebookSharesAsync (QString notebookGuid, IRequestContextPtr ctx={})=0

Protected Member Functions

- INoteStore (QObject *parent)

7.41.1 Detailed Description

Service: NoteStore

The NoteStore service is used by EDAM clients to exchange information about the collection of notes in an account. This is primarily used for synchronization, but could also be used by a "thin" client without a full local cache.

Most functions take an "authenticationToken" parameter, which is the value returned by the UserStore which permits access to the account.

Calls which require an authenticationToken may throw an EDAMUserException for the following reasons:

- DATA_REQUIRED "authenticationToken" - token is empty
- BAD_DATA_FORMAT "authenticationToken" - token is malformed
- INVALID_AUTH "authenticationToken" - token signature is invalid
- AUTH_EXPIRED "authenticationToken" - token has expired or been revoked
- PERMISSION_DENIED "authenticationToken" - token does not grant permission to perform the requested action
- BUSINESS_SECURITY_LOGIN_REQUIRED "sso" - the user is a member of a business that requires single sign-on, and must complete SSO before accessing business content.

7.41.2 Constructor & Destructor Documentation

7.41.2.1 INoteStore()

```
qevercloud::INoteStore::INoteStore (
            QObject * parent )  [inline], [protected]
```

7.41.3 Member Function Documentation

7.41.3.1 authenticateToSharedNote()

```
virtual AuthenticationResult qevercloud::INoteStore::authenticateToSharedNote (
            QString guid,
            QString noteKey,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the service to produce an authentication token that can be used to access the contents of a single Note which was individually shared from someone's account. This authenticationToken can be used with the various other NoteStore calls to find and retrieve the Note and its directly-referenced children.

Parameters

guid	The GUID identifying this Note on this shard.
noteKey	The 'noteKey' identifier from the Note that was originally created via a call to shareNote() and then given to a recipient to access.
authenticationToken	An optional authenticationToken that identifies the user accessing the shared note. This parameter may be required to access some shared notes.

Exceptions

EDAMUserException	• PERMISSION_DENIED "Note" - the Note with that GUID is either not shared, or the noteKey doesn't match the current key for this note • PERMISSION_DENIED "authenticationToken" - an authentication token is required to access this Note, but either no authentication token or a "non-owner" authentication token was provided.
EDAMNotFoundException	• "guid" - the note with that GUID is not found
EDAMSystemException	• TAKEN_DOWN "Note" - The specified shared note is taken down (for all requesters). • TAKEN_DOWN "Country" - The specified shared note is taken down for the requester because of an IP-based country lookup.

7.41.3.2 authenticateToSharedNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::authenticateToSharedNoteAsync (
            QString guid,
            QString noteKey,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of authenticateToSharedNote

7.41.3.3 authenticateToSharedNotebook()

```
virtual AuthenticationResult qevercloud::INoteStore::authenticateToSharedNotebook (
            QString shareKeyOrGlobalId,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the service to produce an authentication token that can be used to access the contents of a shared notebook from someone else's account. This authenticationToken can be used with the various other NoteStore calls to find and retrieve notes, and if the permissions in the shared notebook are sufficient, to make changes to the contents of the notebook.

Parameters

shareKeyOr↩ GlobalId	May be one of the following: • A share key for a shared notebook that was granted to some recipient Must be used if you are joining a notebook unless it was shared via createOrUpdateNotebookShares. Share keys are delivered out-of-band and are generally not available to clients. For security reasons, share keys may be invalidated at the discretion of the service. • The shared notebook global identifier. May be used to access a notebook that is already joined. • The Notebook GUID. May be used to access a notebook that was already joined, or to access a notebook that was shared with the recipient via createOrUpdateNotebookShares.
authenticationToken	If a non-empty string is provided, this is the full user-based authentication token that identifies the user who is currently logged in and trying to access the shared notebook. If this string is empty, the service will attempt to authenticate to the shared notebook without any logged in user.

Exceptions

EDAMSystemException	• BAD_DATA_FORMAT "shareKey" - invalid shareKey string • INVALID_AUTH "shareKey" - bad signature on shareKey string
EDAMNotFoundException	• "SharedNotebook.id" - the shared notebook no longer exists
EDAMUserException	• DATA_REQUIRED "authenticationToken" - the share requires login, and no valid authentication token was provided. • PERMISSION_DENIED "SharedNotebook.username" - share requires login, and another username has already been bound to this notebook.

7.41.3.4 authenticateToSharedNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::authenticateToSharedNotebookAsync (
            QString shareKeyOrGlobalId,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of authenticateToSharedNotebook

7.41.3.5 copyNote()

```
virtual Note qevercloud::INoteStore::copyNote (
            Guid noteGuid,
```

```
            Guid toNotebookGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Performs a deep copy of the Note with the provided GUID 'noteGuid' into the Notebook with the provided GUID 'toNotebookGuid'. The caller must be the owner of both the Note and the Notebook. This creates a new Note in the destination Notebook with new content and Resources that match all of the content and Resources from the original Note, but with new GUID identifiers. The original Note is not modified by this operation. The copied note is considered as an "upload" for the purpose of upload transfer limit calculation, so its size is added to the upload count for the owner.

If the original note has been shared and has SharedNote records, the shares are NOT copied.

Parameters

noteGuid	The GUID of the Note to copy.
toNotebookGuid	The GUID of the Notebook that should receive the new Note.

Returns

The metadata for the new Note that was created. This will include the new GUID for this Note (and any copied Resources), but will not include the content body or the binary bodies of any Resources.

Exceptions

EDAMUserException	• LIMIT_REACHED "Note" - at max number per account • PERMISSION_DENIED "Notebook.guid" - destination not owned by user • PERMISSION_DENIED "Note" - user doesn't own • QUOTA_REACHED "Accounting.uploadLimit" - note exceeds upload quota
EDAMNotFoundException	• "Notebook.guid" - not found, by GUID

7.41.3.6 copyNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::copyNoteAsync (
            Guid noteGuid,
            Guid toNotebookGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of copyNote

7.41.3.7 createLinkedNotebook()

```
virtual LinkedNotebook qevercloud::INoteStore::createLinkedNotebook (
            const LinkedNotebook & linkedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the service to make a linked notebook with the provided name, username of the owner and identifiers provided. A linked notebook can be either a link to a public notebook or to a private shared notebook.

Parameters

linkedNotebook	The desired fields for the linked notebook must be provided on this object. The name of the linked notebook must be set. Either a username uri or a shard id and share key must be provided otherwise a EDAMUserException is thrown.

Returns

The newly created LinkedNotebook. The server-side id will be saved in this object's 'id' field.

Exceptions

EDAMUserException	• DATA_REQUIRED "LinkedNotebook.shareName" - missing shareName • BAD_DATA_FORMAT "LinkedNotebook.name" - invalid shareName length or pattern • BAD_DATA_FORMAT "LinkedNotebook.username" - bad username format • BAD_DATA_FORMAT "LinkedNotebook.uri" - if public notebook set but bad uri • DATA_REQUIRED "LinkedNotebook.shardId" - if private notebook but shard id not provided • BAD_DATA_FORMAT "LinkedNotebook.stack" - invalid stack name length or pattern
EDAMSystemException	• BAD_DATA_FORMAT "LinkedNotebook.sharedNotebookGlobalId" - if a bad global identifer was set on a private notebook

7.41.3.8 createLinkedNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::createLinkedNotebookAsync (
            const LinkedNotebook & linkedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of createLinkedNotebook

7.41.3.9 createNote()

```
virtual Note qevercloud::INoteStore::createNote (
            const Note & note,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the service to make a note with the provided set of information.

Parameters

note	A Note object containing the desired fields to be populated on the service.

Returns

The newly created Note from the service. The server-side GUIDs for the Note and any Resources will be saved in this object. The service will include the meta-data for each resource in the note, but the binary contents of the resources and their recognition data will be omitted (except Recognition Resource body, for which the behavior is unspecified).

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.title" - invalid length or pattern • BAD_DATA_FORMAT "Note.content" - invalid length for ENML content • BAD_DATA_FORMAT "Resource.mime" - invalid resource MIME type • BAD_DATA_FORMAT "NoteAttributes.∗" - bad resource string • BAD_DATA_FORMAT "ResourceAttributes.∗" - bad resource string • DATA_CONFLICT "Note.deleted" - deleted time set on active note • DATA_REQUIRED "Resource.data" - resource data body missing • ENML_VALIDATION "∗" - note content doesn't validate against DTD • LIMIT_REACHED "Note" - at max number per account • LIMIT_REACHED "Note.size" - total note size too large • LIMIT_REACHED "Note.resources" - too many resources on Note • LIMIT_REACHED "Note.tagGuids" - too many Tags on Note • LIMIT_REACHED "Resource.data.size" - resource too large • LIMIT_REACHED "NoteAttribute.∗" - attribute string too long • LIMIT_REACHED "ResourceAttribute.∗" - attribute string too long • PERMISSION_DENIED "Note.notebookGuid" - NB not owned by user • QUOTA_REACHED "Accounting.uploadLimit" - note exceeds upload quota • BAD_DATA_FORMAT "Tag.name" - Note.tagNames was provided, and one of the specified tags had an invalid length or pattern • LIMIT_REACHED "Tag" - Note.tagNames was provided, and the required new tags would exceed the maximum number per account
EDAMNotFoundException	• "Note.notebookGuid" - not found, by GUID

7.41.3.10 createNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::createNoteAsync (
            const Note & note,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of createNote

7.41.3.11 createNotebook()

```
virtual Notebook qevercloud::INoteStore::createNotebook (
            const Notebook & notebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the service to make a notebook with the provided name.

Parameters

notebook	The desired fields for the notebook must be provided on this object. The name of the notebook must be set, and either the 'active' or 'defaultNotebook' fields may be set by the client at creation. If a notebook exists in the account with the same name (via case-insensitive compare), this will throw an EDAMUserException.

Returns

The newly created Notebook. The server-side GUID will be saved in this object's 'guid' field.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Notebook.name" - invalid length or pattern • BAD_DATA_FORMAT "Notebook.stack" - invalid length or pattern • BAD_DATA_FORMAT "Publishing.uri" - if publishing set but bad uri • BAD_DATA_FORMAT "Publishing.publicDescription" - if too long • DATA_CONFLICT "Notebook.name" - name already in use • DATA_CONFLICT "Publishing.uri" - if URI already in use • DATA_REQUIRED "Publishing.uri" - if publishing set but uri missing • DATA_REQUIRED "Notebook" - notebook parameter was null • PERMISSION_DENIED "Notebook.defaultNotebook" - if the 'defaultNotebook' field is set to 'true' for a Notebook that is not owned by the user identified by the passed authenticationToken. • LIMIT_REACHED "Notebook" - at max number of notebooks
EDAMNotFoundException	• "Workspace.guid" - if workspaceGuid set and no Workspace exists for the GUID

7.41.3.12 createNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::createNotebookAsync (
            const Notebook & notebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of createNotebook

7.41.3.13 createOrUpdateNotebookShares()

```
virtual CreateOrUpdateNotebookSharesResult qevercloud::INoteStore::createOrUpdateNotebook↩
Shares (
            const NotebookShareTemplate & shareTemplate,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Share a notebook by a messaging thread ID or a list of contacts. This function is intended to be used in conjunction with Evernote messaging, and as such does not notify the recipient that a notebook has been shared with them.

Sharing with a subset of participants on a thread is accomplished by specifying both a thread ID and a list of contacts. This ensures that even if those contacts are on the thread under a deactivated identity, the correct user (the one who has the given contact on the thread) receives the share.

Parameters

authenticationToken	An authentication token that grants the caller permission to share the notebook. This should be an owner token if the notebook is owned by the caller. If the notebook is a business notebook to which the caller has full access, this should be their business authentication token. If the notebook is a shared (non-business) notebook to which the caller has full access, this should be the shared notebook authentication token returned by NoteStore.authenticateToNotebook.
shareTemplate	Specifies the GUID of the notebook to be shared, the privilege at which the notebook should be shared, and the recipient information.

Returns

A structure containing the USN of the Notebook after the change and a list of created or updated Shared↩ Notebooks.

Exceptions

EDAMUserException	• DATA_REQUIRED "Notebook.guid" - if no notebook GUID was specified • BAD_DATA_FORMAT "Notebook.guid" - if shareTemplate.notebookGuid is not a valid GUID • DATA_REQUIRED "shareTemplate" - if the shareTemplate parameter was missing • DATA_REQUIRED "NotebookShareTemplate.privilege" - if no privilege was specified • DATA_CONFLICT "NotebookShareTemplate.privilege" - if the specified privilege is not allowed. • DATA_REQUIRED "NotebookShareTemplate.recipients" - if no recipients were specified, either by thread ID or as a list of contacts • LIMIT_REACHED "SharedNotebook" - if the notebook has reached its maximum number of shares
EDAMInvalidContactsException	• "NotebookShareTemplate.recipients" - if one or more of the recipients specified in shareTemplate.recipients was not syntactically valid, or if attempting to share a notebook with an Evernote identity that the sharer does not have a connection to. The exception will specify which recipients were invalid.
EDAMNotFoundException	• "Notebook.guid" - if no notebook with the specified GUID was found • "NotebookShareTemplate.recipientThreadId" - if the recipient thread ID was specified, but no thread with that ID exists

7.41.3.14 createOrUpdateNotebookSharesAsync()

```
virtual AsyncResult * qevercloud::INoteStore::createOrUpdateNotebookSharesAsync (
            const NotebookShareTemplate & shareTemplate,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of createOrUpdateNotebookShares

7.41.3.15 createSearch()

```
virtual SavedSearch qevercloud::INoteStore::createSearch (
            const SavedSearch & search,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the service to make a saved search with a set of information.

Parameters

search	The desired list of fields for the search are specified in this object. The caller must specify the name and query for the search, and may optionally specify a search scope. The SavedSearch.format field is ignored by the service.

Returns

The newly created SavedSearch. The server-side GUID will be saved in this object.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "SavedSearch.name" - invalid length or pattern • BAD_DATA_FORMAT "SavedSearch.query" - invalid length • DATA_CONFLICT "SavedSearch.name" - name already in use • LIMIT_REACHED "SavedSearch" - at max number of searches

7.41.3.16 createSearchAsync()

```
virtual AsyncResult * qevercloud::INoteStore::createSearchAsync (
            const SavedSearch & search,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of createSearch

7.41.3.17 createTag()

```
virtual Tag qevercloud::INoteStore::createTag (
            const Tag & tag,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the service to make a tag with a set of information.

Parameters

tag	The desired list of fields for the tag are specified in this object. The caller must specify the tag name, and may provide the parentGUID.

Returns

The newly created Tag. The server-side GUID will be saved in this object.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Tag.name" - invalid length or pattern • BAD_DATA_FORMAT "Tag.parentGuid" - malformed GUID • DATA_CONFLICT "Tag.name" - name already in use • LIMIT_REACHED "Tag" - at max number of tags
EDAMNotFoundException	• "Tag.parentGuid" - not found, by GUID

7.41.3.18 createTagAsync()

```
virtual AsyncResult * qevercloud::INoteStore::createTagAsync (
            const Tag & tag,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of createTag

7.41.3.19 deleteNote()

```
virtual qint32 qevercloud::INoteStore::deleteNote (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Moves the note into the trash. The note may still be undeleted, unless it is expunged. This is equivalent to calling updateNote() after setting Note.active = false

Parameters

guid	The GUID of the note to delete.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• PERMISSION_DENIED "Note" - user doesn't have permission to update the note.
EDAMUserException	• DATA_CONFLICT "Note.guid" - the note is already deleted

Exceptions

EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.20 deleteNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::deleteNoteAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of deleteNote

7.41.3.21 emailNote()

```
virtual void qevercloud::INoteStore::emailNote (
            const NoteEmailParameters & parameters,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Attempts to send a single note to one or more email recipients.

NOTE: This function is generally not available to third party applications. Calls will result in an EDAMUserException with the error code PERMISSION_DENIED.

Parameters

authenticationToken	The note will be sent as the user logged in via this token, using that user's registered email address. If the authenticated user doesn't have permission to read that note, the emailing will fail.
parameters	The note must be specified either by GUID (in which case it will be sent using the existing data in the service), or else the full Note must be passed to this call. This also specifies the additional email fields that will be used in the email.

Exceptions

EDAMUserException	• LIMIT_REACHED "NoteEmailParameters.toAddresses" - The email can't be sent because this would exceed the user's daily email limit. • BAD_DATA_FORMAT "(email address)" - email address malformed • DATA_REQUIRED "NoteEmailParameters.toAddresses" - if there are no To: or Cc: addresses provided. • DATA_REQUIRED "Note.title" - if the caller provides a Note parameter with no title • DATA_REQUIRED "Note.content" - if the caller provides a Note parameter with no content • ENML_VALIDATION "∗" - note content doesn't validate against DTD • DATA_REQUIRED "NoteEmailParameters.note" - if no guid or note provided • PERMISSION_DENIED "Note" - private note, user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.22 emailNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::emailNoteAsync (
            const NoteEmailParameters & parameters,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of emailNote

7.41.3.23 expungeLinkedNotebook()

```
virtual qint32 qevercloud::INoteStore::expungeLinkedNotebook (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Permanently expunges the linked notebook from the account.

NOTE: This function is generally not available to third party applications. Calls will result in an EDAMUserException with the error code PERMISSION_DENIED.

Parameters

guid	The LinkedNotebook.guid field of the LinkedNotebook to permanently remove from the account.

7.41.3.24 expungeLinkedNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::expungeLinkedNotebookAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of expungeLinkedNotebook

7.41.3.25 expungeNote()

```
virtual qint32 qevercloud::INoteStore::expungeNote (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Permanently removes a Note, and all of its Resources, from the service.

NOTE: This function is not available to third party applications. Calls will result in an EDAMUserException with the error code PERMISSION_DENIED.

Parameters

guid	The GUID of the note to delete.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• PERMISSION_DENIED "Note" - user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.26 expungeNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::expungeNoteAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of expungeNote

7.41.3.27 expungeNotebook()

```
virtual qint32 qevercloud::INoteStore::expungeNotebook (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Permanently removes the notebook from the user's account. After this action, the notebook is no longer available for undeletion, etc. If the notebook contains any Notes, they will be moved to the current default notebook and moved into the trash (i.e. Note.active=false).

NOTE: This function is generally not available to third party applications. Calls will result in an EDAMUserException with the error code PERMISSION_DENIED.

Parameters

guid	The GUID of the notebook to delete.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Notebook.guid" - if the parameter is missing • LIMIT_REACHED "Notebook" - trying to expunge the last Notebook • PERMISSION_DENIED "Notebook" - private notebook, user doesn't own

7.41.3.28 expungeNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::expungeNotebookAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of expungeNotebook

7.41.3.29 expungeSearch()

```
virtual qint32 qevercloud::INoteStore::expungeSearch (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Permanently deletes the saved search with the provided GUID, if present.

NOTE: This function is generally not available to third party applications. Calls will result in an EDAMUserException with the error code PERMISSION_DENIED.

Parameters

guid	The GUID of the search to delete.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "SavedSearch.guid" - if the guid parameter is empty • PERMISSION_DENIED "SavedSearch" - user doesn't own
EDAMNotFoundException	• "SavedSearch.guid" - not found, by GUID

7.41.3.30 expungeSearchAsync()

```
virtual AsyncResult * qevercloud::INoteStore::expungeSearchAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of expungeSearch

7.41.3.31 expungeTag()

```
virtual qint32 qevercloud::INoteStore::expungeTag (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Permanently deletes the tag with the provided GUID, if present.

NOTE: This function is not generally available to third party applications. Calls will result in an EDAMUserException with the error code PERMISSION_DENIED.

Parameters

guid	The GUID of the tag to delete.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Tag.guid" - if the guid parameter is missing • PERMISSION_DENIED "Tag" - user doesn't own tag
EDAMNotFoundException	• "Tag.guid" - tag not found, by GUID

7.41.3.32 expungeTagAsync()

```
virtual AsyncResult * qevercloud::INoteStore::expungeTagAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of expungeTag

7.41.3.33 findNoteCounts()

```
virtual NoteCollectionCounts qevercloud::INoteStore::findNoteCounts (
            const NoteFilter & filter,
            bool withTrash,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

This function is used to determine how many notes are found for each notebook and tag in the user's account, given a current set of filter parameters that determine the current selection. This function will return a structure that gives the note count for each notebook and tag that has at least one note under the requested filter. Any notebook or tag that has zero notes in the filtered set will not be listed in the reply to this function (so they can be assumed to be 0).

Parameters

authenticationToken	Must be a valid token for the user's account unless the NoteFilter 'notebookGuid' is the GUID of a public notebook.
filter	The note selection filter that is currently being applied. The note counts are to be calculated with this filter applied to the total set of notes in the user's account.
withTrash	If true, then the NoteCollectionCounts.trashCount will be calculated and supplied in the reply. Otherwise, the trash value will be omitted.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "NoteFilter.notebookGuid" - if malformed • BAD_DATA_FORMAT "NoteFilter.notebookGuids" - if any are malformed • BAD_DATA_FORMAT "NoteFilter.words" - if search string too long

Exceptions

EDAMNotFoundException	• "Notebook.guid" - not found, by GUID

7.41.3.34 findNoteCountsAsync()

```
virtual AsyncResult * qevercloud::INoteStore::findNoteCountsAsync (
            const NoteFilter & filter,
            bool withTrash,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of findNoteCounts

7.41.3.35 findNoteOffset()

```
virtual qint32 qevercloud::INoteStore::findNoteOffset (
            const NoteFilter & filter,
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Finds the position of a note within a sorted subset of all of the user's notes. This may be useful for thin clients that are displaying a paginated listing of a large account, which need to know where a particular note sits in the list without retrieving all notes first.

Parameters

authenticationToken	Must be a valid token for the user's account unless the NoteFilter 'notebookGuid' is the GUID of a public notebook.
filter	The list of criteria that will constrain the notes to be returned.
guid	The GUID of the note to be retrieved.

Returns

If the note with the provided GUID is found within the matching note list, this will return the offset of that note within that list (where the first offset is 0). If the note is not found within the set of notes, this will return -1.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "offset" - not between 0 and EDAM_USER_NOTES_MAX • BAD_DATA_FORMAT "maxNotes" - not between 0 and EDAM_USER_NOTES_MAX • BAD_DATA_FORMAT "NoteFilter.notebookGuid" - if malformed • BAD_DATA_FORMAT "NoteFilter.tagGuids" - if any are malformed • BAD_DATA_FORMAT "NoteFilter.words" - if search string too long
EDAMNotFoundException	• "Notebook.guid" - not found, by GUID • "Note.guid" - not found, by GUID

7.41.3.36 findNoteOffsetAsync()

```
virtual AsyncResult * qevercloud::INoteStore::findNoteOffsetAsync (
            const NoteFilter & filter,
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of findNoteOffset

7.41.3.37 findNotesMetadata()

```
virtual NotesMetadataList qevercloud::INoteStore::findNotesMetadata (
            const NoteFilter & filter,
            qint32 offset,
            qint32 maxNotes,
            const NotesMetadataResultSpec & resultSpec,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Used to find the high-level information about a set of the notes from a user's account based on various criteria specified via a NoteFilter object.

Web applications that wish to periodically check for new content in a user's Evernote account should consider using webhooks instead of polling this API. See http://dev.evernote.com/documentation/cloud/chapters/polling_notification.php for more information.

Parameters

authenticationToken	Must be a valid token for the user's account unless the NoteFilter 'notebookGuid' is the GUID of a public notebook.
filter	The list of criteria that will constrain the notes to be returned.
offset	The numeric index of the first note to show within the sorted results. The numbering scheme starts with "0". This can be used for pagination.

Parameters

maxNotes	The maximum notes to return in this query. The service will return a set of notes that is no larger than this number, but may return fewer notes if needed. The NoteList.totalNotes field in the return value will indicate whether there are more values available after the returned set. Currently, the service will not return more than 250 notes in a single request, but this number may change in the future.
resultSpec	This specifies which information should be returned for each matching Note. The fields on this structure can be used to eliminate data that the client doesn't need, which will reduce the time and bandwidth to receive and process the reply.

Returns

The list of notes that match the criteria. The Notes.sharedNotes field will not be set.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "offset" - not between 0 and EDAM_USER_NOTES_MAX • BAD_DATA_FORMAT "maxNotes" - not between 0 and EDAM_USER_NOTES_MAX • BAD_DATA_FORMAT "NoteFilter.notebookGuid" - if malformed • BAD_DATA_FORMAT "NoteFilter.tagGuids" - if any are malformed • BAD_DATA_FORMAT "NoteFilter.words" - if search string too long
EDAMNotFoundException	• "Notebook.guid" - not found, by GUID

7.41.3.38 findNotesMetadataAsync()

```
virtual AsyncResult * qevercloud::INoteStore::findNotesMetadataAsync (
            const NoteFilter & filter,
            qint32 offset,
            qint32 maxNotes,
            const NotesMetadataResultSpec & resultSpec,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of findNotesMetadata

7.41.3.39 findRelated()

```
virtual RelatedResult qevercloud::INoteStore::findRelated (
            const RelatedQuery & query,
            const RelatedResultSpec & resultSpec,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Identify related entities on the service, such as notes, notebooks, tags and users in a business related to notes or content.

Parameters

query	The information about which we are finding related entities.
resultSpec	Allows the client to indicate the type and quantity of information to be returned, allowing a saving of time and bandwidth.

Returns

The result of the query, with information considered to likely be relevantly related to the information described by the query.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "RelatedQuery.plainText" - If you provided a a zero-length plain text value. • BAD_DATA_FORMAT "RelatedQuery.noteGuid" - If you provided an invalid Note GUID, that is, one that does not match the constraints defined by EDAM_GUID_LEN_MIN, EDAM_GUID_LEN_MAX, EDAM_GUID_REGEX. • BAD_DATA_FORMAT "NoteFilter.notebookGuid" - if malformed • BAD_DATA_FORMAT "NoteFilter.tagGuids" - if any are malformed • BAD_DATA_FORMAT "NoteFilter.words" - if search string too long • PERMISSION_DENIED "Note" - If the caller does not have access to the note identified by RelatedQuery.noteGuid. • PERMISSION_DENIED "authenticationToken" - If the caller has requested to findExperts in the context of a non business user (i.e. The authenticationToken is not a business auth token). • DATA_REQUIRED "RelatedResultSpec" - If you did not not set any values in the result spec.
EDAMNotFoundException	• "RelatedQuery.noteGuid" - the note with that GUID is not found, if that field has been set in the query.

7.41.3.40 findRelatedAsync()

```
virtual AsyncResult * qevercloud::INoteStore::findRelatedAsync (
            const RelatedQuery & query,
            const RelatedResultSpec & resultSpec,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of findRelated

7.41.3.41 getDefaultNotebook()

```
virtual Notebook qevercloud::INoteStore::getDefaultNotebook (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the notebook that should be used to store new notes in the user's account when no other notebooks are specified.

7.41.3.42 getDefaultNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getDefaultNotebookAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getDefaultNotebook

7.41.3.43 getFilteredSyncChunk()

```
virtual SyncChunk qevercloud::INoteStore::getFilteredSyncChunk (
            qint32 afterUSN,
            qint32 maxEntries,
            const SyncChunkFilter & filter,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the NoteStore to provide the state of the account in order of last modification. This request retrieves one block of the server's state so that a client can make several small requests against a large account rather than getting the entire state in one big message. This call gives fine-grained control of the data that will be received by a client by omitting data elements that a client doesn't need. This may reduce network traffic and sync times.

Parameters

afterUSN	The client can pass this value to ask only for objects that have been updated after a certain point. This allows the client to receive updates after its last checkpoint rather than doing a full synchronization on every pass. The default value of "0" indicates that the client wants to get objects from the start of the account.
maxEntries	The maximum number of modified objects that should be returned in the result SyncChunk. This can be used to limit the size of each individual message to be friendly for network transfer.
filter	The caller must set some of the flags in this structure to specify which data types should be returned during the synchronization. See the SyncChunkFilter structure for information on each flag.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "afterUSN" - if negative • BAD_DATA_FORMAT "maxEntries" - if less than 1

7.41.3.44 getFilteredSyncChunkAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getFilteredSyncChunkAsync (
            qint32 afterUSN,
            qint32 maxEntries,
            const SyncChunkFilter & filter,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getFilteredSyncChunk

7.41.3.45 getLinkedNotebookSyncChunk()

```
virtual SyncChunk qevercloud::INoteStore::getLinkedNotebookSyncChunk (
            const LinkedNotebook & linkedNotebook,
            qint32 afterUSN,
            qint32 maxEntries,
            bool fullSyncOnly,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the NoteStore to provide information about the contents of a linked notebook that has been shared with the caller, or that is public to the world. This will return a result that is similar to getSyncChunk, but will only contain entries that are visible to the caller. I.e. only that particular Notebook will be visible, along with its Notes, and Tags on those Notes.

This function must be called on the shard that owns the referenced notebook. (I.e. the shardId in /shard/shard↩ Id/edam/note must be the same as LinkedNotebook.shardId.)

Parameters

authenticationToken	This should be an authenticationToken for the guest who has received the invitation to the share. (I.e. this should not be the result of NoteStore.authenticateToSharedNotebook)
linkedNotebook	This structure should contain identifying information and permissions to access the notebook in question. This must contain the valid fields for either a shared notebook (e.g. shareKey) or a public notebook (e.g. username, uri)
afterUSN	The client can pass this value to ask only for objects that have been updated after a certain point. This allows the client to receive updates after its last checkpoint rather than doing a full synchronization on every pass. The default value of "0" indicates that the client wants to get objects from the start of the account.
maxEntries	The maximum number of modified objects that should be returned in the result SyncChunk. This can be used to limit the size of each individual message to be friendly for network transfer. Applications should not request more than 256 objects at a time, and must handle the case where the service returns less than the requested number of objects in a given request even though more objects are available on the service.
fullSyncOnly	If true, then the client only wants initial data for a full sync. In this case, the service will not return any expunged objects, and will not return any Resources, since these are also provided in their corresponding Notes.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "afterUSN" - if negative • BAD_DATA_FORMAT "maxEntries" - if less than 1
EDAMNotFoundException	• "LinkedNotebook" - if the provided information doesn't match any valid notebook • "LinkedNotebook.uri" - if the provided public URI doesn't match any valid notebook • "SharedNotebook.id" - if the provided information indicates a shared notebook that no longer exists

7.41.3.46 getLinkedNotebookSyncChunkAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getLinkedNotebookSyncChunkAsync (
            const LinkedNotebook & linkedNotebook,
            qint32 afterUSN,
            qint32 maxEntries,
            bool fullSyncOnly,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getLinkedNotebookSyncChunk

7.41.3.47 getLinkedNotebookSyncState()

```
virtual SyncState qevercloud::INoteStore::getLinkedNotebookSyncState (
            const LinkedNotebook & linkedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the NoteStore to provide information about the status of a linked notebook that has been shared with the caller, or that is public to the world. This will return a result that is similar to getSyncState, but may omit SyncState.uploaded if the caller doesn't have permission to write to the linked notebook.

This function must be called on the shard that owns the referenced notebook. (I.e. the shardId in /shard/shard↩Id/edam/note must be the same as LinkedNotebook.shardId.)

Parameters

authenticationToken	This should be an authenticationToken for the guest who has received the invitation to the share. (I.e. this should not be the result of NoteStore.authenticateToSharedNotebook)
linkedNotebook	This structure should contain identifying information and permissions to access the notebook in question.

Exceptions

EDAMUserException	• DATA_REQUIRED "LinkedNotebook.username" - The username field must be populated with the current username of the owner of the notebook for which you are obtaining sync state.
EDAMNotFoundException	• "LinkedNotebook.username" - If the LinkedNotebook.username field does not correspond to a current user on the service.
SystemException	• SHARD_UNAVAILABLE - If the provided LinkedNotebook.username corresponds to a user whose account is on a shard other than that on which this method was invoked.

7.41.3.48 getLinkedNotebookSyncStateAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getLinkedNotebookSyncStateAsync (
            const LinkedNotebook & linkedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getLinkedNotebookSyncState

7.41.3.49 getNote()

```
virtual Note qevercloud::INoteStore::getNote (
            Guid guid,
            bool withContent,
            bool withResourcesData,
            bool withResourcesRecognition,
            bool withResourcesAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

DEPRECATED. See getNoteWithResultSpec.

This function is equivalent to getNoteWithResultSpec, with each of the boolean parameters mapping to the equivalent field of a NoteResultSpec. The Note.sharedNotes field is never populated on the returned note. To get a note with its shares, use getNoteWithResultSpec.

7.41.3.50 getNoteApplicationData()

```
virtual LazyMap qevercloud::INoteStore::getNoteApplicationData (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Get all of the application data for the note identified by GUID, with values returned within the LazyMap fullMap field. If there are no applicationData entries, then a LazyMap with an empty fullMap will be returned. If your application only needs to fetch its own applicationData entry, use getNoteApplicationDataEntry instead.

7.41.3.51 getNoteApplicationDataAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteApplicationDataAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNoteApplicationData

7.41.3.52 getNoteApplicationDataEntry()

```
virtual QString qevercloud::INoteStore::getNoteApplicationDataEntry (
            Guid guid,
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Get the value of a single entry in the applicationData map for the note identified by GUID.

Exceptions

EDAMNotFoundException	• "Note.guid" - note not found, by GUID • "NoteAttributes.applicationData.key" - note not found, by key

7.41.3.53 getNoteApplicationDataEntryAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteApplicationDataEntryAsync (
            Guid guid,
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNoteApplicationDataEntry

7.41.3.54 getNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteAsync (
            Guid guid,
            bool withContent,
            bool withResourcesData,
            bool withResourcesRecognition,
            bool withResourcesAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNote

7.41.3.55 getNotebook()

```
virtual Notebook qevercloud::INoteStore::getNotebook (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the current state of the notebook with the provided GUID. The notebook may be active or deleted (but not expunged).

Parameters

guid	The GUID of the notebook to be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Notebook.guid" - if the parameter is missing • PERMISSION_DENIED "Notebook" - private notebook, user doesn't own
EDAMNotFoundException	• "Notebook.guid" - tag not found, by GUID

7.41.3.56 getNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNotebookAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNotebook

7.41.3.57 getNotebookShares()

```
virtual ShareRelationships qevercloud::INoteStore::getNotebookShares (
            QString notebookGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Return the share relationships for the given notebook, including both the invitations and the memberships.

Note: Beta method! This method is currently intended for limited use by Evernote clients that have discussed using this routine with the platform team.

7.41.3.58 getNotebookSharesAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNotebookSharesAsync (
            QString notebookGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNotebookShares

7.41.3.59 getNoteContent()

```
virtual QString qevercloud::INoteStore::getNoteContent (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns XHTML contents of the note with the provided GUID. If the Note is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string).

Parameters

guid	The GUID of the note to be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.guid" - if the parameter is missing • PERMISSION_DENIED "Note" - private note, user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.60 getNoteContentAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteContentAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNoteContent

7.41.3.61 getNoteSearchText()

```
virtual QString qevercloud::INoteStore::getNoteSearchText (
            Guid guid,
            bool noteOnly,
            bool tokenizeForIndexing,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a block of the extracted plain text contents of the note with the provided GUID. This text can be indexed for search purposes by a light client that doesn't have capabilities to extract all of the searchable text content from the note and its resources.

If the Note is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string).

Parameters

guid	The GUID of the note to be retrieved.
noteOnly	If true, this will only return the text extracted from the ENML contents of the note itself. If false, this will also include the extracted text from any text-bearing resources (PDF, recognized images)
tokenizeForIndexing	If true, this will break the text into cleanly separated and sanitized tokens. If false, this will return the more raw text extraction, with its original punctuation, capitalization, spacing, etc.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.guid" - if the parameter is missing • PERMISSION_DENIED "Note" - private note, user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.62 getNoteSearchTextAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteSearchTextAsync (
            Guid guid,
            bool noteOnly,
            bool tokenizeForIndexing,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNoteSearchText

7.41.3.63 getNoteTagNames()

```
virtual QStringList qevercloud::INoteStore::getNoteTagNames (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of the names of the tags for the note with the provided guid. This can be used with authentication to get the tags for a user's own note, or can be used without valid authentication to retrieve the names of the tags for a note in a public notebook.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.guid" - if the parameter is missing • PERMISSION_DENIED "Note" - private note, user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.64 getNoteTagNamesAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteTagNamesAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNoteTagNames

7.41.3.65 getNoteVersion()

```
virtual Note qevercloud::INoteStore::getNoteVersion (
            Guid noteGuid,
            qint32 updateSequenceNum,
            bool withResourcesData,
            bool withResourcesRecognition,
            bool withResourcesAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

This can be used to retrieve a previous version of a Note after it has been updated within the service. The caller must identify the note (via its guid) and the version (via the updateSequenceNumber of that version). to find a listing of the stored version USNs for a note, call listNoteVersions. This call is only available for notes in Premium accounts. (I.e. access to past versions of Notes is a Premium-only feature.)

Parameters

noteGuid	The GUID of the note to be retrieved.
updateSequenceNum	The USN of the version of the note that is being retrieved
withResourcesData	If true, any Resource elements in this Note will include the binary contents of their 'data' field's body.
withResourcesRecognition	If true, any Resource elements will include the binary contents of the 'recognition' field's body if recognition data is present.
withResourcesAlternateData	If true, any Resource elements in this Note will include the binary contents of their 'alternateData' fields' body, if an alternate form is present.

Exceptions

EDAMUserException	• DATA_REQUIRED "Note.guid" - if GUID is null or empty string. • BAD_DATA_FORMAT "Note.guid" - if GUID is not of correct length.
EDAMNotFoundException	• "Note.guid" - not found, by GUID. • "Note.updateSequenceNumber" - the Note doesn't have a version with the corresponding USN.

7.41.3.66 getNoteVersionAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteVersionAsync (
            Guid noteGuid,
            qint32 updateSequenceNum,
            bool withResourcesData,
            bool withResourcesRecognition,
```

```
            bool withResourcesAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNoteVersion

7.41.3.67 getNoteWithResultSpec()

```
virtual Note qevercloud::INoteStore::getNoteWithResultSpec (
            Guid guid,
            const NoteResultSpec & resultSpec,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the current state of the note in the service with the provided GUID. The ENML contents of the note will only be provided if the 'withContent' parameter is true. The service will include the meta-data for each resource in the note, but the binary content depends on whether it is explicitly requested in resultSpec parameter. If the Note is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string). The applicationData fields are returned as keysOnly.

Parameters

authenticationToken	An authentication token that grants the caller access to the requested note.
guid	The GUID of the note to be retrieved.
resultSpec	A structure specifying the fields of the note that the caller would like to get.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.guid" - if the parameter is missing • PERMISSION_DENIED "Note" - private note, user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.68 getNoteWithResultSpecAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getNoteWithResultSpecAsync (
            Guid guid,
            const NoteResultSpec & resultSpec,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getNoteWithResultSpec

7.41.3.69 getPublicNotebook()

```
virtual Notebook qevercloud::INoteStore::getPublicNotebook (
            UserID userId,
```

```
            QString publicUri,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Looks for a user account with the provided userId on this NoteStore shard and determines whether that account contains a public notebook with the given URI. If the account is not found, or no public notebook exists with this URI, this will throw an EDAMNotFoundException, otherwise this will return the information for that Notebook.

If a notebook is visible on the web with a full URL like http://www.evernote.com/pub/sethdemo/api Then 'sethdemo' is the username that can be used to look up the userId, and 'api' is the publicUri.

Parameters

userId	The numeric identifier for the user who owns the public notebook. To find this value based on a username string, you can invoke UserStore.getPublicUserInfo
publicUri	The uri string for the public notebook, from Notebook.publishing.uri.

Exceptions

EDAMNotFoundException	• "Publishing.uri" - not found, by URI
EDAMSystemException	• TAKEN_DOWN "PublicNotebook" - The specified public notebook is taken down (for all requesters). • TAKEN_DOWN "Country" - The specified public notebook is taken down for the requester because of an IP-based country lookup.

7.41.3.70 getPublicNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getPublicNotebookAsync (
            UserID userId,
            QString publicUri,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getPublicNotebook

7.41.3.71 getResource()

```
virtual Resource qevercloud::INoteStore::getResource (
            Guid guid,
            bool withData,
            bool withRecognition,
            bool withAttributes,
            bool withAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the current state of the resource in the service with the provided GUID. If the Resource is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string). Only the keys for the applicationData will be returned.

Parameters

guid	The GUID of the resource to be retrieved.
withData	If true, the Resource will include the binary contents of the 'data' field's body.
withRecognition	If true, the Resource will include the binary contents of the 'recognition' field's body if recognition data is present.
withAttributes	If true, the Resource will include the attributes
withAlternateData	If true, the Resource will include the binary contents of the 'alternateData' field's body, if an alternate form is present.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Resource.guid" - if the parameter is missing • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Resource.guid" - not found, by GUID

7.41.3.72 getResourceAlternateData()

```
virtual QByteArray qevercloud::INoteStore::getResourceAlternateData (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

If the Resource with the provided GUID has an alternate data representation (indicated via the Resource.alternateData field), then this request can be used to retrieve the binary contents of that alternate data file. If the caller asks about a resource that has no alternate data form, this will throw EDAMNotFoundException.

Parameters

guid	The GUID of the resource whose recognition data should be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Resource.guid" - if the parameter is missing • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Resource.guid" - not found, by GUID • "Resource.alternateData" - resource has no recognition

7.41.3.73 getResourceAlternateDataAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceAlternateDataAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceAlternateData

7.41.3.74 getResourceApplicationData()

```
virtual LazyMap qevercloud::INoteStore::getResourceApplicationData (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Get all of the application data for the Resource identified by GUID, with values returned within the LazyMap fullMap field. If there are no applicationData entries, then a LazyMap with an empty fullMap will be returned. If your application only needs to fetch its own applicationData entry, use getResourceApplicationDataEntry instead.

7.41.3.75 getResourceApplicationDataAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceApplicationDataAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceApplicationData

7.41.3.76 getResourceApplicationDataEntry()

```
virtual QString qevercloud::INoteStore::getResourceApplicationDataEntry (
            Guid guid,
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Get the value of a single entry in the applicationData map for the Resource identified by GUID.

Exceptions

EDAMNotFoundException	• "Resource.guid" - Resource not found, by GUID • "ResourceAttributes.applicationData.key" - Resource not found, by key

7.41.3.77 getResourceApplicationDataEntryAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceApplicationDataEntryAsync (
            Guid guid,
```

```
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceApplicationDataEntry

7.41.3.78 getResourceAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceAsync (
            Guid guid,
            bool withData,
            bool withRecognition,
            bool withAttributes,
            bool withAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResource

7.41.3.79 getResourceAttributes()

```
virtual ResourceAttributes qevercloud::INoteStore::getResourceAttributes (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the set of attributes for the Resource with the provided GUID. If the Resource is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string).

Parameters

guid	The GUID of the resource whose attributes should be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Resource.guid" - if the parameter is missing • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Resource.guid" - not found, by GUID

7.41.3.80 getResourceAttributesAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceAttributesAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceAttributes

7.41.3.81 getResourceByHash()

```
virtual Resource qevercloud::INoteStore::getResourceByHash (
            Guid noteGuid,
            QByteArray contentHash,
            bool withData,
            bool withRecognition,
            bool withAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the current state of a resource, referenced by containing note GUID and resource content hash.

Parameters

noteGuid	The GUID of the note that holds the resource to be retrieved.
contentHash	The MD5 checksum of the resource within that note. Note that this is the binary checksum, for example from Resource.data.bodyHash, and not the hex-encoded checksum that is used within an en-media tag in a note body.
withData	If true, the Resource will include the binary contents of the 'data' field's body.
withRecognition	If true, the Resource will include the binary contents of the 'recognition' field's body.
withAlternateData	If true, the Resource will include the binary contents of the 'alternateData' field's body, if an alternate form is present.

Exceptions

EDAMUserException	• DATA_REQUIRED "Note.guid" - noteGuid param missing • DATA_REQUIRED "Note.contentHash" - contentHash param missing • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Note" - not found, by guid • "Resource" - not found, by hash

7.41.3.82 getResourceByHashAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceByHashAsync (
            Guid noteGuid,
            QByteArray contentHash,
            bool withData,
            bool withRecognition,
            bool withAlternateData,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceByHash

7.41.3.83 getResourceData()

```
virtual QByteArray qevercloud::INoteStore::getResourceData (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns binary data of the resource with the provided GUID. For example, if this were an image resource, this would contain the raw bits of the image. If the Resource is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string).

Parameters

guid	The GUID of the resource to be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Resource.guid" - if the parameter is missing • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Resource.guid" - not found, by GUID

7.41.3.84 getResourceDataAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceDataAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceData

7.41.3.85 getResourceRecognition()

```
virtual QByteArray qevercloud::INoteStore::getResourceRecognition (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the binary contents of the recognition index for the resource with the provided GUID. If the caller asks about a resource that has no recognition data, this will throw EDAMNotFoundException. If the Resource is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string).

Parameters

guid	The GUID of the resource whose recognition data should be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Resource.guid" - if the parameter is missing • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Resource.guid" - not found, by GUID • "Resource.recognition" - resource has no recognition

7.41.3.86 getResourceRecognitionAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceRecognitionAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceRecognition

7.41.3.87 getResourceSearchText()

```
virtual QString qevercloud::INoteStore::getResourceSearchText (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a block of the extracted plain text contents of the resource with the provided GUID. This text can be indexed for search purposes by a light client that doesn't have capability to extract all of the searchable text content from a resource.

If the Resource is found in a public notebook, the authenticationToken will be ignored (so it could be an empty string).

Parameters

guid	The GUID of the resource to be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Resource.guid" - if the parameter is missing • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Resource.guid" - not found, by GUID

7.41.3.88 getResourceSearchTextAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getResourceSearchTextAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getResourceSearchText

7.41.3.89 getSearch()

```
virtual SavedSearch qevercloud::INoteStore::getSearch (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the current state of the search with the provided GUID.

Parameters

guid	The GUID of the search to be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "SavedSearch.guid" - if the parameter is missing • PERMISSION_DENIED "SavedSearch" - private Tag, user doesn't own
EDAMNotFoundException	• "SavedSearch.guid" - not found, by GUID

7.41.3.90 getSearchAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getSearchAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getSearch

7.41.3.91 getSharedNotebookByAuth()

```
virtual SharedNotebook qevercloud::INoteStore::getSharedNotebookByAuth (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

This function is used to retrieve extended information about a shared notebook by a guest who has already authenticated to access that notebook. This requires an 'authenticationToken' parameter which should be the resut of a call to authenticateToSharedNotebook(...). I.e. this is the token that gives access to the particular shared notebook in someone else's account – it's not the authenticationToken for the owner of the notebook itself.

Parameters

authenticationToken	Should be the authentication token retrieved from the reply of authenticateToSharedNotebook(), proving access to a particular shared notebook.

Exceptions

EDAMUserException	• PERMISSION_DENIED "authenticationToken" - authentication token doesn't correspond to a valid shared notebook
EDAMNotFoundException	• "SharedNotebook.id" - the shared notebook no longer exists

7.41.3.92 getSharedNotebookByAuthAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getSharedNotebookByAuthAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getSharedNotebookByAuth

7.41.3.93 getSyncState()

```
virtual SyncState qevercloud::INoteStore::getSyncState (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the NoteStore to provide information about the status of the user account corresponding to the provided authentication token.

7.41.3.94 getSyncStateAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getSyncStateAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getSyncState

7.41.3.95 getTag()

```
virtual Tag qevercloud::INoteStore::getTag (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the current state of the Tag with the provided GUID.

Parameters

guid	The GUID of the tag to be retrieved.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Tag.guid" - if the parameter is missing • PERMISSION_DENIED "Tag" - private Tag, user doesn't own
EDAMNotFoundException	• "Tag.guid" - tag not found, by GUID

7.41.3.96 getTagAsync()

```
virtual AsyncResult * qevercloud::INoteStore::getTagAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getTag

7.41.3.97 listAccessibleBusinessNotebooks()

```
virtual QList< Notebook > qevercloud::INoteStore::listAccessibleBusinessNotebooks (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of all the notebooks in a business that the user has permission to access, regardless of whether the user has joined them. This includes notebooks that have been shared with the entire business as well as notebooks that have been shared directly with the user.

Parameters

authenticationToken	A business authentication token obtained by calling UserStore.authenticateToBusiness.

Exceptions

EDAMUserException	• INVALID_AUTH "authenticationToken" - if the authentication token is not a business auth token.

7.41.3.98 listAccessibleBusinessNotebooksAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listAccessibleBusinessNotebooksAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listAccessibleBusinessNotebooks

7.41.3.99 listLinkedNotebooks()

```
virtual QList< LinkedNotebook > qevercloud::INoteStore::listLinkedNotebooks (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of linked notebooks

7.41.3.100 listLinkedNotebooksAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listLinkedNotebooksAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listLinkedNotebooks

7.41.3.101 listNotebooks()

```
virtual QList< Notebook > qevercloud::INoteStore::listNotebooks (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of all of the notebooks in the account.

7.41.3.102 listNotebooksAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listNotebooksAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listNotebooks

7.41.3.103 listNoteVersions()

```
virtual QList< NoteVersionId > qevercloud::INoteStore::listNoteVersions (
            Guid noteGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of the prior versions of a particular note that are saved within the service. These prior versions are stored to provide a recovery from unintentional removal of content from a note. The identifiers that are returned by this call can be used with getNoteVersion to retrieve the previous note. The identifiers will be listed from the most recent versions to the oldest. This call is only available for notes in Premium accounts. (I.e. access to past versions of Notes is a Premium-only feature.)

Exceptions

EDAMUserException	• DATA_REQUIRED "Note.guid" - if GUID is null or empty string. • BAD_DATA_FORMAT "Note.guid" - if GUID is not of correct length.
EDAMNotFoundException	• "Note.guid" - not found, by GUID.

7.41.3.104 listNoteVersionsAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listNoteVersionsAsync (
            Guid noteGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listNoteVersions

7.41.3.105 listSearches()

```
virtual QList< SavedSearch > qevercloud::INoteStore::listSearches (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of the searches in the account. Evernote does not support the undeletion of searches, so this will only include active searches.

7.41.3.106 listSearchesAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listSearchesAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listSearches

7.41.3.107 listSharedNotebooks()

```
virtual QList< SharedNotebook > qevercloud::INoteStore::listSharedNotebooks (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Lists the collection of shared notebooks for all notebooks in the users account.

Returns

The list of all SharedNotebooks for the user

7.41.3.108 listSharedNotebooksAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listSharedNotebooksAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listSharedNotebooks

7.41.3.109 listTags()

```
virtual QList< Tag > qevercloud::INoteStore::listTags (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of the tags in the account. Evernote does not support the undeletion of tags, so this will only include active tags.

7.41.3.110 listTagsAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listTagsAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listTags

7.41.3.111 listTagsByNotebook()

```
virtual QList< Tag > qevercloud::INoteStore::listTagsByNotebook (
            Guid notebookGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of the tags that are applied to at least one note within the provided notebook. If the notebook is public, the authenticationToken may be ignored.

Parameters

notebookGuid	the GUID of the notebook to use to find tags

Exceptions

EDAMNotFoundException	• "Notebook.guid" - notebook not found by GUID

7.41.3.112 listTagsByNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::listTagsByNotebookAsync (
            Guid notebookGuid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listTagsByNotebook

7.41.3.113 manageNotebookShares()

```
virtual ManageNotebookSharesResult qevercloud::INoteStore::manageNotebookShares (
            const ManageNotebookSharesParameters & parameters,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Manage invitations and memberships associated with a given notebook.

Note: Beta method! This method is currently intended for limited use by Evernote clients that have discussed using this routine with the platform team.

Parameters

parameters	A structure containing all parameters for the updates. See the structure documentation for details.

Exceptions

EDAMUserException	• EDAMErrorCode.LIMIT_REACHED "SharedNotebook" - Trying to share a notebook while the notebook already has EDAM_NOTEBOOK_SHARED_NOTEBOOK_MAX shares.

7.41.3.114 manageNotebookSharesAsync()

```
virtual AsyncResult * qevercloud::INoteStore::manageNotebookSharesAsync (
            const ManageNotebookSharesParameters & parameters,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of manageNotebookShares

7.41.3.115 noteStoreUrl()

```
virtual QString qevercloud::INoteStore::noteStoreUrl ( ) const  [pure virtual]
```

7.41.3.116 setNoteApplicationDataEntry()

```
virtual qint32 qevercloud::INoteStore::setNoteApplicationDataEntry (
            Guid guid,
            QString key,
            QString value,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Update, or create, an entry in the applicationData map for the note identified by guid.

7.41.3.117 setNoteApplicationDataEntryAsync()

```
virtual AsyncResult * qevercloud::INoteStore::setNoteApplicationDataEntryAsync (
            Guid guid,
            QString key,
            QString value,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of setNoteApplicationDataEntry

7.41.3.118 setNotebookRecipientSettings()

```
virtual Notebook qevercloud::INoteStore::setNotebookRecipientSettings (
            QString notebookGuid,
            const NotebookRecipientSettings & recipientSettings,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Set values for the recipient settings associated with a notebook share. Only the recipient of the share can update their recipient settings.

If you do *not* wish to, or cannot, change one of the recipient settings fields, you must leave that field unset in recipientSettings. This method will skip that field for updates and attempt to leave the existing value as it is.

If recipientSettings.inMyList is false, both reminderNotifyInApp and reminderNotifyEmail will be either left as null or converted to false (if currently true).

To unset a notebook's stack, pass in the empty string for the stack field.

Parameters

authenticationToken	The owner authentication token for the recipient of the share.

Returns

The updated Notebook with the new recipient settings. Note that some of the recipient settings may differ from what was requested. Clients should update their state based on this return value.

Exceptions

EDAMNotFoundException	• Notebook.guid - Thrown if the service does not have a notebook record with the notebookGuid on the given shard. • Publishing.publishState - Thrown if the business notebook is not shared with the user and is also not published to their business.

Exceptions

EDAMUserException	• PEMISSION_DENIED "authenticationToken" - If the owner of the given token is not allowed to set recipient settings on the specified notebook. • DATA_CONFLICT "recipientSettings.reminderNotifyEmail" - Setting reminderNotifyEmail is allowed only for notebooks which belong to the same business as the user. • DATA_CONFLICT "recipientSettings.inMyList" - If the request is setting inMyList to false and any of reminder∗ settings to true.

7.41.3.119 setNotebookRecipientSettingsAsync()

```
virtual AsyncResult * qevercloud::INoteStore::setNotebookRecipientSettingsAsync (
            QString notebookGuid,
            const NotebookRecipientSettings & recipientSettings,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of setNotebookRecipientSettings

7.41.3.120 setNoteStoreUrl()

```
virtual void qevercloud::INoteStore::setNoteStoreUrl (
            QString url )  [pure virtual]
```

7.41.3.121 setResourceApplicationDataEntry()

```
virtual qint32 qevercloud::INoteStore::setResourceApplicationDataEntry (
            Guid guid,
            QString key,
            QString value,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Update, or create, an entry in the applicationData map for the Resource identified by guid.

7.41.3.122 setResourceApplicationDataEntryAsync()

```
virtual AsyncResult * qevercloud::INoteStore::setResourceApplicationDataEntryAsync (
            Guid guid,
            QString key,
            QString value,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of setResourceApplicationDataEntry

7.41.3.123 shareNote()

```
virtual QString qevercloud::INoteStore::shareNote (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

If this note is not already shared publicly (via its own direct URL), then this will start sharing that note. This will return the secret "Note Key" for this note that can currently be used in conjunction with the Note's GUID to gain direct read-only access to the Note. If the note is already shared, then this won't make any changes to the note, and the existing "Note Key" will be returned. The only way to change the Note Key for an existing note is to stopSharingNote first, and then call this function.

Parameters

guid	The GUID of the note to be shared.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.guid" - if the parameter is missing • PERMISSION_DENIED "Note" - private note, user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.124 shareNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::shareNoteAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of shareNote

7.41.3.125 shareNotebook()

```
virtual SharedNotebook qevercloud::INoteStore::shareNotebook (
            const SharedNotebook & sharedNotebook,
            QString message,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

@Deprecated for first-party clients. See createOrUpdateNotebookShares.

Share a notebook with an email address, and optionally to a specific recipient. If an existing SharedNotebook associated with sharedNotebook.notebookGuid is found by recipientUsername or email, then the values of shared↩ Notebook will be used to update the existing record, else a new record will be created.

If recipientUsername is set and there is already a SharedNotebook for that Notebook with that recipientUsername and the privileges on the existing notebook are lower, than on this one, this will update the privileges and sharer↩ UserId. If there isn't an existing SharedNotebook for recipientUsername, this will create and return a shared notebook for that email and recipientUsername. If recipientUsername is not set and there already is a SharedNotebook for a Notebook for that email address and the privileges on the existing SharedNotebook are lower than on this one, this will update the privileges and sharerUserId, and return the updated SharedNotebook. Otherwise, this will create and return a SharedNotebook for the email address.

If the authenticationToken is a Business auth token, recipientUsername is set and the recipient is in the same business as the business auth token, this method will also auto-join the business user to the SharedNotebook - that is it will set serviceJoined on the SharedNotebook and create a LinkedNotebook on the recipient's account pointing to the SharedNotebook. The LinkedNotebook creation happens out-of-band, so there will be a delay on the order of half a minute between the SharedNotebook and LinkedNotebook creation.

Also handles sending an email to the email addresses: if a SharedNotebook is being created, this will send the shared notebook invite email, and if a SharedNotebook already exists, it will send the shared notebook reminder email. Both these emails contain a link to join the notebook. If the notebook is being auto-joined, it sends an email with that information to the recipient.

Parameters

authenticationToken	Must be an authentication token from the owner or a shared notebook authentication token or business authentication token with sufficient permissions to change invitations for a notebook.
sharedNotebook	A shared notebook object populated with the email address of the share recipient, the notebook guid and the access permissions. All other attributes of the shared object are ignored. The SharedNotebook.allowPreview field must be explicitly set with either a true or false value.
message	The sharer-defined message to put in the email sent out.

Returns

The fully populated SharedNotebook object including the server assigned globalId which can both be used to uniquely identify the SharedNotebook.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "SharedNotebook.email" - if the email was not valid • DATA_REQUIRED "SharedNotebook.privilege" - if the SharedNotebook.privilegeLevel was not set. • BAD_DATA_FORMAT "SharedNotebook.requireLogin" - if requireLogin was set. requireLogin is deprecated. • BAD_DATA_FORMAT "SharedNotebook.privilegeLevel" - if the SharedNotebook.privilegeLevel field was unset or set to GROUP. • PERMISSION_DENIED "user" - if the email address on the authenticationToken's owner's account is not confirmed. • PERMISSION_DENIED "SharedNotebook.recipientSettings" - if recipientSettings is set in the sharedNotebook. Only the recipient can set these values via the setSharedNotebookRecipientSettings method. • EDAMErrorCode.LIMIT_REACHED "SharedNotebook" - The notebook already has EDAM_NOTEBOOK_SHARED_NOTEBOOK_MAX shares.
EDAMNotFoundException	• Notebook.guid - if the notebookGuid is not a valid GUID for the user.

7.41.3.126 shareNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::shareNotebookAsync (
            const SharedNotebook & sharedNotebook,
            QString message,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of shareNotebook

7.41.3.127 stopSharingNote()

```
virtual void qevercloud::INoteStore::stopSharingNote (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

If this note is shared publicly then this will stop sharing that note and invalidate its "Note Key", so any existing URLs to access that Note will stop working.

If the Note is not shared, then this function will do nothing.

This function does not remove individual shares for the note. To remove individual shares, see stopSharingNote↩ WithRecipients.

Parameters

guid	The GUID of the note to be un-shared.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.guid" - if the parameter is missing • PERMISSION_DENIED "Note" - private note, user doesn't own
EDAMNotFoundException	• "Note.guid" - not found, by GUID

7.41.3.128 stopSharingNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::stopSharingNoteAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of stopSharingNote

7.41.3.129 unsetNoteApplicationDataEntry()

```
virtual qint32 qevercloud::INoteStore::unsetNoteApplicationDataEntry (
            Guid guid,
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Remove an entry identified by 'key' from the applicationData map for the note identified by 'guid'. Silently ignores an unset of a non-existing key.

7.41.3.130 unsetNoteApplicationDataEntryAsync()

```
virtual AsyncResult * qevercloud::INoteStore::unsetNoteApplicationDataEntryAsync (
            Guid guid,
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of unsetNoteApplicationDataEntry

7.41.3.131 unsetResourceApplicationDataEntry()

```
virtual qint32 qevercloud::INoteStore::unsetResourceApplicationDataEntry (
            Guid guid,
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Remove an entry identified by 'key' from the applicationData map for the Resource identified by 'guid'.

7.41.3.132 unsetResourceApplicationDataEntryAsync()

```
virtual AsyncResult * qevercloud::INoteStore::unsetResourceApplicationDataEntryAsync (
            Guid guid,
            QString key,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of unsetResourceApplicationDataEntry

7.41.3.133 untagAll()

```
virtual void qevercloud::INoteStore::untagAll (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Removes the provided tag from every note that is currently tagged with this tag. If this operation is successful, the tag will still be in the account, but it will not be tagged on any notes.

This function is not indended for use by full synchronizing clients, since it does not provide enough result information to the client to reconcile the local state without performing a follow-up sync from the service. This is intended for "thin clients" that need to efficiently support this as a UI operation.

Parameters

guid	The GUID of the tag to remove from all notes.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Tag.guid" - if the guid parameter is missing • PERMISSION_DENIED "Tag" - user doesn't own tag
EDAMNotFoundException	• "Tag.guid" - tag not found, by GUID

7.41.3.134 untagAllAsync()

```
virtual AsyncResult * qevercloud::INoteStore::untagAllAsync (
            Guid guid,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of untagAll

7.41.3.135 updateLinkedNotebook()

```
virtual qint32 qevercloud::INoteStore::updateLinkedNotebook (
            const LinkedNotebook & linkedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Parameters

linkedNotebook	Updates the name of a linked notebook.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• DATA_REQUIRED "LinkedNotebook.shareName" - missing shareName • BAD_DATA_FORMAT "LinkedNotebook.shareName" - invalid shareName length or pattern • BAD_DATA_FORMAT "LinkedNotebook.stack" - invalid stack name length or pattern

7.41.3.136 updateLinkedNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::updateLinkedNotebookAsync (
            const LinkedNotebook & linkedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateLinkedNotebook

7.41.3.137 updateNote()

```
virtual Note qevercloud::INoteStore::updateNote (
            const Note & note,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Submit a set of changes to a note to the service. The provided data must include the note's guid field for identification. The note's title must also be set.

Parameters

note	A Note object containing the desired fields to be populated on the service. With the exception of the note's title and guid, fields that are not being changed do not need to be set. If the content is not being modified, note.content should be left unset. If the list of resources is not being modified, note.resources should be left unset.

Returns

The Note.sharedNotes field will not be set. The service will include the meta-data for each resource in the note, but the binary contents of the resources and their recognition data will be omitted.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Note.title" - invalid length or pattern • BAD_DATA_FORMAT "Note.content" - invalid length for ENML body • BAD_DATA_FORMAT "NoteAttributes.∗" - bad resource string • BAD_DATA_FORMAT "ResourceAttributes.∗" - bad resource string • BAD_DATA_FORMAT "Resource.mime" - invalid resource MIME type • DATA_CONFLICT "Note.deleted" - deleted time set on active note • DATA_REQUIRED "Resource.data" - resource data body missing • ENML_VALIDATION "∗" - note content doesn't validate against DTD • LIMIT_REACHED "Note.tagGuids" - too many Tags on Note • LIMIT_REACHED "Note.resources" - too many resources on Note • LIMIT_REACHED "Note.size" - total note size too large • LIMIT_REACHED "Resource.data.size" - resource too large • LIMIT_REACHED "NoteAttribute.∗" - attribute string too long • LIMIT_REACHED "ResourceAttribute.∗" - attribute string too long • PERMISSION_DENIED "Note.notebookGuid" - user doesn't own destination • PERMISSION_DENIED "Note.tags" - user doesn't have permission to modify the note's tags. note.tags must be unset. • PERMISSION_DENIED "Note.attributes" - user doesn't have permission to modify the note's attributes. note.attributes must be unset. • QUOTA_REACHED "Accounting.uploadLimit" - note exceeds upload quota • BAD_DATA_FORMAT "Tag.name" - Note.tagNames was provided, and one of the specified tags had an invalid length or pattern • LIMIT_REACHED "Tag" - Note.tagNames was provided, and the required new tags would exceed the maximum number per account
EDAMNotFoundException	• "Note.guid" - note not found, by GUID • "Note.notebookGuid" - if notebookGuid provided, but not found

7.41.3.138 updateNoteAsync()

```
virtual AsyncResult * qevercloud::INoteStore::updateNoteAsync (
            const Note & note,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateNote

7.41.3.139 updateNotebook()

```
virtual qint32 qevercloud::INoteStore::updateNotebook (
            const Notebook & notebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Submits notebook changes to the service. The provided data must include the notebook's guid field for identification.

The Notebook will be moved to the specified Workspace, if a non empty Notebook.workspaceGuid is provided. If an empty Notebook.workspaceGuid is set and the Notebook is in a Workspace, then it will be removed from the Workspace and a full access SharedNotebook record will be ensured for the caller. If the caller does not already have a full access share, either the privilege of an existing share will be upgraded or a new share will be created. It is illegal to set a Notebook.workspaceGuid on a Workspace backing Notebook.

Parameters

notebook	The notebook object containing the requested changes.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Notebook.name" - invalid length or pattern • BAD_DATA_FORMAT "Notebook.stack" - invalid length or pattern • BAD_DATA_FORMAT "Publishing.uri" - if publishing set but bad uri • BAD_DATA_FORMAT "Publishing.publicDescription" - if too long • DATA_CONFLICT "Notebook.name" - name already in use • DATA_CONFLICT "Publishing.uri" - if URI already in use • DATA_REQUIRED "Publishing.uri" - if publishing set but uri missing • DATA_REQUIRED "Notebook" - notebook parameter was null • PERMISSION_DENIED "Notebook.defaultNotebook" - if the 'defaultNotebook' field is set to 'true' for a Notebook that is not owned by the user identified by the passed authenticationToken.
EDAMNotFoundException	• "Notebook.guid" - not found, by GUID • "Workspace.guid" - if a non empty workspaceGuid set and no Workspace exists for the GUID

7.41.3.140 updateNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::updateNotebookAsync (
```

```
            const Notebook & notebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateNotebook

7.41.3.141 updateNoteIfUsnMatches()

```
virtual UpdateNoteIfUsnMatchesResult qevercloud::INoteStore::updateNoteIfUsnMatches (
            const Note & note,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Perform the same operation as updateNote() would provided that the update sequence number on the parameter Note object matches the current update sequence number that the service has for the note. If they do *not* match, then *no* update is performed and the return value will have the current server state in the note field and updated will be false. If the update sequence numbers between the client and server do match, then the note will be updated and the note field of the return value will be returned as it would be for the updateNote method. This method allows you to check for an update to the note on the service, by another client instance, from when you obtained the note state as a baseline for your edits and the time when you wish to save your edits. If your client can merge the conflict, you can avoid overwriting changes that were saved to the service by the other client.

See the updateNote method for information on the exceptions and parameters for this method. The only difference is that you must have an update sequence number defined on the note parameter (equal to the USN of the note as synched to the client), and the following additional exceptions might be thrown.

Exceptions

EDAMUserException	• DATA_REQUIRED "Note.updateSequenceNum" - If the update sequence number was not provided. This includes a value that is set as 0. • BAD_DATA_FORMAT "Note.updateSequenceNum" - If the note has an update sequence number that is larger than the current server value, which should not happen if your client is working correctly.

7.41.3.142 updateNoteIfUsnMatchesAsync()

```
virtual AsyncResult * qevercloud::INoteStore::updateNoteIfUsnMatchesAsync (
            const Note & note,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateNoteIfUsnMatches

7.41.3.143 updateResource()

```
virtual qint32 qevercloud::INoteStore::updateResource (
            const Resource & resource,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Submit a set of changes to a resource to the service. This can be used to update the meta-data about the resource, but cannot be used to change the binary contents of the resource (including the length and hash). These cannot be changed directly without creating a new resource and removing the old one via updateNote.

Parameters

resource	A Resource object containing the desired fields to be populated on the service. The service will attempt to update the resource with the following fields from the client: • guid: must be provided to identify the resource • mime • width • height • duration • attributes: optional. if present, the set of attributes will be replaced.

Returns

The Update Sequence Number of the resource after the changes have been applied.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Resource.guid" - if the parameter is missing • BAD_DATA_FORMAT "Resource.mime" - invalid resource MIME type • BAD_DATA_FORMAT "ResourceAttributes.∗" - bad resource string • LIMIT_REACHED "ResourceAttribute.∗" - attribute string too long • PERMISSION_DENIED "Resource" - private resource, user doesn't own
EDAMNotFoundException	• "Resource.guid" - not found, by GUID

7.41.3.144 updateResourceAsync()

```
virtual AsyncResult * qevercloud::INoteStore::updateResourceAsync (
            const Resource & resource,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateResource

7.41.3.145 updateSearch()

```
virtual qint32 qevercloud::INoteStore::updateSearch (
            const SavedSearch & search,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Submits search changes to the service. The provided data must include the search's guid field for identification. The service will apply updates to the following search fields: name, query, and scope.

Parameters

search	The search object containing the requested changes.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "SavedSearch.name" - invalid length or pattern • BAD_DATA_FORMAT "SavedSearch.query" - invalid length • DATA_CONFLICT "SavedSearch.name" - name already in use • PERMISSION_DENIED "SavedSearch" - user doesn't own tag
EDAMNotFoundException	• "SavedSearch.guid" - not found, by GUID

7.41.3.146 updateSearchAsync()

```
virtual AsyncResult * qevercloud::INoteStore::updateSearchAsync (
            const SavedSearch & search,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateSearch

7.41.3.147 updateSharedNotebook()

```
virtual qint32 qevercloud::INoteStore::updateSharedNotebook (
            const SharedNotebook & sharedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

@Deprecated See createOrUpdateNotebookShares and manageNotebookShares.

7.41.3.148 updateSharedNotebookAsync()

```
virtual AsyncResult * qevercloud::INoteStore::updateSharedNotebookAsync (
            const SharedNotebook & sharedNotebook,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateSharedNotebook

7.41.3.149 updateTag()

```
virtual qint32 qevercloud::INoteStore::updateTag (
            const Tag & tag,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Submits tag changes to the service. The provided data must include the tag's guid field for identification. The service will apply updates to the following tag fields: name, parentGuid

Parameters

tag	The tag object containing the requested changes.

Returns

The Update Sequence Number for this change within the account.

Exceptions

EDAMUserException	• BAD_DATA_FORMAT "Tag.name" - invalid length or pattern • BAD_DATA_FORMAT "Tag.parentGuid" - malformed GUID • DATA_CONFLICT "Tag.name" - name already in use • DATA_CONFLICT "Tag.parentGuid" - can't set parent: circular • PERMISSION_DENIED "Tag" - user doesn't own tag
EDAMNotFoundException	• "Tag.guid" - tag not found, by GUID • "Tag.parentGuid" - parent not found, by GUID

7.41.3.150 updateTagAsync()

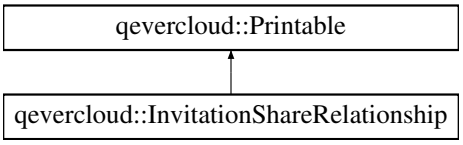
```
virtual AsyncResult * qevercloud::INoteStore::updateTagAsync (
            const Tag & tag,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateTag

7.42 qevercloud::InvitationShareRelationship Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::InvitationShareRelationship:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const InvitationShareRelationship &other) const
- bool operator!= (const InvitationShareRelationship &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > displayName
- Optional< UserIdentity > recipientUserIdentity
- Optional< ShareRelationshipPrivilegeLevel > privilege
- Optional< UserID > sharerUserId

7.42.1 Detailed Description

Describes an invitation to a person to use their Evernote credentials to become a member of a notebook.

7.42.2 Member Function Documentation

7.42.2.1 operator"!=()

```
bool qevercloud::InvitationShareRelationship::operator!= (
            const InvitationShareRelationship & other ) const  [inline]
```

7.42.2.2 operator==()

```
bool qevercloud::InvitationShareRelationship::operator== (
            const InvitationShareRelationship & other ) const  [inline]
```

7.42.2.3 print()

```
virtual void qevercloud::InvitationShareRelationship::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.42.3 Member Data Documentation

7.42.3.1 displayName

```
Optional< QString > qevercloud::InvitationShareRelationship::displayName
```

The string that clients should show to users to represent this invitation.

7.42.3.2 localData

```
EverCloudLocalData qevercloud::InvitationShareRelationship::localData
```

See the declaration of EverCloudLocalData for details

7.42.3.3 privilege

```
Optional< ShareRelationshipPrivilegeLevel > qevercloud::InvitationShareRelationship::privilege
```

The privilege level at which the member will be joined, if it turns out that the member is not already joined at a higher level. Note that the `identity` field may not uniquely identify an Evernote User ID, and so we won't know until the invitation is redeemed whether or not the recipient already has privilege.

7.42.3.4 recipientUserIdentity

```
Optional< UserIdentity > qevercloud::InvitationShareRelationship::recipientUserIdentity
```

Identifies the recipient of the invitation. The user identity type can be either EMAIL, EVERNOTE or IDENTITYID. If the invitation was created using the classic notebook sharing APIs it will be EMAIL. If it was created using the new identity-based notebook sharing APIs it will either be EVERNOTE or IDENTITYID, depending on whether we can map the identity to an Evernote user at the time of creation.

7.42.3.5 sharerUserId

```
Optional< UserID > qevercloud::InvitationShareRelationship::sharerUserId
```

The user id of the user who most recently shared this notebook to this identity. This field is used by the service to convey information to the user, so clients should treat it as read-only.

7.43 qevercloud::IRequestContext Class Reference

```
#include <RequestContext.h>
```

Public Member Functions

- virtual QUuid requestId () const =0
- virtual QString authenticationToken () const =0
- virtual qint64 requestTimeout () const =0
- virtual bool increaseRequestTimeoutExponentially () const =0
- virtual qint64 maxRequestTimeout () const =0
- virtual quint32 maxRequestRetryCount () const =0
- virtual QList< QNetworkCookie > cookies () const =0
- virtual IRequestContext * clone () const =0
- virtual ~IRequestContext ()=default

Friends

- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &strm, const IRequestContext &ctx)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &dbg, const IRequestContext &ctx)

7.43.1 Detailed Description

IRequestContext carries several request scoped values defining the way request is handled by QEverCloud

7.43.2 Constructor & Destructor Documentation

7.43.2.1 ~IRequestContext()

```
virtual qevercloud::IRequestContext::~IRequestContext ( )  [virtual], [default]
```

7.43.3 Member Function Documentation

7.43.3.1 authenticationToken()

```
virtual QString qevercloud::IRequestContext::authenticationToken ( ) const  [pure virtual]
```

Authentication token to use along with the request

7.43.3.2 clone()

```
virtual IRequestContext * qevercloud::IRequestContext::clone ( ) const  [pure virtual]
```

Create a new instance of IRequestContext with all the same parameters as in the source but a distinct id

7.43.3.3 cookies()

```
virtual QList< QNetworkCookie > qevercloud::IRequestContext::cookies ( ) const  [pure virtual]
```

Cookies to set to QNetworkRequest corresponding to Evernote API call

7.43.3.4 increaseRequestTimeoutExponentially()

```
virtual bool qevercloud::IRequestContext::increaseRequestTimeoutExponentially ( ) const  [pure
virtual]
```

Should request timeout be exponentially increased on retries or not

7.43.3.5 maxRequestRetryCount()

```
virtual quint32 qevercloud::IRequestContext::maxRequestRetryCount ( ) const  [pure virtual]
```

Max number of attempts to retry a request

7.43.3.6 maxRequestTimeout()

```
virtual qint64 qevercloud::IRequestContext::maxRequestTimeout ( ) const  [pure virtual]
```

Max request timeout in milliseconds (upper boundary for exponentially increasing timeouts on retries)

7.43.3.7 requestId()

```
virtual QUuid qevercloud::IRequestContext::requestId ( ) const  [pure virtual]
```

Automatically generated unique identifier for each request

7.43.3.8 requestTimeout()

```
virtual qint64 qevercloud::IRequestContext::requestTimeout ( ) const  [pure virtual]
```

Request timeout in milliseconds

7.43.4 Friends And Related Function Documentation

7.43.4.1 operator<< [1/2]

```
QEVERCLOUD_EXPORT QDebug & operator<< (
            QDebug & dbg,
            const IRequestContext & ctx )  [friend]
```

7.43.4.2 operator<< [2/2]

```
QEVERCLOUD_EXPORT QTextStream & operator<< (
            QTextStream & strm,
            const IRequestContext & ctx )  [friend]
```

7.44 qevercloud::IRetryPolicy Struct Reference

```
#include <DurableService.h>
```

Public Member Functions

- virtual bool shouldRetry (const EverCloudExceptionDataPtr &exceptionData)=0

7.44.1 Member Function Documentation

7.44.1.1 shouldRetry()

```
virtual bool qevercloud::IRetryPolicy::shouldRetry (
            const EverCloudExceptionDataPtr & exceptionData )  [pure virtual]
```

7.45 qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::iterator Struct Reference

```
#include <Helpers.h>
```

Public Member Functions

- iterator (const typename Container::const_iterator it)
- Container::const_iterator operator* ()
- iterator & operator++ ()
- bool operator!= (const iterator &other) const

Public Attributes

- Container::const_iterator m_iterator

7.45.1 Constructor & Destructor Documentation

7.45.1.1 iterator()

```
template<typename Container >
qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::iterator::iterator (
            const typename Container::const_iterator it )  [inline]
```

7.45.2 Member Function Documentation

7.45.2.1 operator"!=()

```
template<typename Container >
bool qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::iterator::operator!=
(
            const iterator & other ) const  [inline]
```

7.45.2.2 operator*()

```
template<typename Container >
Container::const_iterator qevercloud::QAssociativeContainerConstReferenceWrapper< Container
>::iterator::operator* ( )  [inline]
```

7.45.2.3 operator++()

```
template<typename Container >
iterator & qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::iterator↩
::operator++ ( )  [inline]
```

7.45.3 Member Data Documentation

7.45.3.1 m_iterator

```
template<typename Container >
Container::const_iterator qevercloud::QAssociativeContainerConstReferenceWrapper< Container
>::iterator::m_iterator
```

7.46 qevercloud::QAssociativeContainerReferenceWrapper< Container >::iterator Struct Reference

`#include <Helpers.h>`

Public Member Functions

- iterator (const typename Container::iterator it)
- Container::iterator operator* ()
- iterator & operator++ ()
- bool operator!= (const iterator &other) const

Public Attributes

- Container::iterator m_iterator

7.46.1 Constructor & Destructor Documentation

7.46.1.1 iterator()

```
template<typename Container >
qevercloud::QAssociativeContainerReferenceWrapper< Container >::iterator::iterator (
            const typename Container::iterator it )  [inline]
```

7.46.2 Member Function Documentation

7.46.2.1 operator"!=()

```
template<typename Container >
bool qevercloud::QAssociativeContainerReferenceWrapper< Container >::iterator::operator!= (
            const iterator & other ) const  [inline]
```

7.46.2.2 operator*()

```
template<typename Container >
Container::iterator qevercloud::QAssociativeContainerReferenceWrapper< Container >::iterator↩
::operator* ( )  [inline]
```

7.46.2.3 operator++()

```
template<typename Container >
iterator & qevercloud::QAssociativeContainerReferenceWrapper< Container >::iterator::operator++
( )  [inline]
```

7.46.3 Member Data Documentation

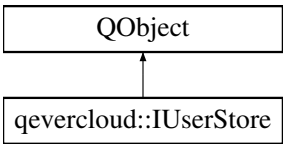
7.46.3.1 m_iterator

```
template<typename Container >
Container::iterator qevercloud::QAssociativeContainerReferenceWrapper< Container >::iterator↩
::m_iterator
```

7.47 qevercloud::IUserStore Class Reference

```
#include <Services.h>
```

Inheritance diagram for qevercloud::IUserStore:



Public Member Functions

- virtual QString userStoreUrl () const =0
- virtual void setUserStoreUrl (QString url)=0
- virtual bool checkVersion (QString clientName, qint16 edamVersionMajor=EDAM_VERSION_MAJOR, qint16 edamVersionMinor=EDAM_VERSION_MINOR, IRequestContextPtr ctx={})=0
- virtual AsyncResult * checkVersionAsync (QString clientName, qint16 edamVersionMajor=EDAM_VERSION_MAJOR, qint16 edamVersionMinor=EDAM_VERSION_MINOR, IRequestContextPtr ctx={})=0
- virtual BootstrapInfo getBootstrapInfo (QString locale, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getBootstrapInfoAsync (QString locale, IRequestContextPtr ctx={})=0
- virtual AuthenticationResult authenticateLongSession (QString username, QString password, QString consumerKey, QString consumerSecret, QString deviceIdentifier, QString deviceDescription, bool supports↩ TwoFactor, IRequestContextPtr ctx={})=0
- virtual AsyncResult * authenticateLongSessionAsync (QString username, QString password, QString consumerKey, QString consumerSecret, QString deviceIdentifier, QString deviceDescription, bool supports↩ TwoFactor, IRequestContextPtr ctx={})=0
- virtual AuthenticationResult completeTwoFactorAuthentication (QString oneTimeCode, QString device↩ Identifier, QString deviceDescription, IRequestContextPtr ctx={})=0
- virtual AsyncResult * completeTwoFactorAuthenticationAsync (QString oneTimeCode, QString device↩ Identifier, QString deviceDescription, IRequestContextPtr ctx={})=0
- virtual void revokeLongSession (IRequestContextPtr ctx={})=0
- virtual AsyncResult * revokeLongSessionAsync (IRequestContextPtr ctx={})=0
- virtual AuthenticationResult authenticateToBusiness (IRequestContextPtr ctx={})=0
- virtual AsyncResult * authenticateToBusinessAsync (IRequestContextPtr ctx={})=0
- virtual User getUser (IRequestContextPtr ctx={})=0
- virtual AsyncResult * getUserAsync (IRequestContextPtr ctx={})=0
- virtual PublicUserInfo getPublicUserInfo (QString username, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getPublicUserInfoAsync (QString username, IRequestContextPtr ctx={})=0
- virtual UserUrls getUserUrls (IRequestContextPtr ctx={})=0
- virtual AsyncResult * getUserUrlsAsync (IRequestContextPtr ctx={})=0
- virtual void inviteToBusiness (QString emailAddress, IRequestContextPtr ctx={})=0
- virtual AsyncResult * inviteToBusinessAsync (QString emailAddress, IRequestContextPtr ctx={})=0
- virtual void removeFromBusiness (QString emailAddress, IRequestContextPtr ctx={})=0

- virtual AsyncResult * removeFromBusinessAsync (QString emailAddress, IRequestContextPtr ctx={})=0
- virtual void updateBusinessUserIdentifier (QString oldEmailAddress, QString newEmailAddress, IRequestContextPtr ctx={})=0
- virtual AsyncResult * updateBusinessUserIdentifierAsync (QString oldEmailAddress, QString newEmail↩ Address, IRequestContextPtr ctx={})=0
- virtual QList< UserProfile > listBusinessUsers (IRequestContextPtr ctx={})=0
- virtual AsyncResult * listBusinessUsersAsync (IRequestContextPtr ctx={})=0
- virtual QList< BusinessInvitation > listBusinessInvitations (bool includeRequestedInvitations, IRequestContextPtr ctx={})=0
- virtual AsyncResult * listBusinessInvitationsAsync (bool includeRequestedInvitations, IRequestContextPtr ctx={})=0
- virtual AccountLimits getAccountLimits (ServiceLevel serviceLevel, IRequestContextPtr ctx={})=0
- virtual AsyncResult * getAccountLimitsAsync (ServiceLevel serviceLevel, IRequestContextPtr ctx={})=0

Protected Member Functions

- IUserStore (QObject *parent)

7.47.1 Detailed Description

Service: UserStore

The UserStore service is primarily used by EDAM clients to establish authentication via username and password over a trusted connection (e.g. SSL). A client's first call to this interface should be checkVersion() to ensure that the client's software is up to date.

All calls which require an authenticationToken may throw an EDAMUserException for the following reasons:

- AUTH_EXPIRED "authenticationToken" - token has expired
- BAD_DATA_FORMAT "authenticationToken" - token is malformed
- DATA_REQUIRED "authenticationToken" - token is empty
- INVALID_AUTH "authenticationToken" - token signature is invalid
- PERMISSION_DENIED "authenticationToken" - token does not convey sufficient privileges

7.47.2 Constructor & Destructor Documentation

7.47.2.1 IUserStore()

```
qevercloud::IUserStore::IUserStore (
            QObject * parent )  [inline], [protected]
```

7.47.3 Member Function Documentation

7.47.3.1 authenticateLongSession()

```
virtual AuthenticationResult qevercloud::IUserStore::authenticateLongSession (
            QString username,
            QString password,
            QString consumerKey,
            QString consumerSecret,
            QString deviceIdentifier,
            QString deviceDescription,
            bool supportsTwoFactor,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

This is used to check a username and password in order to create a long-lived authentication token that can be used for further actions.

This function is not available to most third party applications, which typically authenticate using OAuth as described at dev.evernote.com. If you believe that your application requires permission to authenticate using username and password instead of OAuth, please contact Evernote developer support by visiting dev.evernote.com.

Parameters

username	The username or registered email address of the account to authenticate against.
password	The plaintext password to check against the account. Since this is not protected by the EDAM protocol, this information must be provided over a protected transport (i.e. SSL).
consumerKey	The "consumer key" portion of the API key issued to the client application by Evernote.
consumerSecret	The "consumer secret" portion of the API key issued to the client application by Evernote.
deviceIdentifier	An optional string that uniquely identifies the device from which the authentication is being performed. This string allows the service to return the same authentication token when a given application requests authentication repeatedly from the same device. This may happen when the user logs out of an application and then logs back in, or when the application is uninstalled and later reinstalled. If no reliable device identifier can be created, this value should be omitted. If set, the device identifier must be between 1 and EDAM_DEVICE_ID_LEN_MAX characters long and must match the regular expression EDAM_DEVICE_ID_REGEX.
deviceDescription	A description of the device from which the authentication is being performed. This field is displayed to the user in a list of authorized applications to allow them to distinguish between multiple tokens issued to the same client application on different devices. For example, the Evernote iOS client on a user's iPhone and iPad might pass the iOS device names "Bob's iPhone" and "Bob's iPad". The device description must be between 1 and EDAM_DEVICE_DESCRIPTION_LEN_MAX characters long and must match the regular expression EDAM_DEVICE_DESCRIPTION_REGEX.
supportsTwoFactor	Whether the calling application supports two-factor authentication. If this parameter is false, this method will fail with the error code INVALID_AUTH and the parameter "password" when called for a user who has enabled two-factor authentication.

Returns

The result of the authentication. The level of detail provided in the returned AuthenticationResult.User structure depends on the access level granted by calling application's API key.

If the user has two-factor authentication enabled, AuthenticationResult.secondFactorRequired will be set and AuthenticationResult.authenticationToken will contain a short-lived token that may only be used to complete the two-factor authentication process by calling UserStore.completeTwoFactorAuthentication.

Exceptions

EDAMUserException	• DATA_REQUIRED "username" - username is empty • DATA_REQUIRED "password" - password is empty • DATA_REQUIRED "consumerKey" - consumerKey is empty • DATA_REQUIRED "consumerSecret" - consumerSecret is empty • DATA_REQUIRED "deviceDescription" - deviceDescription is empty • BAD_DATA_FORMAT "deviceDescription" - deviceDescription is not valid. • BAD_DATA_FORMAT "deviceIdentifier" - deviceIdentifier is not valid. • INVALID_AUTH "username" - username not found • INVALID_AUTH "password" - password did not match • INVALID_AUTH "consumerKey" - consumerKey is not authorized • INVALID_AUTH "consumerSecret" - consumerSecret is incorrect • INVALID_AUTH "businessOnly" - the user is a business-only account • PERMISSION_DENIED "User.active" - user account is closed • PERMISSION_DENIED "User.tooManyFailuresTryAgainLater" - user has failed authentication too often • AUTH_EXPIRED "password" - user password is expired

7.47.3.2 authenticateLongSessionAsync()

```
virtual AsyncResult * qevercloud::IUserStore::authenticateLongSessionAsync (
            QString username,
            QString password,
            QString consumerKey,
            QString consumerSecret,
            QString deviceIdentifier,
            QString deviceDescription,
            bool supportsTwoFactor,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of authenticateLongSession

7.47.3.3 authenticateToBusiness()

```
virtual AuthenticationResult qevercloud::IUserStore::authenticateToBusiness (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

This is used to take an existing authentication token that grants access to an individual user account (returned from 'authenticate', 'authenticateLongSession' or an OAuth authorization) and obtain an additional authentication token that may be used to access business notebooks if the user is a member of an Evernote Business account.

The resulting authentication token may be used to make NoteStore API calls against the business using the Note↩ Store URL returned in the result.

Parameters

authenticationToken	The authentication token for the user. This may not be a shared authentication token (returned by NoteStore.authenticateToSharedNotebook or NoteStore.authenticateToSharedNote) or a business authentication token.

Returns

The result of the authentication, with the token granting access to the business in the result's 'authentication↩ Token' field. The URL that must be used to access the business account NoteStore will be returned in the result's 'noteStoreUrl' field. The 'User' field will not be set in the result.

Exceptions

EDAMUserException	• PERMISSION_DENIED "authenticationToken" - the provided authentication token is a shared or business authentication token. • PERMISSION_DENIED "Business" - the user identified by the provided authentication token is not currently a member of a business. • PERMISSION_DENIED "Business.status" - the business that the user is a member of is not currently in an active status. • BUSINESS_SECURITY_LOGIN_REQUIRED "sso" - the user must complete single sign-on before authenticating to the business.

7.47.3.4 authenticateToBusinessAsync()

```
virtual AsyncResult * qevercloud::IUserStore::authenticateToBusinessAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of authenticateToBusiness

7.47.3.5 checkVersion()

```
virtual bool qevercloud::IUserStore::checkVersion (
            QString clientName,
            qint16 edamVersionMajor = EDAM_VERSION_MAJOR,
            qint16 edamVersionMinor = EDAM_VERSION_MINOR,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

This should be the first call made by a client to the EDAM service. It tells the service what protocol version is used by the client. The service will then return true if the client is capable of talking to the service, and false if the client's protocol version is incompatible with the service, so the client must upgrade. If a client receives a false value, it should report the incompatibility to the user and not continue with any more EDAM requests (UserStore or NoteStore).

Parameters

clientName	This string provides some information about the client for tracking/logging on the service. It should provide information about the client's software and platform. The structure should be: application/version; platform/version; [device/version] E.g. "Evernote Windows/3.0.1; Windows/XP SP3".
edamVersionMajor	This should be the major protocol version that was compiled by the client. This should be the current value of the EDAM_VERSION_MAJOR constant for the client.
edamVersionMinor	This should be the major protocol version that was compiled by the client. This should be the current value of the EDAM_VERSION_MINOR constant for the client.

7.47.3.6 checkVersionAsync()

```
virtual AsyncResult * qevercloud::IUserStore::checkVersionAsync (
            QString clientName,
            qint16 edamVersionMajor = EDAM_VERSION_MAJOR,
            qint16 edamVersionMinor = EDAM_VERSION_MINOR,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of checkVersion

7.47.3.7 completeTwoFactorAuthentication()

```
virtual AuthenticationResult qevercloud::IUserStore::completeTwoFactorAuthentication (
            QString oneTimeCode,
            QString deviceIdentifier,
            QString deviceDescription,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Complete the authentication process when a second factor is required. This call is made after a successful call to authenticate or authenticateLongSession when the authenticating user has enabled two-factor authentication.

Parameters

authenticationToken	An authentication token returned by a previous call to UserStore.authenticate or UserStore.authenticateLongSession that could not be completed in a single call because a second factor was required.
oneTimeCode	The one time code entered by the user. This value is delivered out-of-band, typically via SMS or an authenticator application.
deviceIdentifier	See the corresponding parameter in authenticateLongSession.
deviceDescription	See the corresponding parameter in authenticateLongSession.

Returns

The result of the authentication. The level of detail provided in the returned AuthenticationResult.User structure depends on the access level granted by the calling application's API key. If the initial authentication call was made to authenticateLongSession, the AuthenticationResult will contain a long-lived authentication token.

Exceptions

EDAMUserException	• DATA_REQUIRED "authenticationToken" - authenticationToken is empty • DATA_REQUIRED "oneTimeCode" - oneTimeCode is empty • BAD_DATA_FORMAT "deviceIdentifier" - deviceIdentifier is not valid • BAD_DATA_FORMAT "authenticationToken" - authenticationToken is not well formed • INVALID_AUTH "oneTimeCode" - oneTimeCode did not match • AUTH_EXPIRED "authenticationToken" - authenticationToken has expired • PERMISSION_DENIED "authenticationToken" - authenticationToken is not valid • PERMISSION_DENIED "User.active" - user account is closed • PERMISSION_DENIED "User.tooManyFailuresTryAgainLater" - user has failed authentication too often • DATA_CONFLICT "User.twoFactorAuthentication" - The user has not enabled two-factor authentication.

7.47.3.8 completeTwoFactorAuthenticationAsync()

```
virtual AsyncResult * qevercloud::IUserStore::completeTwoFactorAuthenticationAsync (
            QString oneTimeCode,
            QString deviceIdentifier,
            QString deviceDescription,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of completeTwoFactorAuthentication

7.47.3.9 getAccountLimits()

```
virtual AccountLimits qevercloud::IUserStore::getAccountLimits (
            ServiceLevel serviceLevel,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Retrieve the standard account limits for a given service level. This should only be called when necessary, e.g. to determine if a higher level is available should the user upgrade, and should be cached for long periods (e.g. 30 days) as the values are not expected to fluctuate frequently.

Exceptions

EDAMUserException	• DATA_REQUIRED "serviceLevel" - serviceLevel is null

7.47.3.10 getAccountLimitsAsync()

```
virtual AsyncResult * qevercloud::IUserStore::getAccountLimitsAsync (
            ServiceLevel serviceLevel,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getAccountLimits

7.47.3.11 getBootstrapInfo()

```
virtual BootstrapInfo qevercloud::IUserStore::getBootstrapInfo (
            QString locale,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

This provides bootstrap information to the client. Various bootstrap profiles and settings may be used by the client to configure itself.

Parameters

locale	The client's current locale, expressed in language[_country] format. E.g., "en_US". See ISO-639 and ISO-3166 for valid language and country codes.

Returns

The bootstrap information suitable for this client.

7.47.3.12 getBootstrapInfoAsync()

```
virtual AsyncResult * qevercloud::IUserStore::getBootstrapInfoAsync (
            QString locale,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getBootstrapInfo

7.47.3.13 getPublicUserInfo()

```
virtual PublicUserInfo qevercloud::IUserStore::getPublicUserInfo (
            QString username,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asks the UserStore about the publicly available location information for a particular username.

Exceptions

EDAMUserException	• DATA_REQUIRED "username" - username is empty

7.47.3.14 getPublicUserInfoAsync()

```
virtual AsyncResult * qevercloud::IUserStore::getPublicUserInfoAsync (
            QString username,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getPublicUserInfo

7.47.3.15 getUser()

```
virtual User qevercloud::IUserStore::getUser (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the User corresponding to the provided authentication token, or throws an exception if this token is not valid. The level of detail provided in the returned User structure depends on the access level granted by the token, so a web service client may receive fewer fields than an integrated desktop client.

7.47.3.16 getUserAsync()

```
virtual AsyncResult * qevercloud::IUserStore::getUserAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getUser

7.47.3.17 getUserUrls()

```
virtual UserUrls qevercloud::IUserStore::getUserUrls (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns the URLs that should be used when sending requests to the service on behalf of the account represented by the provided authenticationToken.

This method isn't needed by most clients, who can retrieve the correct set of UserUrls from the AuthenticationResult returned from UserStore::authenticateLongSession(). This method is typically only needed to look up the correct URLs for an existing long-lived authentication token.

7.47.3.18 getUserUrlsAsync()

```
virtual AsyncResult * qevercloud::IUserStore::getUserUrlsAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of getUserUrls

7.47.3.19 inviteToBusiness()

```
virtual void qevercloud::IUserStore::inviteToBusiness (
            QString emailAddress,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Invite a user to join an Evernote Business account.

Behavior will depend on the auth token.

1. auth token with privileges to manage Evernote Business membership. "External Provisioning" - The user will receive an email inviting them to join the business. They do not need to have an existing Evernote account. If the user has already been invited, a new invitation email will be sent.
2. business auth token issued to an admin user. Only for first-party clients: "Approve Invitation" - If there has been a request to invite the email, approve it. Invited user will receive email with a link to join business. "Invite User" - If no invitation for the email exists, create an approved invitation for the email. An email will be sent to the emailAddress with a link to join the caller's business. business auth token: "Request Invitation" - If no invitation exists, create a request to invite the user to the business. These requests do not count towards a business' max active user limit.

Parameters

authenticationToken	the authentication token with sufficient privileges to manage Evernote Business membership or a business auth token.
emailAddress	the email address of the user to invite to join the Evernote Business account.

Exceptions

EDAMUserException	• DATA_REQUIRED "email" - if no email address was provided • BAD_DATA_FORMAT "email" - if the email address is not well formed • DATA_CONFLICT "BusinessUser.email" - if there is already a user in the business whose business email address matches the specified email address. • LIMIT_REACHED "Business.maxActiveUsers" - if the business has reached its user limit.

7.47.3.20 inviteToBusinessAsync()

```
virtual AsyncResult * qevercloud::IUserStore::inviteToBusinessAsync (
            QString emailAddress,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of inviteToBusiness

7.47.3.21 listBusinessInvitations()

```
virtual QList< BusinessInvitation > qevercloud::IUserStore::listBusinessInvitations (
            bool includeRequestedInvitations,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of outstanding invitations to join an Evernote Business account.

Only outstanding invitations are returned by this function. Users who have accepted an invitation and joined a business are listed using listBusinessUsers.

Parameters

authenticationToken	An authentication token with sufficient privileges to manage Evernote Business membership.
includeRequestedInvitations	If true, invitations with a status of BusinessInvitationStatus.REQUESTED will be included in the returned list. If false, only invitations with a status of BusinessInvitationStatus.APPROVED will be included.

7.47.3.22 listBusinessInvitationsAsync()

```
virtual AsyncResult * qevercloud::IUserStore::listBusinessInvitationsAsync (
            bool includeRequestedInvitations,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listBusinessInvitations

7.47.3.23 listBusinessUsers()

```
virtual QList< UserProfile > qevercloud::IUserStore::listBusinessUsers (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Returns a list of active business users in a given business.

Clients are required to cache this information and re-fetch no more than once per day or when they encountered a user ID or username that was not known to them.

To avoid excessive look ups, clients should also track user IDs and usernames that belong to users who are not in the business, since they will not be included in the result.

I.e., when a client encounters a previously unknown user ID as a note's creator, it may query listBusinessUsers to find information about this user. If the user is not in the resulting list, the client should track that fact and not re-query the service the next time that it sees this user on a note.

Parameters

authenticationToken	A business authentication token returned by authenticateToBusiness or with sufficient privileges to manage Evernote Business membership.

7.47.3.24 listBusinessUsersAsync()

```
virtual AsyncResult * qevercloud::IUserStore::listBusinessUsersAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of listBusinessUsers

7.47.3.25 removeFromBusiness()

```
virtual void qevercloud::IUserStore::removeFromBusiness (
            QString emailAddress,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Remove a user from an Evernote Business account. Once removed, the user will no longer be able to access content within the Evernote Business account.

The email address of the user to remove from the business must match the email address used to invite a user to join the business via UserStore.inviteToBusiness. This function will only remove users who were invited by external provisioning

Parameters

authenticationToken	An authentication token with sufficient privileges to manage Evernote Business membership.
emailAddress	The email address of the user to remove from the Evernote Business account.

Exceptions

EDAMUserException	• DATA_REQUIRED "email" - if no email address was provided • BAD_DATA_FORMAT "email" - The email address is not well formed
EDAMNotFoundException	• "email" - If there is no user with the specified email address in the business or that user was not invited via external provisioning.

7.47.3.26 removeFromBusinessAsync()

```
virtual AsyncResult * qevercloud::IUserStore::removeFromBusinessAsync (
            QString emailAddress,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of removeFromBusiness

7.47.3.27 revokeLongSession()

```
virtual void qevercloud::IUserStore::revokeLongSession (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Revoke an existing long lived authentication token. This can be used to revoke OAuth tokens or tokens created by calling authenticateLongSession, and allows a user to effectively log out of Evernote from the perspective of the application that holds the token. The authentication token that is passed is immediately revoked and may not be used to call any authenticated EDAM function.

Parameters

authenticationToken	the authentication token to revoke.

Exceptions

EDAMUserException	• DATA_REQUIRED "authenticationToken" - no authentication token provided • BAD_DATA_FORMAT "authenticationToken" - the authentication token is not well formed • INVALID_AUTH "authenticationToken" - the authentication token is invalid • AUTH_EXPIRED "authenticationToken" - the authentication token is expired or is already revoked.

7.47.3.28 revokeLongSessionAsync()

```
virtual AsyncResult * qevercloud::IUserStore::revokeLongSessionAsync (
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of revokeLongSession

7.47.3.29 setUserStoreUrl()

```
virtual void qevercloud::IUserStore::setUserStoreUrl (
            QString url )  [pure virtual]
```

7.47.3.30 updateBusinessUserIdentifier()

```
virtual void qevercloud::IUserStore::updateBusinessUserIdentifier (
            QString oldEmailAddress,
            QString newEmailAddress,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Update the email address used to uniquely identify an Evernote Business user.

This will update the identifier for a user who was previously invited using inviteToBusiness, ensuring that caller and the Evernote service maintain an agreed-upon identifier for a specific user.

For example, the following sequence of calls would invite a user to join a business, update their email address, and then remove the user from the business using the updated email address.

inviteToBusiness("foo@bar.com") updateBusinessUserIdentifier("foo@bar.com", "baz@bar.com") removeFrom↩ Business("baz@bar.com")

Parameters

authenticationToken	An authentication token with sufficient privileges to manage Evernote Business membership.
oldEmailAddress	The existing email address used to uniquely identify the user.
newEmailAddress	The new email address used to uniquely identify the user.

Exceptions

EDAMUserException	• DATA_REQUIRED "oldEmailAddress" - No old email address was provided • DATA_REQUIRED "newEmailAddress" - No new email address was provided • BAD_DATA_FORMAT "oldEmailAddress" - The old email address is not well formed • BAD_DATA_FORMAT "newEmailAddress" - The new email address is not well formed • DATA_CONFLICT "oldEmailAddress" - The old and new email addresses were the same • DATA_CONFLICT "newEmailAddress" - There is already an invitation or registered user with the provided new email address. • DATA_CONFLICT "invitation.externallyProvisioned" - The user identified by oldEmailAddress was not added via UserStore.inviteToBusiness and therefore cannot be updated.
EDAMNotFoundException	• "oldEmailAddress" - If there is no user or invitation with the specified oldEmailAddress in the business.

7.47.3.31 updateBusinessUserIdentifierAsync()

```
virtual AsyncResult * qevercloud::IUserStore::updateBusinessUserIdentifierAsync (
            QString oldEmailAddress,
            QString newEmailAddress,
            IRequestContextPtr ctx = {} )  [pure virtual]
```

Asynchronous version of updateBusinessUserIdentifier

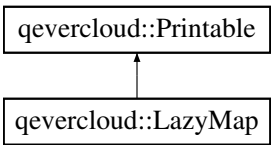
7.47.3.32 userStoreUrl()

```
virtual QString qevercloud::IUserStore::userStoreUrl ( ) const  [pure virtual]
```

7.48 qevercloud::LazyMap Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::LazyMap:



Public Types

- using FullMap = QMap< QString, QString >

Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const LazyMap &other) const
- bool operator!= (const LazyMap &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QSet< QString > > keysOnly
- Optional< QMap< QString, QString > > fullMap

Properties

- OptionalQSet< QString > keysOnly
- Optional< FullMap > fullMap

7.48.1 Detailed Description

A structure that wraps a map of name/value pairs whose values are not always present in the structure in order to reduce space when obtaining batches of entities that contain the map.

When the server provides the client with a LazyMap, it will fill in either the keysOnly field or the fullMap field, but never both, based on the API and parameters.

When a client provides a LazyMap to the server as part of an update to an object, the server will only update the LazyMap if the fullMap field is set. If the fullMap field is not set, the server will not make any changes to the map.

Check the API documentation of the individual calls involving the LazyMap for full details including the constraints of the names and values of the map.

7.48.2 Member Typedef Documentation

7.48.2.1 FullMap

```
using qevercloud::LazyMap::FullMap = QMap<QString, QString>
```

7.48.3 Member Function Documentation

7.48.3.1 operator"!=()

```
bool qevercloud::LazyMap::operator!= (
            const LazyMap & other ) const  [inline]
```

7.48.3.2 operator==()

```
bool qevercloud::LazyMap::operator== (
            const LazyMap & other ) const  [inline]
```

7.48.3.3 print()

```
virtual void qevercloud::LazyMap::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.48.4 Member Data Documentation

7.48.4.1 fullMap

```
Optional<QMap<QString, QString> > qevercloud::LazyMap::fullMap
```

The complete map, including all keys and values.

7.48.4.2 keysOnly

```
Optional<QSet<QString> > qevercloud::LazyMap::keysOnly
```

The set of keys for the map. This field is ignored by the server when set.

7.48.4.3 localData

```
EverCloudLocalData qevercloud::LazyMap::localData
```

See the declaration of EverCloudLocalData for details

7.48.5 Property Documentation

7.48.5.1 fullMap

```
Optional<FullMap> qevercloud::LazyMap::fullMap
```

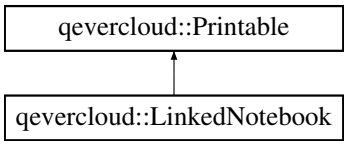
7.48.5.2 keysOnly

```
OptionalQSet<QString> qevercloud::LazyMap::keysOnly
```

7.49 qevercloud::LinkedNotebook Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::LinkedNotebook:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const LinkedNotebook &other) const
- bool operator!= (const LinkedNotebook &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > shareName
- Optional< QString > username
- Optional< QString > shardId
- Optional< QString > sharedNotebookGlobalId
- Optional< QString > uri
- Optional< Guid > guid
- Optional< qint32 > updateSequenceNum
- Optional< QString > noteStoreUrl
- Optional< QString > webApiUrlPrefix
- Optional< QString > stack
- Optional< qint32 > businessId

7.49.1 Detailed Description

A link in a user's account that refers them to a public or individual shared notebook in another user's account.

7.49.2 Member Function Documentation

7.49.2.1 operator"!=()

```
bool qevercloud::LinkedNotebook::operator!= (
            const LinkedNotebook & other ) const  [inline]
```

7.49.2.2 operator==()

```
bool qevercloud::LinkedNotebook::operator== (
            const LinkedNotebook & other ) const  [inline]
```

7.49.2.3 print()

```
virtual void qevercloud::LinkedNotebook::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.49.3 Member Data Documentation

7.49.3.1 businessId

```
Optional< qint32 > qevercloud::LinkedNotebook::businessId
```

If set, this will be the unique identifier for the business that owns the notebook to which the linked notebook refers.

7.49.3.2 guid

```
Optional< Guid > qevercloud::LinkedNotebook::guid
```

The unique identifier of this linked notebook. Will be set whenever a linked notebook is retrieved from the service, but may be null when a client is creating a linked notebook.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.49.3.3 localData

```
EverCloudLocalData qevercloud::LinkedNotebook::localData
```

See the declaration of EverCloudLocalData for details

7.49.3.4 noteStoreUrl

```
Optional< QString > qevercloud::LinkedNotebook::noteStoreUrl
```

This field will contain the full URL that clients should use to make NoteStore requests to the server shard that contains that notebook's data. I.e. this is the URL that should be used to create the Thrift HTTP client transport to send messages to the NoteStore service for the account.

7.49.3.5 shardId

```
Optional< QString > qevercloud::LinkedNotebook::shardId
```

The shard ID of the notebook if the notebook is not public.

uri The identifier of the public notebook.

7.49.3.6 sharedNotebookGlobalId

```
Optional< QString > qevercloud::LinkedNotebook::sharedNotebookGlobalId
```

The globally unique identifier (globalId) of the shared notebook that corresponds to the share key, or the GUID of the Notebook that the linked notebook refers to. This field must be filled in with the SharedNotebook.globalId or Notebook.GUID value when creating new LinkedNotebooks. This field replaces the deprecated "shareKey" field.

7.49.3.7 shareName

```
Optional< QString > qevercloud::LinkedNotebook::shareName
```

The display name of the shared notebook. The link owner can change this.

7.49.3.8 stack

```
Optional< QString > qevercloud::LinkedNotebook::stack
```

If this is set, then the notebook is visually contained within a stack of notebooks with this name. All notebooks in the same account with the same 'stack' field are considered to be in the same stack. Notebooks with no stack set are "top level" and not contained within a stack. The link owner can change this and this field is for the benefit of the link owner.

7.49.3.9 updateSequenceNum

```
Optional< qint32 > qevercloud::LinkedNotebook::updateSequenceNum
```

A number identifying the last transaction to modify the state of this object. The USN values are sequential within an account, and can be used to compare the order of modifications within the service.

7.49.3.10 uri

```
Optional< QString > qevercloud::LinkedNotebook::uri
```

NOT DOCUMENTED

7.49.3.11 username

```
Optional< QString > qevercloud::LinkedNotebook::username
```

The username of the user who owns the shared or public notebook.

7.49.3.12 webApiUrlPrefix

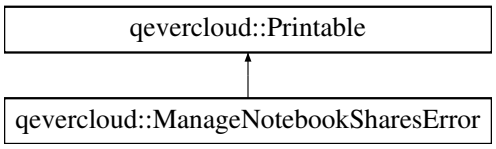
```
Optional< QString > qevercloud::LinkedNotebook::webApiUrlPrefix
```

This field will contain the initial part of the URLs that should be used to make requests to Evernote's thin client "web API", which provide optimized operations for clients that aren't capable of manipulating the full contents of accounts via the full Thrift data model. Clients should concatenate the relative path for the various servlets onto the end of this string to construct the full URL, as documented on our developer web site.

7.50 qevercloud::ManageNotebookSharesError Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::ManageNotebookSharesError:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ManageNotebookSharesError &other) const
- bool operator!= (const ManageNotebookSharesError &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< UserIdentity > userIdentity
- Optional< EDAMUserException > userException
- Optional< EDAMNotFoundException > notFoundException

7.50.1 Detailed Description

A structure to capture certain errors that occurred during a call to manageNotebookShares. That method can be run best-effort, meaning that some change requests can be applied while others fail. Note that some errors such as system errors will still fail the entire transaction regardless of running best effort. When some change requests do not succeed, the error conditions are captured in instances of this class, captured by the identity of the share relationship and one of the exception fields.

7.50.2 Member Function Documentation

7.50.2.1 operator"!=()

```
bool qevercloud::ManageNotebookSharesError::operator!= (
            const ManageNotebookSharesError & other ) const  [inline]
```

7.50.2.2 operator==()

```
bool qevercloud::ManageNotebookSharesError::operator== (
            const ManageNotebookSharesError & other ) const  [inline]
```

7.50.2.3 print()

```
virtual void qevercloud::ManageNotebookSharesError::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.50.3 Member Data Documentation

7.50.3.1 localData

```
EverCloudLocalData qevercloud::ManageNotebookSharesError::localData
```

See the declaration of EverCloudLocalData for details

7.50.3.2 notFoundException

```
Optional< EDAMNotFoundException > qevercloud::ManageNotebookSharesError::notFoundException
```

If the error is represented as an EDAMNotFoundException that would have otherwise been thrown without best-effort execution. Only one exception field will be set.

7.50.3.3 userException

```
Optional< EDAMUserException > qevercloud::ManageNotebookSharesError::userException
```

If the error is represented as an EDAMUserException that would have otherwise been thrown without best-effort execution. Only one exception field will be set.

7.50.3.4 userIdentity

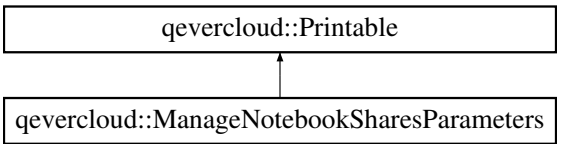
```
Optional< UserIdentity > qevercloud::ManageNotebookSharesError::userIdentity
```

The identity of the share relationship whose update encountered an error.

7.51 qevercloud::ManageNotebookSharesParameters Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::ManageNotebookSharesParameters:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ManageNotebookSharesParameters &other) const
- bool operator!= (const ManageNotebookSharesParameters &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > notebookGuid
- Optional< QString > inviteMessage
- Optional< QList< MemberShareRelationship > > membershipsToUpdate
- Optional< QList< InvitationShareRelationship > > invitationsToCreateOrUpdate
- Optional< QList< UserIdentity > > unshares

Properties

- OptionalQList< MemberShareRelationship > membershipsToUpdate
- OptionalQList< InvitationShareRelationship > invitationsToCreateOrUpdate
- OptionalQList< UserIdentity > unshares

7.51.1 Detailed Description

A structure that captures parameters used by clients to manage the shares for a given notebook via the manage↩ NotebookShares method.

7.51.2 Member Function Documentation

7.51.2.1 operator"!=()

```
bool qevercloud::ManageNotebookSharesParameters::operator!= (
            const ManageNotebookSharesParameters & other ) const  [inline]
```

7.51.2.2 operator==()

```
bool qevercloud::ManageNotebookSharesParameters::operator== (
            const ManageNotebookSharesParameters & other ) const  [inline]
```

7.51.2.3 print()

```
virtual void qevercloud::ManageNotebookSharesParameters::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.51.3 Member Data Documentation

7.51.3.1 invitationsToCreateOrUpdate

```
Optional<QList<InvitationShareRelationship>> qevercloud::ManageNotebookSharesParameters↩
::invitationsToCreateOrUpdate
```

The list of invitations to update, as matched by the identity field of the InvitationShareRelationship instances, or to create if an existing invitation does not exist. This field is not intended to be the full set of invitations on the notebook and should only include those invitations that you wish to create or update. Note that your invitation could convert into a membership via a service-supported auto-join operation. This happens, for example, when you use an invitation with an Evernote UserID type for a recipient who is a member of the business to which the notebook belongs. Note that to discover the user IDs for business members, the sharer must also be part of the business.

7.51.3.2 inviteMessage

```
Optional< QString > qevercloud::ManageNotebookSharesParameters::inviteMessage
```

If the service sends a message to invitees, this parameter will be used to form the actual message that is sent.

7.51.3.3 localData

```
EverCloudLocalData qevercloud::ManageNotebookSharesParameters::localData
```

See the declaration of EverCloudLocalData for details

7.51.3.4 membershipsToUpdate

```
Optional<QList<MemberShareRelationship>> qevercloud::ManageNotebookSharesParameters::memberships↩
ToUpdate
```

The list of existing memberships to update. This field is not intended to be the full set of memberships for the notebook and should only include those already-existing memberships that you actually want to change. If you want to remove shares, see the unshares fields. If you want to create a membership, i.e. auto-join a business user, you can do this via the invitationsToCreateOrUpdate field using an Evernote UserID of a fellow business member (the created invitation is automatically joined by the service, so the client is creating an invitation, not a membership).

7.51.3.5 notebookGuid

```
Optional< QString > qevercloud::ManageNotebookSharesParameters::notebookGuid
```

The GUID of the notebook whose shares are being managed.

7.51.3.6 unshares

```
Optional<QList<UserIdentity> > qevercloud::ManageNotebookSharesParameters::unshares
```

The list of share relationships to expunge from the service. If the user identity is for an Evernote UserID, then matching invitations or memberships will be removed. If it's an e-mail, then e-mail based shared notebook invitations will be removed. If it's for an Identity ID, then any invitations that match the identity (by identity ID or user ID or e-mail for legacy invitations) will be removed.

7.51.4 Property Documentation

7.51.4.1 invitationsToCreateOrUpdate

```
OptionalQList<InvitationShareRelationship> qevercloud::ManageNotebookSharesParameters::invitations↩
ToCreateOrUpdate
```

7.51.4.2 membershipsToUpdate

```
OptionalQList<MemberShareRelationship> qevercloud::ManageNotebookSharesParameters::memberships↩
ToUpdate
```

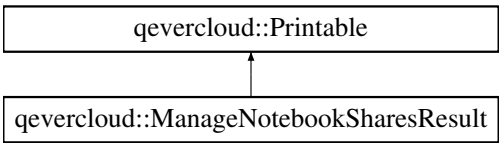
7.51.4.3 unshares

```
OptionalQList<UserIdentity> qevercloud::ManageNotebookSharesParameters::unshares
```

7.52 qevercloud::ManageNotebookSharesResult Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::ManageNotebookSharesResult:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ManageNotebookSharesResult &other) const
- bool operator!= (const ManageNotebookSharesResult &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QList< ManageNotebookSharesError > > errors

Properties

- OptionalQList< ManageNotebookSharesError > errors

7.52.1 Detailed Description

The return value of a call to the manageNotebookShares method.

7.52.2 Member Function Documentation

7.52.2.1 operator"!=()

```
bool qevercloud::ManageNotebookSharesResult::operator!= (
            const ManageNotebookSharesResult & other ) const  [inline]
```

7.52.2.2 operator==()

```
bool qevercloud::ManageNotebookSharesResult::operator== (
            const ManageNotebookSharesResult & other ) const  [inline]
```

7.52.2.3 print()

```
virtual void qevercloud::ManageNotebookSharesResult::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.52.3 Member Data Documentation

7.52.3.1 errors

```
Optional<QList<ManageNotebookSharesError> > qevercloud::ManageNotebookSharesResult::errors
```

If the method completed without throwing exceptions, some errors might still have occurred, and in that case, this field will contain the list of those errors the occurred.

7.52.3.2 localData

```
EverCloudLocalData qevercloud::ManageNotebookSharesResult::localData
```

See the declaration of EverCloudLocalData for details

7.52.4 Property Documentation

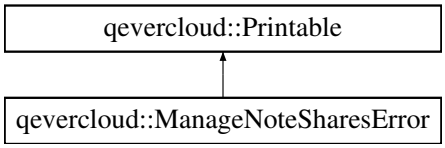
7.52.4.1 errors

```
OptionalQList<ManageNotebookSharesError> qevercloud::ManageNotebookSharesResult::errors
```

7.53 qevercloud::ManageNoteSharesError Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::ManageNoteSharesError:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ManageNoteSharesError &other) const
- bool operator!= (const ManageNoteSharesError &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< IdentityID > identityID
- Optional< UserID > userID
- Optional< EDAMUserException > userException
- Optional< EDAMNotFoundException > notFoundException

7.53.1 Detailed Description

Captures errors that occur during a call to manageNoteShares. That function can be run best-effort, meaning that some change requests can be applied while others fail. Note that some errors such as system exceptions may still cause the entire call to fail.

Only one of the two ID fields will be set on a given error.

Only one of the two exception fields will be set on a given error.

7.53.2 Member Function Documentation

7.53.2.1 operator"!=()

```
bool qevercloud::ManageNoteSharesError::operator!= (
            const ManageNoteSharesError & other ) const  [inline]
```

7.53.2.2 operator==()

```
bool qevercloud::ManageNoteSharesError::operator== (
            const ManageNoteSharesError & other ) const  [inline]
```

7.53.2.3 print()

```
virtual void qevercloud::ManageNoteSharesError::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.53.3 Member Data Documentation

7.53.3.1 identityID

```
Optional< IdentityID > qevercloud::ManageNoteSharesError::identityID
```

The identity ID of an outstanding invitation that was not updated due to the error.

7.53.3.2 localData

```
EverCloudLocalData qevercloud::ManageNoteSharesError::localData
```

See the declaration of EverCloudLocalData for details

7.53.3.3 notFoundException

```
Optional< EDAMNotFoundException > qevercloud::ManageNoteSharesError::notFoundException
```

If the error is represented as an EDAMNotFoundException that would have otherwise been thrown without best-effort execution. The identifier field of the exception will be either "Identity.id" or "User.id", indicating that no existing share could be found for the specified recipient.

7.53.3.4 userException

```
Optional< EDAMUserException > qevercloud::ManageNoteSharesError::userException
```

If the error is represented as an EDAMUserException that would have otherwise been thrown without best-effort execution.

7.53.3.5 userID

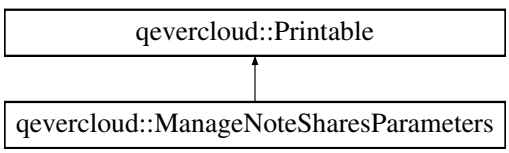
```
Optional< UserID > qevercloud::ManageNoteSharesError::userID
```

The user ID of an existing membership that was not updated due to the error.

7.54 qevercloud::ManageNoteSharesParameters Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::ManageNoteSharesParameters:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ManageNoteSharesParameters &other) const
- bool operator!= (const ManageNoteSharesParameters &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > noteGuid
- Optional< QList< NoteMemberShareRelationship > > membershipsToUpdate
- Optional< QList< NoteInvitationShareRelationship > > invitationsToUpdate
- Optional< QList< UserID > > membershipsToUnshare
- Optional< QList< IdentityID > > invitationsToUnshare

Properties

- OptionalQList< NoteMemberShareRelationship > membershipsToUpdate
- OptionalQList< NoteInvitationShareRelationship > invitationsToUpdate
- OptionalQList< UserID > membershipsToUnshare
- OptionalQList< IdentityID > invitationsToUnshare

7.54.1 Detailed Description

Captures parameters used by clients to manage the shares for a given note via the manageNoteShares function. This is used only to manage the existing memberships and invitations for a note. To invite a new recipient, use NoteStore.createOrUpdateSharedNotes.

The only field of an existing membership or invitation that can be updated by this function is the share privilege.

7.54.2 Member Function Documentation

7.54.2.1 operator"!=()

```
bool qevercloud::ManageNoteSharesParameters::operator!= (
            const ManageNoteSharesParameters & other ) const  [inline]
```

7.54.2.2 operator==()

```
bool qevercloud::ManageNoteSharesParameters::operator== (
            const ManageNoteSharesParameters & other ) const  [inline]
```

7.54.2.3 print()

```
virtual void qevercloud::ManageNoteSharesParameters::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.54.3 Member Data Documentation

7.54.3.1 invitationsToUnshare

```
Optional<QList<IdentityID> > qevercloud::ManageNoteSharesParameters::invitationsToUnshare
```

A list of outstanding invitations to expunge from the service.

7.54.3.2 invitationsToUpdate

```
Optional<QList<NoteInvitationShareRelationship> > qevercloud::ManageNoteSharesParameters↩
::invitationsToUpdate
```

The list of outstanding invitations to update, as matched by the identity field of the NoteInvitationShareRelatioship instances. This field is not meant to be the full set of invitations for the note. Clients should only include those existing invitations that they wish to modify.

7.54.3.3 localData

```
EverCloudLocalData qevercloud::ManageNoteSharesParameters::localData
```

See the declaration of EverCloudLocalData for details

7.54.3.4 membershipsToUnshare

```
Optional<QList<UserID> > qevercloud::ManageNoteSharesParameters::membershipsToUnshare
```

A list of existing memberships to expunge from the service.

7.54.3.5 membershipsToUpdate

```
Optional<QList<NoteMemberShareRelationship> > qevercloud::ManageNoteSharesParameters::memberships↩
ToUpdate
```

A list of existing memberships to update. This field is not meant to be the full set of memberships for the note. Clients should only include those existing memberships that they wish to modify. To remove an existing membership, see the unshares field.

7.54.3.6 noteGuid

```
Optional< QString > qevercloud::ManageNoteSharesParameters::noteGuid
```

The GUID of the note whose shares are being managed.

7.54.4 Property Documentation

7.54.4.1 invitationsToUnshare

```
OptionalQList<IdentityID> qevercloud::ManageNoteSharesParameters::invitationsToUnshare
```

7.54.4.2 invitationsToUpdate

```
OptionalQList<NoteInvitationShareRelationship> qevercloud::ManageNoteSharesParameters::invitations↩
ToUpdate
```

7.54.4.3 membershipsToUnshare

```
OptionalQList<UserID> qevercloud::ManageNoteSharesParameters::membershipsToUnshare
```

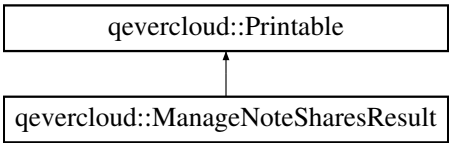
7.54.4.4 membershipsToUpdate

```
OptionalQList<NoteMemberShareRelationship> qevercloud::ManageNoteSharesParameters::memberships↩
ToUpdate
```

7.55 qevercloud::ManageNoteSharesResult Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::ManageNoteSharesResult:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ManageNoteSharesResult &other) const
- bool operator!= (const ManageNoteSharesResult &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QList< ManageNoteSharesError > > errors

Properties

- OptionalQList< ManageNoteSharesError > errors

7.55.1 Detailed Description

The return value of a call to the manageNoteShares function.

7.55.2 Member Function Documentation

7.55.2.1 operator"!=()

```
bool qevercloud::ManageNoteSharesResult::operator!= (
            const ManageNoteSharesResult & other ) const  [inline]
```

7.55.2.2 operator==()

```
bool qevercloud::ManageNoteSharesResult::operator== (
            const ManageNoteSharesResult & other ) const  [inline]
```

7.55.2.3 print()

```
virtual void qevercloud::ManageNoteSharesResult::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.55.3 Member Data Documentation

7.55.3.1 errors

```
Optional<QList<ManageNoteSharesError> > qevercloud::ManageNoteSharesResult::errors
```

If the call succeeded without throwing an exception, some errors might still have occurred. In that case, this field will contain the list of errors.

7.55.3.2 localData

```
EverCloudLocalData qevercloud::ManageNoteSharesResult::localData
```

See the declaration of EverCloudLocalData for details

7.55.4 Property Documentation

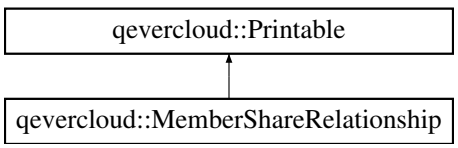
7.55.4.1 errors

```
OptionalQList<ManageNoteSharesError> qevercloud::ManageNoteSharesResult::errors
```

7.56 qevercloud::MemberShareRelationship Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::MemberShareRelationship:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const MemberShareRelationship &other) const
- bool operator!= (const MemberShareRelationship &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > displayName
- Optional< UserID > recipientUserId
- Optional< ShareRelationshipPrivilegeLevel > bestPrivilege
- Optional< ShareRelationshipPrivilegeLevel > individualPrivilege
- Optional< ShareRelationshipRestrictions > restrictions
- Optional< UserID > sharerUserId

7.56.1 Detailed Description

Describes the association between a Notebook and an Evernote User who is a member of that notebook.

7.56.2 Member Function Documentation

7.56.2.1 operator"!=()

```
bool qevercloud::MemberShareRelationship::operator!= (
            const MemberShareRelationship & other ) const  [inline]
```

7.56.2.2 operator==()

```
bool qevercloud::MemberShareRelationship::operator== (
            const MemberShareRelationship & other ) const  [inline]
```

7.56.2.3 print()

```
virtual void qevercloud::MemberShareRelationship::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.56.3 Member Data Documentation

7.56.3.1 bestPrivilege

```
Optional< ShareRelationshipPrivilegeLevel > qevercloud::MemberShareRelationship::bestPrivilege
```

The privilege at which the member can access the notebook, which is the best privilege granted either individually or to a group to which a member belongs, such as a business. This field is used by the service to convey information to the user, so clients should treat it as read-only.

7.56.3.2 displayName

```
Optional< QString > qevercloud::MemberShareRelationship::displayName
```

The string that clients should show to users to represent this member.

7.56.3.3 individualPrivilege

```
Optional< ShareRelationshipPrivilegeLevel > qevercloud::MemberShareRelationship::individual↩
Privilege
```

The individually granted privilege for the member, which does not take GROUP privileges into account. This value may be unset if only a group-assigned privilege has been granted to the member. This value can be managed by others with sufficient rights using the manageNotebookShares method. The valid values that clients should present to users for selection are given via the the 'restrictions' field.

7.56.3.4 localData

```
EverCloudLocalData qevercloud::MemberShareRelationship::localData
```

See the declaration of EverCloudLocalData for details

7.56.3.5 recipientUserId

```
Optional< UserID > qevercloud::MemberShareRelationship::recipientUserId
```

The Evernote User ID of the recipient of this notebook share.

7.56.3.6 restrictions

```
Optional< ShareRelationshipRestrictions > qevercloud::MemberShareRelationship::restrictions
```

The restrictions on which privileges may be individually assigned to the recipient of this share relationship.

7.56.3.7 sharerUserId

```
Optional< UserID > qevercloud::MemberShareRelationship::sharerUserId
```

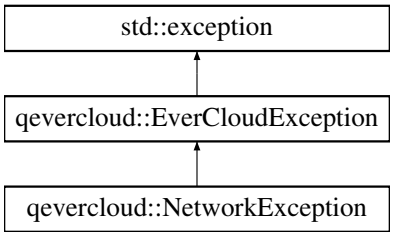
The user id of the user who most recently shared the notebook to this user. This field is currently unset for a MemberShareRelationship created by joining a notebook that has been published to the business (MemberShare↩ Relationships where the individual privilege is unset). This field is used by the service to convey information to the user, so clients should treat it as read-only.

7.57 qevercloud::NetworkException Class Reference

The NetworkException class represents QNetworkReply level errors.

`#include <Exceptions.h>`

Inheritance diagram for qevercloud::NetworkException:



Public Member Functions

- NetworkException ()
- NetworkException (QNetworkReply::NetworkError error)
- NetworkException (QNetworkReply::NetworkError error, QString message)
- virtual ~NetworkException () noexcept override
- bool operator== (const NetworkException &other) const
- bool operator!= (const NetworkException &other) const
- QNetworkReply::NetworkError type () const
- const char * what () const noexcept override
- virtual EverCloudExceptionDataPtr exceptionData () const override

Protected Attributes

- QNetworkReply::NetworkError m_type

7.57.1 Detailed Description

The NetworkException class represents QNetworkReply level errors.

7.57.2 Constructor & Destructor Documentation

7.57.2.1 NetworkException() [1/3]

`qevercloud::NetworkException::NetworkException ( )`

7.57.2.2 NetworkException() [2/3]

```
qevercloud::NetworkException::NetworkException (
            QNetworkReply::NetworkError error )
```

7.57.2.3 NetworkException() [3/3]

```
qevercloud::NetworkException::NetworkException (
            QNetworkReply::NetworkError error,
            QString message )
```

7.57.2.4 ~NetworkException()

```
virtual qevercloud::NetworkException::~NetworkException ( )  [override], [virtual], [noexcept]
```

7.57.3 Member Function Documentation

7.57.3.1 exceptionData()

```
virtual EverCloudExceptionDataPtr qevercloud::NetworkException::exceptionData ( ) const  [override],
[virtual]
```

Reimplemented from qevercloud::EverCloudException.

7.57.3.2 operator"!=()

```
bool qevercloud::NetworkException::operator!= (
            const NetworkException & other ) const
```

7.57.3.3 operator==()

```
bool qevercloud::NetworkException::operator== (
            const NetworkException & other ) const
```

7.57.3.4 type()

```
QNetworkReply::NetworkError qevercloud::NetworkException::type ( ) const
```

7.57.3.5 what()

```
const char * qevercloud::NetworkException::what ( ) const  [override], [virtual], [noexcept]
```

Reimplemented from qevercloud::EverCloudException.

7.57.4 Member Data Documentation

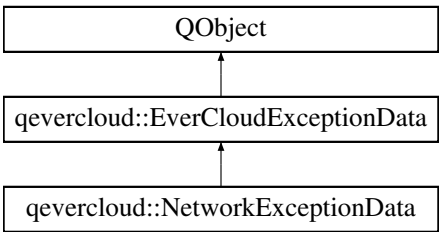
7.57.4.1 m_type

```
QNetworkReply::NetworkError qevercloud::NetworkException::m_type  [protected]
```

7.58 qevercloud::NetworkExceptionData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::NetworkExceptionData:



Public Member Functions

- NetworkExceptionData (QString error, QNetworkReply::NetworkError type)
- virtual void throwException () const override

Protected Attributes

- QNetworkReply::NetworkError m_type

Additional Inherited Members

7.58.1 Detailed Description

Asynchronous API counterpart of NetworkException. See EverCloudExceptionData for more details.

7.58.2 Constructor & Destructor Documentation

7.58.2.1 NetworkExceptionData()

```
qevercloud::NetworkExceptionData::NetworkExceptionData (
            QString error,
            QNetworkReply::NetworkError type )  [explicit]
```

7.58.3 Member Function Documentation

7.58.3.1 throwException()

```
virtual void qevercloud::NetworkExceptionData::throwException ( ) const  [override], [virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EverCloudExceptionData.

7.58.4 Member Data Documentation

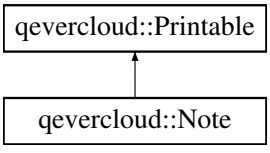
7.58.4.1 m_type

```
QNetworkReply::NetworkError qevercloud::NetworkExceptionData::m_type  [protected]
```

7.59 qevercloud::Note Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::Note:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Note &other) const
- bool operator!= (const Note &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > guid
- Optional< QString > title
- Optional< QString > content
- Optional< QByteArray > contentHash
- Optional< qint32 > contentLength
- Optional< Timestamp > created
- Optional< Timestamp > updated
- Optional< Timestamp > deleted
- Optional< bool > active
- Optional< qint32 > updateSequenceNum
- Optional< QString > notebookGuid
- Optional< QList< Guid > > tagGuids
- Optional< QList< Resource > > resources
- Optional< NoteAttributes > attributes
- Optional< QStringList > tagNames
- Optional< QList< SharedNote > > sharedNotes
- Optional< NoteRestrictions > restrictions
- Optional< NoteLimits > limits

Properties

- OptionalQList< Guid > tagGuids
- OptionalQList< Resource > resources
- OptionalQList< SharedNote > sharedNotes

7.59.1 Detailed Description

Represents a single note in the user's account.

7.59.2 Member Function Documentation

7.59.2.1 operator"!=()

```
bool qevercloud::Note::operator!= (
            const Note & other ) const  [inline]
```

7.59.2.2 operator==()

```
bool qevercloud::Note::operator== (
            const Note & other ) const  [inline]
```

7.59.2.3 print()

```
virtual void qevercloud::Note::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.59.3 Member Data Documentation

7.59.3.1 active

```
Optional< bool > qevercloud::Note::active
```

If the note is available for normal actions and viewing, this flag will be set to true.

7.59.3.2 attributes

```
Optional< NoteAttributes > qevercloud::Note::attributes
```

A list of the attributes for this note. If the list of attributes are omitted on a call to updateNote(), then the server will assume that no changes have been made to the resources.

7.59.3.3 content

```
Optional< QString > qevercloud::Note::content
```

The XHTML block that makes up the note. This is the canonical form of the note's contents, so will include abstract Evernote tags for internal resource references. A client may create a separate transformed version of this content for internal presentation, but the same canonical bytes should be used for transmission and comparison unless the user chooses to modify their content.
Length: EDAM_NOTE_CONTENT_LEN_MIN - EDAM_NOTE_CONTENT_LEN_MAX

7.59.3.4 contentHash

```
Optional< QByteArray > qevercloud::Note::contentHash
```

The binary MD5 checksum of the UTF-8 encoded content body. This will always be set by the server, but clients may choose to omit this when they submit a note with content.
Length: EDAM_HASH_LEN (exactly)

7.59.3.5 contentLength

```
Optional< qint32 > qevercloud::Note::contentLength
```

The number of Unicode characters in the content of the note. This will always be set by the service, but clients may choose to omit this value when they submit a Note.

7.59.3.6 created

```
Optional< Timestamp > qevercloud::Note::created
```

The date and time when the note was created in one of the clients. In most cases, this will match the user's sense of when the note was created, and ordering between notes will be based on ordering of this field. However, this is not a "reliable" timestamp if a client has an incorrect clock, so it cannot provide a true absolute ordering between notes. Notes created directly through the service (e.g. via the web GUI) will have an absolutely ordered "created" value.

7.59.3.7 deleted

```
Optional< Timestamp > qevercloud::Note::deleted
```

If present, the note is considered "deleted", and this stores the date and time when the note was deleted by one of the clients. In most cases, this will match the user's sense of when the note was deleted, but this field may be unreliable due to the possibility of client clock errors.

7.59.3.8 guid

```
Optional< Guid > qevercloud::Note::guid
```

The unique identifier of this note. Will be set by the server, but will be omitted by clients calling NoteStore.create↩ Note()
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.59.3.9 limits

```
Optional< NoteLimits > qevercloud::Note::limits
```

NOT DOCUMENTED

7.59.3.10 localData

```
EverCloudLocalData qevercloud::Note::localData
```

See the declaration of EverCloudLocalData for details

7.59.3.11 notebookGuid

```
Optional< QString > qevercloud::Note::notebookGuid
```

The unique identifier of the notebook that contains this note. If no notebookGuid is provided on a call to create↩ Note(), the default notebook will be used instead.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.59.3.12 resources

```
Optional<QList<Resource> > qevercloud::Note::resources
```

The list of resources that are embedded within this note. If the list of resources are omitted on a call to update↩ Note(), then the server will assume that no changes have been made to the resources. The binary contents of the resources must be provided when the resource is first sent to the service, but it will be omitted by the service when the Note is returned in the future. Maximum: EDAM_NOTE_RESOURCES_MAX resources per note

7.59.3.13 restrictions

```
Optional< NoteRestrictions > qevercloud::Note::restrictions
```

If this field is set, the user has note-level permissions that may differ from their notebook-level permissions. In this case, the restrictions structure specifies a set of restrictions limiting the actions that a user may take on the note based on their note-level permissions. If this field is unset, then there are no note-specific restrictions. However, a client may still be limited based on the user's notebook permissions.

7.59.3.14 sharedNotes

```
Optional<QList<SharedNote> > qevercloud::Note::sharedNotes
```

The list of recipients with whom this note has been shared. This field will be unset if the caller has access to the note via the containing notebook, but does not have activity feed permission for that notebook. This field is read-only. Clients may not make changes to a note's sharing state via this field.

7.59.3.15 tagGuids

```
Optional<QList<Guid> > qevercloud::Note::tagGuids
```

A list of the GUID identifiers for tags that are applied to this note. This may be provided in a call to createNote() to unambiguously declare the tags that should be assigned to the new note. Alternately, clients may pass the names of desired tags via the 'tagNames' field during note creation. If the list of tags are omitted on a call to createNote(), then the server will assume that no changes have been made to the resources. Maximum: EDAM_NOTE_TAGS_MAX tags per note

7.59.3.16 tagNames

```
Optional< QStringList > qevercloud::Note::tagNames
```

May be provided by clients during calls to createNote() as an alternative to providing the tagGuids of existing tags. If any tagNames are provided during createNote(), these will be found, or created if they don't already exist. Created tags will have no parent (they will be at the top level of the tag panel).

7.59.3.17 title

```
Optional< QString > qevercloud::Note::title
```

The subject of the note. Can't begin or end with a space.
Length: EDAM_NOTE_TITLE_LEN_MIN - EDAM_NOTE_TITLE_LEN_MAX
Regex: EDAM_NOTE_TITLE_REGEX

7.59.3.18 updated

```
Optional< Timestamp > qevercloud::Note::updated
```

The date and time when the note was last modified in one of the clients. In most cases, this will match the user's sense of when the note was modified, but this field may not be absolutely reliable due to the possibility of client clock errors.

7.59.3.19 updateSequenceNum

```
Optional< qint32 > qevercloud::Note::updateSequenceNum
```

A number identifying the last transaction to modify the state of this note (including changes to the note's attributes or resources). The USN values are sequential within an account, and can be used to compare the order of modifications within the service.

7.59.4 Property Documentation

7.59.4.1 resources

```
OptionalQList<Resource> qevercloud::Note::resources
```

7.59.4.2 sharedNotes

```
OptionalQList<SharedNote> qevercloud::Note::sharedNotes
```

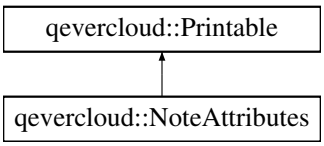
7.59.4.3 tagGuids

```
OptionalQList<Guid> qevercloud::Note::tagGuids
```

7.60 qevercloud::NoteAttributes Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::NoteAttributes:



Public Types

- using Classifications = QMap< QString, QString >

Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteAttributes &other) const
- bool operator!= (const NoteAttributes &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Timestamp > subjectDate
- Optional< double > latitude
- Optional< double > longitude
- Optional< double > altitude
- Optional< QString > author
- Optional< QString > source
- Optional< QString > sourceURL
- Optional< QString > sourceApplication
- Optional< Timestamp > shareDate
- Optional< qint64 > reminderOrder
- Optional< Timestamp > reminderDoneTime
- Optional< Timestamp > reminderTime
- Optional< QString > placeName
- Optional< QString > contentClass
- Optional< LazyMap > applicationData
- Optional< QString > lastEditedBy
- Optional< QMap< QString, QString > > classifications
- Optional< UserID > creatorId
- Optional< UserID > lastEditorId
- Optional< bool > sharedWithBusiness
- Optional< Guid > conflictSourceNoteGuid
- Optional< qint32 > noteTitleQuality

Properties

- Optional< Classifications > classifications

7.60.1 Detailed Description

The list of optional attributes that can be stored on a note.

7.60.2 Member Typedef Documentation

7.60.2.1 Classifications

```
using qevercloud::NoteAttributes::Classifications = QMap<QString, QString>
```

7.60.3 Member Function Documentation

7.60.3.1 operator"!=()

```
bool qevercloud::NoteAttributes::operator!= (
            const NoteAttributes & other ) const  [inline]
```

7.60.3.2 operator==()

```
bool qevercloud::NoteAttributes::operator== (
            const NoteAttributes & other ) const  [inline]
```

7.60.3.3 print()

```
virtual void qevercloud::NoteAttributes::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.60.4 Member Data Documentation

7.60.4.1 altitude

```
Optional< double > qevercloud::NoteAttributes::altitude
```

the altitude where the note was taken

7.60.4.2 applicationData

```
Optional< LazyMap > qevercloud::NoteAttributes::applicationData
```

Provides a location for applications to store a relatively small (4kb) blob of data that is not meant to be visible to the user and that is opaque to the Evernote service. A single application may use at most one entry in this map, using its API consumer key as the map key. See the documentation for LazyMap for a description of when the actual map values are returned by the service.

To safely add or modify your application's entry in the map, use NoteStore.setNoteApplicationDataEntry. To safely remove your application's entry from the map, use NoteStore.unsetNoteApplicationDataEntry.

Minimum length of a name (key): EDAM_APPLICATIONDATA_NAME_LEN_MIN
Sum max size of key and value: EDAM_APPLICATIONDATA_ENTRY_LEN_MAX
Syntax regex for name (key): EDAM_APPLICATIONDATA_NAME_REGEX

7.60.4.3 author

```
Optional< QString > qevercloud::NoteAttributes::author
```

the author of the content of the note
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.60.4.4 classifications

```
Optional<QMap<QString, QString> > qevercloud::NoteAttributes::classifications
```

A map of classifications applied to the note by clients or by the Evernote service. The key is the string name of the classification type, and the value is a constant that begins with CLASSIFICATION_.

7.60.4.5 conflictSourceNoteGuid

```
Optional< Guid > qevercloud::NoteAttributes::conflictSourceNoteGuid
```

If set, this specifies the GUID of a note that caused a sync conflict resulting in the creation of a duplicate note. The duplicated note contains the user's changes that could not be applied as a result of the sync conflict, and uses the conflictSourceNoteGuid field to specify the note that caused the conflict. This allows clients to provide a customized user experience for note conflicts.

7.60.4.6 contentClass

```
Optional< QString > qevercloud::NoteAttributes::contentClass
```

The class (or type) of note. This field is used to indicate to clients that special structured information is represented within the note such that special rules apply when making modifications. If contentClass is set and the client application does not specifically support the specified class, the client MUST treat the note as read-only. In this case, the client MAY modify the note's notebook and tags via the Note.notebookGuid and Note.tagGuids fields. The client MAY also modify the reminderOrder field as well as the reminderTime and reminderDoneTime fields.

Applications should set contentClass only when they are creating notes that contain structured information that needs to be maintained in order for the user to be able to use the note within that application. Setting content↩ Class makes a note read-only in other applications, so there is a trade-off when an application chooses to use contentClass. Applications that set contentClass when creating notes must use a contentClass string of the form *CompanyName.ApplicationName* to ensure uniqueness.

Length restrictions: EDAM_NOTE_CONTENT_CLASS_LEN_MIN, EDAM_NOTE_CONTENT_CLASS_LEN_MAX
Regex: EDAM_NOTE_CONTENT_CLASS_REGEX

7.60.4.7 creatorId

```
Optional< UserID > qevercloud::NoteAttributes::creatorId
```

The numeric user ID of the user who originally created the note.

7.60.4.8 lastEditedBy

```
Optional< QString > qevercloud::NoteAttributes::lastEditedBy
```

An indication of who made the last change to the note. If you are accessing the note via a shared notebook to which you have modification rights, or if you are the owner of the notebook to which the note belongs, then you have access to the value. In this case, the value will be unset if the owner of the notebook containing the note was the last to make the modification, else it will be a string describing the guest who made the last edit. If you do not have access to this value, it will be left unset. This field is read-only by clients. The server will ignore all values set by clients into this field.

7.60.4.9 lastEditorId

```
Optional< UserID > qevercloud::NoteAttributes::lastEditorId
```

The numeric user ID of the user described in lastEditedBy.

7.60.4.10 latitude

```
Optional< double > qevercloud::NoteAttributes::latitude
```

the latitude where the note was taken

7.60.4.11 localData

```
EverCloudLocalData qevercloud::NoteAttributes::localData
```

See the declaration of EverCloudLocalData for details

7.60.4.12 longitude

```
Optional< double > qevercloud::NoteAttributes::longitude
```

the longitude where the note was taken

7.60.4.13 noteTitleQuality

```
Optional< qint32 > qevercloud::NoteAttributes::noteTitleQuality
```

If set, this specifies that the note's title was automatically generated and indicates the likelihood that the generated title is useful for display to the user. If not set, the note's title was manually entered by the user.

Clients MUST set this attribute to one of the following values when the corresponding note's title was not manually entered by the user: EDAM_NOTE_TITLE_QUALITY_UNTITLED, EDAM_NOTE_TITLE_QUALITY_LOW, EDAM↩ _NOTE_TITLE_QUALITY_MEDIUM or EDAM_NOTE_TITLE_QUALITY_HIGH.

When a user edits a note's title, clients MUST unset this value.

7.60.4.14 placeName

```
Optional< QString > qevercloud::NoteAttributes::placeName
```

Allows the user to assign a human-readable location name associated with a note. Users may assign values like 'Home' and 'Work'. Place names may also be populated with values from geonames database (e.g., a restaurant name). Applications are encouraged to normalize values so that grouping values by place name provides a useful result. Applications MUST NOT automatically add place name values based on geolocation without confirmation from the user; that is, the value in this field should be more useful than a simple automated lookup based on the note's latitude and longitude.

7.60.4.15 reminderDoneTime

```
Optional< Timestamp > qevercloud::NoteAttributes::reminderDoneTime
```

The date and time when a user dismissed/"marked done" the reminder on the note. Users typically do not manually set this value directly as it is set to the time when the user dismissed/"marked done" the reminder.

7.60.4.16 reminderOrder

```
Optional< qint64 > qevercloud::NoteAttributes::reminderOrder
```

The set of notes with this parameter set are considered "reminders" and are to be treated specially by clients to give them higher UI prominence within a notebook. The value is used to sort the reminder notes within the notebook with higher values representing greater prominence. Outside of the context of a notebook, the value of this parameter is undefined. The value is not intended to be compared to the values of reminder notes in other notebooks. In order to allow clients to place a note at a higher precedence than other notes, you should never set a value greater than the current time (as defined for a Timetstamp). To place a note at higher precedence than existing notes, set the value to the current time as defined for a timestamp (milliseconds since the epoch). Synchronizing clients must remember the time when the update was performed, using the local clock on the client, and use that value when they later upload the note to the service. Clients must not set the reminderOrder to the reminderTime as the reminderTime could be in the future. Those two fields are never intended to be related. The correct value for reminderOrder field for new notes is the "current" time when the user indicated that the note is a reminder. Clients may implement a separate "sort by date" feature to show notes ordered by reminderTime. Whenever a reminder↩ DoneTime or reminderTime is set but a reminderOrder is not set, the server will fill in the current server time for the reminderOrder field.

7.60.4.17 reminderTime

```
Optional< Timestamp > qevercloud::NoteAttributes::reminderTime
```

The date and time a user has selected to be reminded of the note. A note with this value set is known as a "reminder" and the user can be reminded, via e-mail or client-specific notifications, of the note when the time is reached or about to be reached. When a user sets a reminder time on a note that has a reminder done time, and that reminder time is in the future, then the reminder done time should be cleared. This should happen regardless of any existing reminder time that may have previously existed on the note.

7.60.4.18 shareDate

```
Optional< Timestamp > qevercloud::NoteAttributes::shareDate
```

The date and time when this note was directly shared via its own URL. This is only set on notes that were individually shared - it is independent of any notebook-level sharing of the containing notebook. This field is treated as "read-only" for clients; the server will ignore changes to this field from an external client.

7.60.4.19 sharedWithBusiness

```
Optional< bool > qevercloud::NoteAttributes::sharedWithBusiness
```

When this flag is set on a business note, any user in that business may view the note if they request it by GUID. This field is read-only by clients. The server will ignore all values set by clients into this field.

To share a note with the business, use NoteStore.shareNoteWithBusiness and to stop sharing a note with the business, use NoteStore.stopSharingNoteWithBusiness.

7.60.4.20 source

```
Optional< QString > qevercloud::NoteAttributes::source
```

the method that the note was added to the account, if the note wasn't directly authored in an Evernote desktop client.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.60.4.21 sourceApplication

```
Optional< QString > qevercloud::NoteAttributes::sourceApplication
```

an identifying string for the application that created this note. This string does not have a guaranteed syntax or structure – it is intended for human inspection and tracking.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.60.4.22 sourceURL

```
Optional< QString > qevercloud::NoteAttributes::sourceURL
```

the original location where the resource was hosted. For web clips, this will be the URL of the page that was clipped.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.60.4.23 subjectDate

```
Optional< Timestamp > qevercloud::NoteAttributes::subjectDate
```

time that the note refers to

7.60.5 Property Documentation

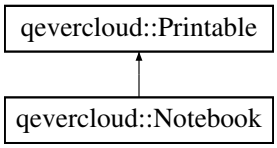
7.60.5.1 classifications

```
Optional<Classifications> qevercloud::NoteAttributes::classifications
```

7.61 qevercloud::Notebook Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::Notebook:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Notebook &other) const
- bool operator!= (const Notebook &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > guid
- Optional< QString > name
- Optional< qint32 > updateSequenceNum
- Optional< bool > defaultNotebook
- Optional< Timestamp > serviceCreated
- Optional< Timestamp > serviceUpdated
- Optional< Publishing > publishing
- Optional< bool > published
- Optional< QString > stack
- Optional< QList< qint64 > > sharedNotebookIds
- Optional< QList< SharedNotebook > > sharedNotebooks
- Optional< BusinessNotebook > businessNotebook
- Optional< User > contact
- Optional< NotebookRestrictions > restrictions
- Optional< NotebookRecipientSettings > recipientSettings

Properties

- OptionalQList< qint64 > sharedNotebookIds
- OptionalQList< SharedNotebook > sharedNotebooks

7.61.1 Detailed Description

A unique container for a set of notes.

7.61.2 Member Function Documentation

7.61.2.1 operator"!=()

```
bool qevercloud::Notebook::operator!= (
            const Notebook & other ) const  [inline]
```

7.61.2.2 operator==()

```
bool qevercloud::Notebook::operator== (
            const Notebook & other ) const  [inline]
```

7.61.2.3 print()

```
virtual void qevercloud::Notebook::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.61.3 Member Data Documentation

7.61.3.1 businessNotebook

```
Optional< BusinessNotebook > qevercloud::Notebook::businessNotebook
```

If the notebook is part of a business account and has been shared with the entire business, this will contain sharing information. The presence or absence of this field is not a reliable test of whether a given notebook is in fact a business notebook - the field is only used when a notebook is or has been shared with the entire business.

7.61.3.2 contact

```
Optional< User > qevercloud::Notebook::contact
```

Intended for use with Business accounts, this field identifies the user who has been designated as the "contact". For notebooks created in business accounts, the server will automatically set this value to the user who created the notebook unless Notebook.contact.username has been set, in which that value will be used. When updating a notebook, it is common to leave Notebook.contact field unset, indicating that no change to the value is being requested and that the existing value, if any, should be preserved.

7.61.3.3 defaultNotebook

```
Optional< bool > qevercloud::Notebook::defaultNotebook
```

If true, this notebook should be used for new notes whenever the user has not (or cannot) specify a desired target notebook. For example, if a note is submitted via SMTP email. The service will maintain at most one default↩ Notebook per account. If a second notebook is created or updated with defaultNotebook set to true, the service will automatically update the prior notebook's defaultNotebook field to false. If the default notebook is deleted (i.e. "active" set to false), the "defaultNotebook" field will be set to false by the service. If the account has no default notebook set, the service will use the most recent notebook as the default.

7.61.3.4 guid

```
Optional< Guid > qevercloud::Notebook::guid
```

The unique identifier of this notebook.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.61.3.5 localData

```
EverCloudLocalData qevercloud::Notebook::localData
```

See the declaration of EverCloudLocalData for details

7.61.3.6 name

```
Optional< QString > qevercloud::Notebook::name
```

A sequence of characters representing the name of the notebook. May be changed by clients, but the account may not contain two notebooks with names that are equal via a case-insensitive comparison. Can't begin or end with a space.
Length: EDAM_NOTEBOOK_NAME_LEN_MIN - EDAM_NOTEBOOK_NAME_LEN_MAX
Regex: EDAM_NOTEBOOK_NAME_REGEX

7.61.3.7 published

```
Optional< bool > qevercloud::Notebook::published
```

If this is set to true, then the Notebook will be accessible either to the public, or for business users to their business, via the 'publishing' or 'businessNotebook' specifications, which must also be set. If this is set to false, the Notebook will not be available to the public (or business). Clients that do not wish to change the publishing behavior of a Notebook should not set this value when calling NoteStore.updateNotebook().

7.61.3.8 publishing

```
Optional< Publishing > qevercloud::Notebook::publishing
```

If the Notebook has been opened for public access, then this will point to the set of publishing information for the Notebook (URI, description, etc.). A Notebook cannot be published without providing this information, but it will persist for later use if publishing is ever disabled on the Notebook. Clients that do not wish to change the publishing behavior of a Notebook should not set this value when calling NoteStore.updateNotebook(). Note that this structure is never populated for business notebooks, see the businessNotebook field.

7.61.3.9 recipientSettings

```
Optional< NotebookRecipientSettings > qevercloud::Notebook::recipientSettings
```

This represents the preferences/settings that a recipient has set for this notebook. These are intended to be changed only by the recipient, and each recipient has their own recipient settings.

7.61.3.10 restrictions

```
Optional< NotebookRestrictions > qevercloud::Notebook::restrictions
```

NOT DOCUMENTED

7.61.3.11 serviceCreated

```
Optional< Timestamp > qevercloud::Notebook::serviceCreated
```

The time when this notebook was created on the service. This will be set on the service during creation, and the service will provide this value when it returns a Notebook to a client. The service will ignore this value if it is sent by clients.

7.61.3.12 serviceUpdated

```
Optional< Timestamp > qevercloud::Notebook::serviceUpdated
```

The time when this notebook was last modified on the service. This will be set on the service during creation, and the service will provide this value when it returns a Notebook to a client. The service will ignore this value if it is sent by clients.

7.61.3.13 sharedNotebookIds

```
Optional<QList<qint64> > qevercloud::Notebook::sharedNotebookIds
```

DEPRECATED - replaced by sharedNotebooks.

7.61.3.14 sharedNotebooks

```
Optional<QList<SharedNotebook> > qevercloud::Notebook::sharedNotebooks
```

The list of recipients to whom this notebook has been shared (one SharedNotebook object per recipient email address). This field will be unset if you do not have permission to access this data. If you are accessing the notebook as the owner or via a shared notebook that is modifiable, then you have access to this data and the value will be set. This field is read-only. Clients may not make changes to shared notebooks via this field.

7.61.3.15 stack

```
Optional< QString > qevercloud::Notebook::stack
```

If this is set, then the notebook is visually contained within a stack of notebooks with this name. All notebooks in the same account with the same 'stack' field are considered to be in the same stack. Notebooks with no stack set are "top level" and not contained within a stack.

7.61.3.16 updateSequenceNum

```
Optional< qint32 > qevercloud::Notebook::updateSequenceNum
```

A number identifying the last transaction to modify the state of this object. The USN values are sequential within an account, and can be used to compare the order of modifications within the service.

7.61.4 Property Documentation

7.61.4.1 sharedNotebookIds

```
OptionalQList<qint64> qevercloud::Notebook::sharedNotebookIds
```

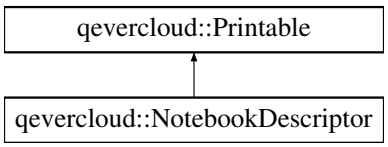
7.61.4.2 sharedNotebooks

```
OptionalQList<SharedNotebook> qevercloud::Notebook::sharedNotebooks
```

7.62 qevercloud::NotebookDescriptor Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NotebookDescriptor:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NotebookDescriptor &other) const
- bool operator!= (const NotebookDescriptor &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > guid
- Optional< QString > notebookDisplayName
- Optional< QString > contactName
- Optional< bool > hasSharedNotebook
- Optional< qint32 > joinedUserCount

7.62.1 Detailed Description

A structure that describes a notebook or a user's relationship with a notebook. NotebookDescriptor is expected to remain a lighter-weight structure when compared to Notebook.

7.62.2 Member Function Documentation

7.62.2.1 operator"!=()

```
bool qevercloud::NotebookDescriptor::operator!= (
            const NotebookDescriptor & other ) const  [inline]
```

7.62.2.2 operator==()

```
bool qevercloud::NotebookDescriptor::operator== (
            const NotebookDescriptor & other ) const  [inline]
```

7.62.2.3 print()

```
virtual void qevercloud::NotebookDescriptor::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.62.3 Member Data Documentation

7.62.3.1 contactName

```
Optional< QString > qevercloud::NotebookDescriptor::contactName
```

The User.name value of the notebook's "contact".

7.62.3.2 guid

```
Optional< Guid > qevercloud::NotebookDescriptor::guid
```

The unique identifier of the notebook.

7.62.3.3 hasSharedNotebook

```
Optional< bool > qevercloud::NotebookDescriptor::hasSharedNotebook
```

Whether a SharedNotebook record exists between the calling user and this notebook.

7.62.3.4 joinedUserCount

```
Optional< qint32 > qevercloud::NotebookDescriptor::joinedUserCount
```

The number of users who have joined this notebook.

7.62.3.5 localData

```
EverCloudLocalData qevercloud::NotebookDescriptor::localData
```

See the declaration of EverCloudLocalData for details

7.62.3.6 notebookDisplayName

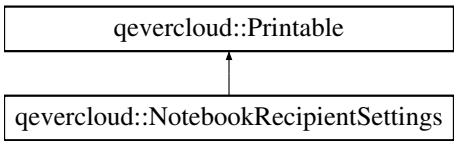
```
Optional< QString > qevercloud::NotebookDescriptor::notebookDisplayName
```

A sequence of characters representing the name of the notebook.

7.63 qevercloud::NotebookRecipientSettings Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NotebookRecipientSettings:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NotebookRecipientSettings &other) const
- bool operator!= (const NotebookRecipientSettings &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > reminderNotifyEmail
- Optional< bool > reminderNotifyInApp
- Optional< bool > inMyList
- Optional< QString > stack
- Optional< RecipientStatus > recipientStatus

7.63.1 Detailed Description

Settings meant for the recipient of a notebook share.

Some of these fields have a 3-state read value but a 2-state write value. On read, it is possible to observe "unset", true, or false. The initial state is "unset". When you choose to set a value, you may set it to either true or false, but you cannot unset the value. Once one of these members has a true/false value, it will always have a true/false value.

7.63.2 Member Function Documentation

7.63.2.1 operator"!=()

```
bool qevercloud::NotebookRecipientSettings::operator!= (
            const NotebookRecipientSettings & other ) const  [inline]
```

7.63.2.2 operator==()

```
bool qevercloud::NotebookRecipientSettings::operator== (
            const NotebookRecipientSettings & other ) const  [inline]
```

7.63.2.3 print()

```
virtual void qevercloud::NotebookRecipientSettings::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.63.3 Member Data Documentation

7.63.3.1 inMyList

```
Optional< bool > qevercloud::NotebookRecipientSettings::inMyList
```

DEPRECATED: Use recipientStatus instead. The notebook is on the recipient's notebook list (formerly, we would say that the recipient has "joined" the notebook)

7.63.3.2 localData

```
EverCloudLocalData qevercloud::NotebookRecipientSettings::localData
```

See the declaration of EverCloudLocalData for details

7.63.3.3 recipientStatus

```
Optional< RecipientStatus > qevercloud::NotebookRecipientSettings::recipientStatus
```

The notebook is on/off the recipient's notebook list (formerly, we would say that the recipient has "joined" the notebook) and perhaps also their default notebook

7.63.3.4 reminderNotifyEmail

```
Optional< bool > qevercloud::NotebookRecipientSettings::reminderNotifyEmail
```

Indicates that the user wishes to receive daily e-mail notifications for reminders associated with the notebook. This may be true only for business notebooks that belong to the business of which the user is a member. You may only set this value on a notebook in your business. This value will initially be unset.

7.63.3.5 reminderNotifyInApp

```
Optional< bool > qevercloud::NotebookRecipientSettings::reminderNotifyInApp
```

Indicates that the user wishes to receive notifications for reminders by applications that support providing such notifications. The exact nature of the notification is defined by the individual applications. This value will initially be unset.

7.63.3.6 stack

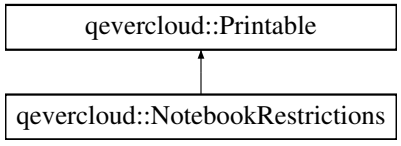
```
Optional< QString > qevercloud::NotebookRecipientSettings::stack
```

The stack the recipient has put this notebook into. See Notebook.stack for a definition. Every recipient can have their own stack value for the same notebook.

7.64 qevercloud::NotebookRestrictions Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NotebookRestrictions:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NotebookRestrictions &other) const
- bool operator!= (const NotebookRestrictions &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > noReadNotes
- Optional< bool > noCreateNotes
- Optional< bool > noUpdateNotes
- Optional< bool > noExpungeNotes
- Optional< bool > noShareNotes
- Optional< bool > noEmailNotes
- Optional< bool > noSendMessageToRecipients
- Optional< bool > noUpdateNotebook
- Optional< bool > noExpungeNotebook
- Optional< bool > noSetDefaultNotebook
- Optional< bool > noSetNotebookStack
- Optional< bool > noPublishToPublic
- Optional< bool > noPublishToBusinessLibrary
- Optional< bool > noCreateTags
- Optional< bool > noUpdateTags
- Optional< bool > noExpungeTags
- Optional< bool > noSetParentTag
- Optional< bool > noCreateSharedNotebooks
- Optional< SharedNotebookInstanceRestrictions > updateWhichSharedNotebookRestrictions
- Optional< SharedNotebookInstanceRestrictions > expungeWhichSharedNotebookRestrictions
- Optional< bool > noShareNotesWithBusiness
- Optional< bool > noRenameNotebook
- Optional< bool > noSetInMyList
- Optional< bool > noChangeContact
- Optional< CanMoveToContainerRestrictions > canMoveToContainerRestrictions
- Optional< bool > noSetReminderNotifyEmail
- Optional< bool > noSetReminderNotifyInApp
- Optional< bool > noSetRecipientSettingsStack
- Optional< bool > noCanMoveNote

7.64.1 Detailed Description

This structure captures information about the types of operations that cannot be performed on a given notebook with a type of authenticated access and credentials. The values filled into this structure are based on then-current values in the server database for shared notebooks and notebook publishing records, as well as information related to the authentication token. Information from the authentication token includes the application that is accessing the server, as defined by the permissions granted by consumer (api) key, and the method used to obtain the token, for example via authenticateToSharedNotebook, authenticateToBusiness, etc. Note that changes to values in this structure that are the result of shared notebook or publishing record changes are communicated to the client via a change in the notebook USN during sync. It is important to use the same access method, parameters, and consumer key in order obtain correct results from the sync engine.

The server has the final say on what is allowed as values may change between calls to obtain NotebookRestrictions instances and to operate on data on the service.

If the following are set and true, then the given restriction is in effect, as accessed by the same authentication token from which the values were obtained.

7.64.2 Member Function Documentation

7.64.2.1 operator"!=()

```
bool qevercloud::NotebookRestrictions::operator!= (
            const NotebookRestrictions & other ) const  [inline]
```

7.64.2.2 operator==()

```
bool qevercloud::NotebookRestrictions::operator== (
            const NotebookRestrictions & other ) const  [inline]
```

7.64.2.3 print()

```
virtual void qevercloud::NotebookRestrictions::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.64.3 Member Data Documentation

7.64.3.1 canMoveToContainerRestrictions

```
Optional< CanMoveToContainerRestrictions > qevercloud::NotebookRestrictions::canMoveToContainer↩
Restrictions
```

Specifies if the client can move this notebook to a container and if not, the reason why.

7.64.3.2 expungeWhichSharedNotebookRestrictions

```
Optional< SharedNotebookInstanceRestrictions > qevercloud::NotebookRestrictions::expunge↩
WhichSharedNotebookRestrictions
```

Restrictions on which shared notebook instances can be expunged. If the value is not set or null, then the client can expunge any of the shared notebooks associated with the notebook on which the NotebookRestrictions are defined. See the enumeration for further details.

7.64.3.3 localData

```
EverCloudLocalData qevercloud::NotebookRestrictions::localData
```

See the declaration of EverCloudLocalData for details

7.64.3.4 noCanMoveNote

```
Optional< bool > qevercloud::NotebookRestrictions::noCanMoveNote
```

If set, the client cannot move a Note into or out of the Notebook.

7.64.3.5 noChangeContact

```
Optional< bool > qevercloud::NotebookRestrictions::noChangeContact
```

NOT DOCUMENTED

7.64.3.6 noCreateNotes

```
Optional< bool > qevercloud::NotebookRestrictions::noCreateNotes
```

The client may not create new notes in the notebook.

7.64.3.7 noCreateSharedNotebooks

```
Optional< bool > qevercloud::NotebookRestrictions::noCreateSharedNotebooks
```

The client is unable to create shared notebooks for the notebook.

7.64.3.8 noCreateTags

```
Optional< bool > qevercloud::NotebookRestrictions::noCreateTags
```

The client may not complete an operation that results in a new tag being created in the owner's account.

7.64.3.9 noEmailNotes

```
Optional< bool > qevercloud::NotebookRestrictions::noEmailNotes
```

The client may not e-mail notes by guid via the Evernote service by using the emailNote method. Email notes by value by populating the note parameter instead.

7.64.3.10 noExpungeNotebook

`Optional< bool > qevercloud::NotebookRestrictions::noExpungeNotebook`

The client may not expunge the Notebook object itself, for example, via the expungeNotebook method.

7.64.3.11 noExpungeNotes

`Optional< bool > qevercloud::NotebookRestrictions::noExpungeNotes`

The client may not expunge notes currently in the notebook.

7.64.3.12 noExpungeTags

`Optional< bool > qevercloud::NotebookRestrictions::noExpungeTags`

The client may not expunge tags in the owner's account.

7.64.3.13 noPublishToBusinessLibrary

`Optional< bool > qevercloud::NotebookRestrictions::noPublishToBusinessLibrary`

The client may not publish the notebook to the business library.

7.64.3.14 noPublishToPublic

`Optional< bool > qevercloud::NotebookRestrictions::noPublishToPublic`

The client may not publish the notebook to the public. For example, business notebooks may not be shared publicly.

7.64.3.15 noReadNotes

`Optional< bool > qevercloud::NotebookRestrictions::noReadNotes`

The client is not able to read notes from the service and the notebook is write-only.

7.64.3.16 noRenameNotebook

`Optional< bool > qevercloud::NotebookRestrictions::noRenameNotebook`

The client may not rename this notebook.

7.64.3.17 noSendMessageToRecipients

`Optional< bool > qevercloud::NotebookRestrictions::noSendMessageToRecipients`

The client may not send messages to the share recipients of the notebook.

7.64.3.18 noSetDefaultNotebook

`Optional< bool > qevercloud::NotebookRestrictions::noSetDefaultNotebook`

The client may not set this notebook to be the default notebook. The caller should leave Notebook.defaultNotebook unset.

7.64.3.19 noSetInMyList

`Optional< bool > qevercloud::NotebookRestrictions::noSetInMyList`

clients may not change the NotebookRecipientSettings.inMyList settings for this notebook.

7.64.3.20 noSetNotebookStack

`Optional< bool > qevercloud::NotebookRestrictions::noSetNotebookStack`

If the client is able to update the Notebook, the Notebook.stack value may not be set.

7.64.3.21 noSetParentTag

`Optional< bool > qevercloud::NotebookRestrictions::noSetParentTag`

If the client is able to create or update tags in the owner's account, then they will not be able to set the parent tag. Leave the value unset.

7.64.3.22 noSetRecipientSettingsStack

`Optional< bool > qevercloud::NotebookRestrictions::noSetRecipientSettingsStack`

NOT DOCUMENTED

7.64.3.23 noSetReminderNotifyEmail

`Optional< bool > qevercloud::NotebookRestrictions::noSetReminderNotifyEmail`

NOT DOCUMENTED

7.64.3.24 noSetReminderNotifyInApp

```
Optional< bool > qevercloud::NotebookRestrictions::noSetReminderNotifyInApp
```

NOT DOCUMENTED

7.64.3.25 noShareNotes

```
Optional< bool > qevercloud::NotebookRestrictions::noShareNotes
```

The client may not share notes in the notebook via the shareNote or createOrUpdateSharedNotes methods.

7.64.3.26 noShareNotesWithBusiness

```
Optional< bool > qevercloud::NotebookRestrictions::noShareNotesWithBusiness
```

The client may not share notes in the notebook via the shareNoteWithBusiness method.

7.64.3.27 noUpdateNotebook

```
Optional< bool > qevercloud::NotebookRestrictions::noUpdateNotebook
```

The client may not update the Notebook object itself, for example, via the updateNotebook method.

7.64.3.28 noUpdateNotes

```
Optional< bool > qevercloud::NotebookRestrictions::noUpdateNotes
```

The client may not update notes currently in the notebook.

7.64.3.29 noUpdateTags

```
Optional< bool > qevercloud::NotebookRestrictions::noUpdateTags
```

The client may not update tags in the owner's account.

7.64.3.30 updateWhichSharedNotebookRestrictions

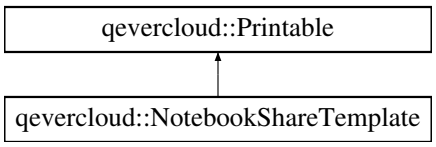
```
Optional< SharedNotebookInstanceRestrictions > qevercloud::NotebookRestrictions::updateWhich↩
SharedNotebookRestrictions
```

Restrictions on which shared notebook instances can be updated. If the value is not set or null, then the client can update any of the shared notebooks associated with the notebook on which the NotebookRestrictions are defined. See the enumeration for further details.

7.65 qevercloud::NotebookShareTemplate Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::NotebookShareTemplate:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NotebookShareTemplate &other) const
- bool operator!= (const NotebookShareTemplate &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > notebookGuid
- Optional< MessageThreadID > recipientThreadId
- Optional< QList< Contact > > recipientContacts
- Optional< SharedNotebookPrivilegeLevel > privilege

Properties

- OptionalQList< Contact > recipientContacts

7.65.1 Detailed Description

A structure used to share a notebook with one or more recipients at a given privilege.

7.65.2 Member Function Documentation

7.65.2.1 operator"!=()

```
bool qevercloud::NotebookShareTemplate::operator!= (
            const NotebookShareTemplate & other ) const  [inline]
```

7.65.2.2 operator==()

```
bool qevercloud::NotebookShareTemplate::operator== (
            const NotebookShareTemplate & other ) const  [inline]
```

7.65.2.3 print()

```
virtual void qevercloud::NotebookShareTemplate::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.65.3 Member Data Documentation

7.65.3.1 localData

```
EverCloudLocalData qevercloud::NotebookShareTemplate::localData
```

See the declaration of EverCloudLocalData for details

7.65.3.2 notebookGuid

```
Optional< Guid > qevercloud::NotebookShareTemplate::notebookGuid
```

The GUID of the notebook.

7.65.3.3 privilege

```
Optional< SharedNotebookPrivilegeLevel > qevercloud::NotebookShareTemplate::privilege
```

The privilege level to be granted.

7.65.3.4 recipientContacts

```
Optional<QList<Contact> > qevercloud::NotebookShareTemplate::recipientContacts
```

The recipients of the notebook share specified as a list of contacts. This should only be set if the sharing takes place before the thread is created. Use recipientThreadId instead when sharing with an existing thread. Either this field or recipientThreadId must be set.

7.65.3.5 recipientThreadId

```
Optional< MessageThreadID > qevercloud::NotebookShareTemplate::recipientThreadId
```

The recipients of the notebook share specified as a messaging thread ID. If you have an existing messaging thread to share the note with, specify its ID here instead of recipientContacts in order to properly support defunct identities. The sharer must be a participant of the thread. Either this field or recipientContacts must be set.

7.65.4 Property Documentation

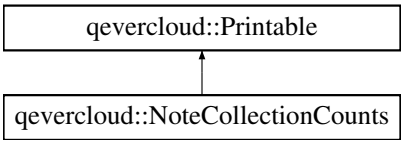
7.65.4.1 recipientContacts

```
OptionalQList<Contact> qevercloud::NotebookShareTemplate::recipientContacts
```

7.66 qevercloud::NoteCollectionCounts Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteCollectionCounts:



Public Types

- using TagCounts = QMap< Guid, qint32 >

Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteCollectionCounts &other) const
- bool operator!= (const NoteCollectionCounts &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QMap< Guid, qint32 > > notebookCounts
- Optional< QMap< Guid, qint32 > > tagCounts
- Optional< qint32 > trashCount

Properties

- Optional< TagCounts > notebookCounts
- Optional< TagCounts > tagCounts

7.66.1 Detailed Description

A data structure representing the number of notes for each notebook and tag with a non-zero set of applicable notes.

7.66.2 Member Typedef Documentation

7.66.2.1 TagCounts

```
using qevercloud::NoteCollectionCounts::TagCounts = QMap<Guid, qint32>
```

7.66.3 Member Function Documentation

7.66.3.1 operator"!=()

```
bool qevercloud::NoteCollectionCounts::operator!= (
            const NoteCollectionCounts & other ) const  [inline]
```

7.66.3.2 operator==()

```
bool qevercloud::NoteCollectionCounts::operator== (
            const NoteCollectionCounts & other ) const  [inline]
```

7.66.3.3 print()

```
virtual void qevercloud::NoteCollectionCounts::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.66.4 Member Data Documentation

7.66.4.1 localData

```
EverCloudLocalData qevercloud::NoteCollectionCounts::localData
```

See the declaration of EverCloudLocalData for details

7.66.4.2 notebookCounts

```
Optional<QMap<Guid, qint32> > qevercloud::NoteCollectionCounts::notebookCounts
```

A mapping from the Notebook GUID to the number of notes (from some selection) that are in the corresponding notebook.

7.66.4.3 tagCounts

```
Optional<QMap<Guid, qint32> > qevercloud::NoteCollectionCounts::tagCounts
```

A mapping from the Tag GUID to the number of notes (from some selection) that have the corresponding tag.

7.66.4.4 trashCount

```
Optional< qint32 > qevercloud::NoteCollectionCounts::trashCount
```

If this is set, then this is the number of notes that are in the trash. If this is not set, then the number of notes in the trash hasn't been reported. (I.e. if there are no notes in the trash, this will be set to 0.)

7.66.5 Property Documentation

7.66.5.1 notebookCounts

```
Optional<TagCounts> qevercloud::NoteCollectionCounts::notebookCounts
```

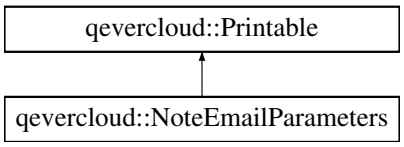
7.66.5.2 tagCounts

```
Optional<TagCounts> qevercloud::NoteCollectionCounts::tagCounts
```

7.67 qevercloud::NoteEmailParameters Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::NoteEmailParameters:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteEmailParameters &other) const
- bool operator!= (const NoteEmailParameters &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > guid
- Optional< Note > note
- Optional< QStringList > toAddresses
- Optional< QStringList > ccAddresses
- Optional< QString > subject
- Optional< QString > message

7.67.1 Detailed Description

Parameters that must be given to the NoteStore emailNote call. These allow the caller to specify the note to send, the recipient addresses, etc.

7.67.2 Member Function Documentation

7.67.2.1 operator"!=()

```
bool qevercloud::NoteEmailParameters::operator!= (
            const NoteEmailParameters & other ) const  [inline]
```

7.67.2.2 operator==()

```
bool qevercloud::NoteEmailParameters::operator== (
            const NoteEmailParameters & other ) const  [inline]
```

7.67.2.3 print()

```
virtual void qevercloud::NoteEmailParameters::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.67.3 Member Data Documentation

7.67.3.1 ccAddresses

```
Optional< QStringList > qevercloud::NoteEmailParameters::ccAddresses
```

If provided, this should contain a list of the SMTP email addresses that should be included in the "Cc:" line of the email. Callers must specify at least one "to" or "cc" email address.

7.67.3.2 guid

```
Optional< QString > qevercloud::NoteEmailParameters::guid
```

If set, this must be the GUID of a note within the user's account that should be retrieved from the service and sent as email. If not set, the 'note' field must be provided instead.

7.67.3.3 localData

```
EverCloudLocalData qevercloud::NoteEmailParameters::localData
```

See the declaration of EverCloudLocalData for details

7.67.3.4 message

```
Optional< QString > qevercloud::NoteEmailParameters::message
```

If provided, this is additional personal text that should be included into the email as a message from the owner to the recipient(s).

7.67.3.5 note

```
Optional< Note > qevercloud::NoteEmailParameters::note
```

If the 'guid' field is not set, this field must be provided, including the full contents of the note note (and all of its Resources) to send. This can be used for a Note that as not been created in the service, for example by a local client with local notes.

7.67.3.6 subject

```
Optional< QString > qevercloud::NoteEmailParameters::subject
```

If provided, this should contain the subject line of the email that will be sent. If not provided, the title of the note will be used as the subject of the email.

7.67.3.7 toAddresses

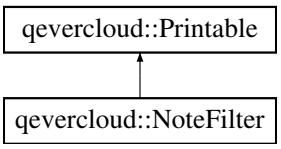
```
Optional< QStringList > qevercloud::NoteEmailParameters::toAddresses
```

If provided, this should contain a list of the SMTP email addresses that should be included in the "To:" line of the email. Callers must specify at least one "to" or "cc" email address.

7.68 qevercloud::NoteFilter Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteFilter:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteFilter &other) const
- bool operator!= (const NoteFilter &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint32 > order
- Optional< bool > ascending
- Optional< QString > words
- Optional< Guid > notebookGuid
- Optional< QList< Guid > > tagGuids
- Optional< QString > timeZone
- Optional< bool > inactive
- Optional< QString > emphasized
- Optional< bool > includeAllReadableNotebooks
- Optional< bool > includeAllReadableWorkspaces
- Optional< QString > context
- Optional< QString > rawWords
- Optional< QByteArray > searchContextBytes

Properties

- OptionalQList< Guid > tagGuids

7.68.1 Detailed Description

A list of criteria that are used to indicate which notes are desired from the account. This is used in queries to the NoteStore to determine which notes should be retrieved.

7.68.2 Member Function Documentation

7.68.2.1 operator"!=()

```
bool qevercloud::NoteFilter::operator!= (
            const NoteFilter & other ) const  [inline]
```

7.68.2.2 operator==()

```
bool qevercloud::NoteFilter::operator== (
            const NoteFilter & other ) const  [inline]
```

7.68.2.3 print()

```
virtual void qevercloud::NoteFilter::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.68.3 Member Data Documentation

7.68.3.1 ascending

```
Optional< bool > qevercloud::NoteFilter::ascending
```

If true, the results will be ascending in the requested sort order. If false, the results will be descending.

7.68.3.2 context

```
Optional< QString > qevercloud::NoteFilter::context
```

Specifies the context to consider when determining result ranking. Clients must leave this value unset unless they wish to explicitly specify a known non-default context.

7.68.3.3 emphasized

```
Optional< QString > qevercloud::NoteFilter::emphasized
```

If present, a search query string that may or may not influence the notes to be returned, both in terms of coverage as well as of order. Think of it as a wish list, not a requirement. Accepts the full search grammar documented in the Evernote API Overview.

7.68.3.4 inactive

```
Optional< bool > qevercloud::NoteFilter::inactive
```

If true, then only notes that are not active (i.e. notes in the Trash) will be returned. Otherwise, only active notes will be returned. There is no way to find both active and inactive notes in a single query.

7.68.3.5 includeAllReadableNotebooks

```
Optional< bool > qevercloud::NoteFilter::includeAllReadableNotebooks
```

If true, then the search will include all business notebooks that are readable by the user. A business authentication token must be supplied for this option to take effect when calling search APIs.

7.68.3.6 includeAllReadableWorkspaces

```
Optional< bool > qevercloud::NoteFilter::includeAllReadableWorkspaces
```

If true, then the search will include all workspaces that are readable by the user. A business authentication token must be supplied for this option to take effect when calling search APIs.

7.68.3.7 localData

```
EverCloudLocalData qevercloud::NoteFilter::localData
```

See the declaration of EverCloudLocalData for details

7.68.3.8 notebookGuid

```
Optional< Guid > qevercloud::NoteFilter::notebookGuid
```

If present, the Guid of the notebook that must contain the notes.

7.68.3.9 order

```
Optional< qint32 > qevercloud::NoteFilter::order
```

The NoteSortOrder value indicating what criterion should be used to sort the results of the filter.

7.68.3.10 rawWords

```
Optional< QString > qevercloud::NoteFilter::rawWords
```

If present, the raw user query input. Accepts the full search grammar documented in the Evernote API Overview.

7.68.3.11 searchContextBytes

```
Optional< QByteArray > qevercloud::NoteFilter::searchContextBytes
```

Specifies the correlating information about the current search session, in byte array. If this request is not for the first page of search results, the client should populate this field with the value of searchContextBytes from the NotesMetadataList of the original search response.

7.68.3.12 tagGuids

```
Optional<QList<Guid> > qevercloud::NoteFilter::tagGuids
```

If present, the list of tags (by GUID) that must be present on the notes.

7.68.3.13 timeZone

```
Optional< QString > qevercloud::NoteFilter::timeZone
```

The zone ID for the user, which will be used to interpret any dates or times in the queries that do not include their desired zone information. For example, if a query requests notes created "yesterday", this will be evaluated from the provided time zone, if provided. The format must be encoded as a standard zone ID such as "America/Los_↩ Angeles".

7.68.3.14 words

```
Optional< QString > qevercloud::NoteFilter::words
```

If present, a search query string that will filter the set of notes to be returned. Accepts the full search grammar documented in the Evernote API Overview.

7.68.4 Property Documentation

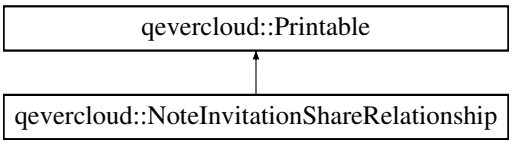
7.68.4.1 tagGuids

```
OptionalQList<Guid> qevercloud::NoteFilter::tagGuids
```

7.69 qevercloud::NoteInvitationShareRelationship Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteInvitationShareRelationship:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteInvitationShareRelationship &other) const
- bool operator!= (const NoteInvitationShareRelationship &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > displayName
- Optional< IdentityID > recipientIdentityId
- Optional< SharedNotePrivilegeLevel > privilege
- Optional< UserID > sharerUserId

7.69.1 Detailed Description

Describes an invitation to a person to use their Evernote credentials to gain access to a note belonging to another user.

7.69.2 Member Function Documentation

7.69.2.1 operator"!=()

```
bool qevercloud::NoteInvitationShareRelationship::operator!= (
            const NoteInvitationShareRelationship & other ) const  [inline]
```

7.69.2.2 operator==()

```
bool qevercloud::NoteInvitationShareRelationship::operator== (
            const NoteInvitationShareRelationship & other ) const  [inline]
```

7.69.2.3 print()

```
virtual void qevercloud::NoteInvitationShareRelationship::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.69.3 Member Data Documentation

7.69.3.1 displayName

```
Optional< QString > qevercloud::NoteInvitationShareRelationship::displayName
```

The string that clients should show to users to represent this invitation.

7.69.3.2 localData

```
EverCloudLocalData qevercloud::NoteInvitationShareRelationship::localData
```

See the declaration of EverCloudLocalData for details

7.69.3.3 privilege

```
Optional< SharedNotePrivilegeLevel > qevercloud::NoteInvitationShareRelationship::privilege
```

The privilege level that the recipient will be granted when they accept this invitation. If the user already has a higher privilege to access this note then this will not affect the recipient's privileges.

7.69.3.4 recipientIdentityId

```
Optional< IdentityID > qevercloud::NoteInvitationShareRelationship::recipientIdentityId
```

Identifies the identity of the invitation recipient. Once the identity has been claimed by an Evernote user and they have accessed the note at least once, the invitation will be used up and will no longer be returned by the service to clients. Instead, that recipient will be included in the list of NoteMemberShareRelationships.

7.69.3.5 sharerUserId

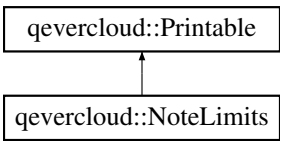
```
Optional< UserID > qevercloud::NoteInvitationShareRelationship::sharerUserId
```

The user id of the user who most recently shared this note to this recipient. This field is used by the service to convey information to the user, so clients should treat it as read-only.

7.70 qevercloud::NoteLimits Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteLimits:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteLimits &other) const
- bool operator!= (const NoteLimits &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint32 > noteResourceCountMax
- Optional< qint64 > uploadLimit
- Optional< qint64 > resourceSizeMax
- Optional< qint64 > noteSizeMax
- Optional< qint64 > uploaded

7.70.1 Detailed Description

Represents the owner's account related limits on a Note. The field uploaded represents the total number of bytes that have been uploaded to this account and is taken from the SyncState struct. All other fields represent account related limits and are taken from the AccountLimits struct.

See SyncState and AccountLimits struct field definitions for more details.

7.70.2 Member Function Documentation

7.70.2.1 operator"!=()

```
bool qevercloud::NoteLimits::operator!= (
            const NoteLimits & other ) const  [inline]
```

7.70.2.2 operator==()

```
bool qevercloud::NoteLimits::operator== (
            const NoteLimits & other ) const  [inline]
```

7.70.2.3 print()

```
virtual void qevercloud::NoteLimits::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.70.3 Member Data Documentation

7.70.3.1 localData

```
EverCloudLocalData qevercloud::NoteLimits::localData
```

See the declaration of EverCloudLocalData for details

7.70.3.2 noteResourceCountMax

```
Optional< qint32 > qevercloud::NoteLimits::noteResourceCountMax
```

NOT DOCUMENTED

7.70.3.3 noteSizeMax

```
Optional< qint64 > qevercloud::NoteLimits::noteSizeMax
```

NOT DOCUMENTED

7.70.3.4 resourceSizeMax

```
Optional< qint64 > qevercloud::NoteLimits::resourceSizeMax
```

NOT DOCUMENTED

7.70.3.5 uploaded

```
Optional< qint64 > qevercloud::NoteLimits::uploaded
```

NOT DOCUMENTED

7.70.3.6 uploadLimit

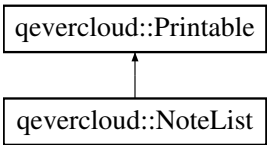
```
Optional< qint64 > qevercloud::NoteLimits::uploadLimit
```

NOT DOCUMENTED

7.71 qevercloud::NoteList Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteList:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteList &other) const
- bool operator!= (const NoteList &other) const

Public Attributes

- EverCloudLocalData localData
- qint32 startIndex = 0
- qint32 totalNotes = 0
- QList< Note > notes
- Optional< QStringList > stoppedWords
- Optional< QStringList > searchedWords
- Optional< qint32 > updateCount
- Optional< QByteArray > searchContextBytes
- Optional< QString > debugInfo

7.71.1 Detailed Description

A small structure for returning a list of notes out of a larger set.

7.71.2 Member Function Documentation

7.71.2.1 operator"!=()

```
bool qevercloud::NoteList::operator!= (
            const NoteList & other ) const  [inline]
```

7.71.2.2 operator==()

```
bool qevercloud::NoteList::operator== (
            const NoteList & other ) const  [inline]
```

7.71.2.3 print()

```
virtual void qevercloud::NoteList::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.71.3 Member Data Documentation

7.71.3.1 debugInfo

```
Optional< QString > qevercloud::NoteList::debugInfo
```

Depends on the value of `context` in NoteFilter, this field may contain debug information if the service decides to do so.

7.71.3.2 localData

```
EverCloudLocalData qevercloud::NoteList::localData
```

See the declaration of EverCloudLocalData for details

7.71.3.3 notes

```
QList< Note > qevercloud::NoteList::notes
```

The list of notes from this range. The Notes will include all metadata (attributes, resources, etc.), but will not include the ENML content of the note or the binary contents of any resources.

7.71.3.4 searchContextBytes

```
Optional< QByteArray > qevercloud::NoteList::searchContextBytes
```

Specifies the correlating information about the current search session, in byte array.

7.71.3.5 searchedWords

```
Optional< QStringList > qevercloud::NoteList::searchedWords
```

If the NoteList was produced using a text based search query that included viable search words or quoted expressions, this will include a list of those words. Any stopped words will not be included in this list.

7.71.3.6 startIndex

```
qint32 qevercloud::NoteList::startIndex = 0
```

The starting index within the overall set of notes. This is also the number of notes that are "before" this list in the set.

7.71.3.7 stoppedWords

```
Optional< QStringList > qevercloud::NoteList::stoppedWords
```

If the NoteList was produced using a text based search query that included words that are not indexed or searched by the service, this will include a list of those ignored words.

7.71.3.8 totalNotes

```
qint32 qevercloud::NoteList::totalNotes = 0
```

The number of notes in the larger set. This can be used to calculate how many notes are "after" this note in the set. (I.e. remaining = totalNotes - (startIndex + notes.length))

7.71.3.9 updateCount

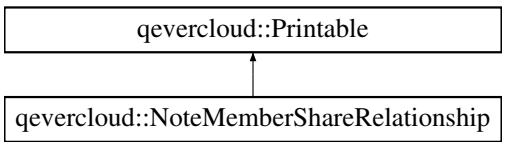
```
Optional< qint32 > qevercloud::NoteList::updateCount
```

Indicates the total number of transactions that have been committed within the account. This reflects (for example) the number of discrete additions or modifications that have been made to the data in this account (tags, notes, resources, etc.). This number is the "high water mark" for Update Sequence Numbers (USN) within the account.

7.72 qevercloud::NoteMemberShareRelationship Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteMemberShareRelationship:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteMemberShareRelationship &other) const
- bool operator!= (const NoteMemberShareRelationship &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > displayName
- Optional< UserID > recipientUserId
- Optional< SharedNotePrivilegeLevel > privilege
- Optional< NoteShareRelationshipRestrictions > restrictions
- Optional< UserID > sharerUserId

7.72.1 Detailed Description

Describes the association between a Note and an Evernote User who is a member of that note.

7.72.2 Member Function Documentation

7.72.2.1 operator"!=()

```
bool qevercloud::NoteMemberShareRelationship::operator!= (
            const NoteMemberShareRelationship & other ) const  [inline]
```

7.72.2.2 operator==()

```
bool qevercloud::NoteMemberShareRelationship::operator== (
            const NoteMemberShareRelationship & other ) const  [inline]
```

7.72.2.3 print()

```
virtual void qevercloud::NoteMemberShareRelationship::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.72.3 Member Data Documentation

7.72.3.1 displayName

```
Optional< QString > qevercloud::NoteMemberShareRelationship::displayName
```

The string that clients should show to users to represent this member.

7.72.3.2 localData

```
EverCloudLocalData qevercloud::NoteMemberShareRelationship::localData
```

See the declaration of EverCloudLocalData for details

7.72.3.3 privilege

```
Optional< SharedNotePrivilegeLevel > qevercloud::NoteMemberShareRelationship::privilege
```

The privilege at which the member can access the note, which is the best privilege granted to the user across all of their individual shares for this note. This field is used by the service to convey information to the user, so clients should treat it as read-only.

7.72.3.4 recipientUserId

```
Optional< UserID > qevercloud::NoteMemberShareRelationship::recipientUserId
```

The Evernote UserID of the user who is a member to the note.

7.72.3.5 restrictions

```
Optional< NoteShareRelationshipRestrictions > qevercloud::NoteMemberShareRelationship::restrictions
```

The restrictions on which privileges may be individually assigned to the recipient of this share relationship. This field is used by the service to convey information to the user, so clients should treat it as read-only.

7.72.3.6 sharerUserId

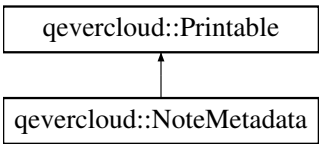
```
Optional< UserID > qevercloud::NoteMemberShareRelationship::sharerUserId
```

The user id of the user who most recently shared the note with this user. This field is used by the service to convey information to the user, so clients should treat it as read-only.

7.73 qevercloud::NoteMetadata Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteMetadata:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteMetadata &other) const
- bool operator!= (const NoteMetadata &other) const

Public Attributes

- EverCloudLocalData localData
- Guid guid
- Optional< QString > title
- Optional< qint32 > contentLength
- Optional< Timestamp > created
- Optional< Timestamp > updated
- Optional< Timestamp > deleted
- Optional< qint32 > updateSequenceNum
- Optional< QString > notebookGuid
- Optional< QList< Guid > > tagGuids
- Optional< NoteAttributes > attributes
- Optional< QString > largestResourceMime
- Optional< qint32 > largestResourceSize

Properties

- OptionalQList< Guid > tagGuids

7.73.1 Detailed Description

This structure is used in the set of results returned by the findNotesMetadata function. It represents the high-level information about a single Note, without some of the larger deep structure. This allows for the information about a list of Notes to be returned relatively quickly with less marshalling and data transfer to remote clients. Most fields in this structure are identical to the corresponding field in the Note structure, with the exception of:

7.73.2 Member Function Documentation

7.73.2.1 operator"!=()

```
bool qevercloud::NoteMetadata::operator!= (
            const NoteMetadata & other ) const  [inline]
```

7.73.2.2 operator==()

```
bool qevercloud::NoteMetadata::operator== (
            const NoteMetadata & other ) const  [inline]
```

7.73.2.3 print()

```
virtual void qevercloud::NoteMetadata::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.73.3 Member Data Documentation

7.73.3.1 attributes

```
Optional< NoteAttributes > qevercloud::NoteMetadata::attributes
```

NOT DOCUMENTED

7.73.3.2 contentLength

```
Optional< qint32 > qevercloud::NoteMetadata::contentLength
```

NOT DOCUMENTED

7.73.3.3 created

```
Optional< Timestamp > qevercloud::NoteMetadata::created
```

NOT DOCUMENTED

7.73.3.4 deleted

```
Optional< Timestamp > qevercloud::NoteMetadata::deleted
```

NOT DOCUMENTED

7.73.3.5 guid

```
Guid qevercloud::NoteMetadata::guid
```

NOT DOCUMENTED

7.73.3.6 largestResourceMime

```
Optional< QString > qevercloud::NoteMetadata::largestResourceMime
```

If set, then this will contain the MIME type of the largest Resource (in bytes) within the Note. This may be useful, for example, to choose an appropriate icon or thumbnail to represent the Note.

7.73.3.7 largestResourceSize

```
Optional< qint32 > qevercloud::NoteMetadata::largestResourceSize
```

If set, this will contain the size of the largest Resource file, in bytes, within the Note. This may be useful, for example, to decide whether to ask the server for a thumbnail to represent the Note.

7.73.3.8 localData

```
EverCloudLocalData qevercloud::NoteMetadata::localData
```

See the declaration of EverCloudLocalData for details

7.73.3.9 notebookGuid

```
Optional< QString > qevercloud::NoteMetadata::notebookGuid
```

NOT DOCUMENTED

7.73.3.10 tagGuids

```
Optional<QList<Guid> > qevercloud::NoteMetadata::tagGuids
```

NOT DOCUMENTED

7.73.3.11 title

```
Optional< QString > qevercloud::NoteMetadata::title
```

NOT DOCUMENTED

7.73.3.12 updated

```
Optional< Timestamp > qevercloud::NoteMetadata::updated
```

NOT DOCUMENTED

7.73.3.13 updateSequenceNum

```
Optional< qint32 > qevercloud::NoteMetadata::updateSequenceNum
```

NOT DOCUMENTED

7.73.4 Property Documentation

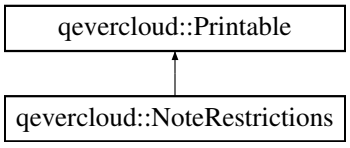
7.73.4.1 tagGuids

```
OptionalQList<Guid> qevercloud::NoteMetadata::tagGuids
```

7.74 qevercloud::NoteRestrictions Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteRestrictions:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteRestrictions &other) const
- bool operator!= (const NoteRestrictions &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > noUpdateTitle
- Optional< bool > noUpdateContent
- Optional< bool > noEmail
- Optional< bool > noShare
- Optional< bool > noSharePublicly

7.74.1 Detailed Description

This structure captures information about the operations that cannot be performed on a given note that has been shared with a recipient via a SharedNote. The following operations are **never** allowed based on SharedNotes, and as such are left out of the NoteRestrictions structure for brevity:

- Expunging a note (NoteStore.expungeNote)
- Moving a note to the trash (Note.active)
- Updating a note's notebook (Note.notebookGuid)
- Updating a note's tags (Note.tagGuids, Note.tagNames)
- Updating a note's attributes (Note.attributes)
- Sharing a note with the business (NoteStore.shareNoteWithBusiness
- Getting a note's version history (NoteStore.listNoteVersions, NoteStore.getNoteVersion)

When a client has permission to update a note's title or content, it may also update the Note.updated timestamp.

This structure reflects only the privileges / restrictions conveyed by the SharedNote. It does not incorporate privileges conveyed by a potential SharedNotebook to the same recipient. As such, the actual permissions that the recipient has on the note may differ from the permissions expressed in this structure.

For example, consider a user with read-only access to a shared notebook, and a read-write share of a specific note in the notebook. The note restrictions would contain noUpdateTitle = false, while the notebook restrictions would contain noUpdateNotes = true. In this case, the user is allowed to update the note title based on the note restrictions.

Alternatively, consider a user with read-write access to a shared notebook, and a read-only share of a specific note in that notebook. The note restrictions would contain noUpdateTitle = true, while the notebook restrictions would contain noUpdateNotes = false. In this case, the user would have full edit permissions on the note based on the notebook restrictions.

7.74.2 Member Function Documentation

7.74.2.1 operator"!=()

```
bool qevercloud::NoteRestrictions::operator!= (
            const NoteRestrictions & other ) const  [inline]
```

7.74.2.2 operator==()

```
bool qevercloud::NoteRestrictions::operator== (
            const NoteRestrictions & other ) const  [inline]
```

7.74.2.3 print()

```
virtual void qevercloud::NoteRestrictions::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.74.3 Member Data Documentation

7.74.3.1 localData

```
EverCloudLocalData qevercloud::NoteRestrictions::localData
```

See the declaration of EverCloudLocalData for details

7.74.3.2 noEmail

```
Optional< bool > qevercloud::NoteRestrictions::noEmail
```

The client may not email the note (NoteStore.emailNote).

7.74.3.3 noShare

```
Optional< bool > qevercloud::NoteRestrictions::noShare
```

The client may not share the note with specific recipients (NoteStore.createOrUpdateSharedNotes).

7.74.3.4 noSharePublicly

```
Optional< bool > qevercloud::NoteRestrictions::noSharePublicly
```

The client may not make the note public (NoteStore.shareNote).

7.74.3.5 noUpdateContent

```
Optional< bool > qevercloud::NoteRestrictions::noUpdateContent
```

NOT DOCUMENTED

7.74.3.6 noUpdateTitle

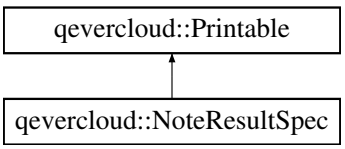
```
Optional< bool > qevercloud::NoteRestrictions::noUpdateTitle
```

The client may not update the note's title (Note.title).

7.75 qevercloud::NoteResultSpec Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteResultSpec:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteResultSpec &other) const
- bool operator!= (const NoteResultSpec &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > includeContent
- Optional< bool > includeResourcesData
- Optional< bool > includeResourcesRecognition
- Optional< bool > includeResourcesAlternateData
- Optional< bool > includeSharedNotes
- Optional< bool > includeNoteAppDataValues
- Optional< bool > includeResourceAppDataValues
- Optional< bool > includeAccountLimits

7.75.1 Detailed Description

This structure is provided to the getNoteWithResultSpec function to specify the subset of fields that should be included in the Note that is returned. This allows clients to request the minimum set of information that they require when retrieving a note, reducing the size of the response and improving the response time.

If one of the fields in this spec is not set, then it will be treated as 'false' by the service, so that the default behavior is to include none of the fields below in the Note.

7.75.2 Member Function Documentation

7.75.2.1 operator"!=()

```
bool qevercloud::NoteResultSpec::operator!= (
            const NoteResultSpec & other ) const  [inline]
```

7.75.2.2 operator==()

```
bool qevercloud::NoteResultSpec::operator== (
            const NoteResultSpec & other ) const  [inline]
```

7.75.2.3 print()

```
virtual void qevercloud::NoteResultSpec::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.75.3 Member Data Documentation

7.75.3.1 includeAccountLimits

```
Optional< bool > qevercloud::NoteResultSpec::includeAccountLimits
```

If true, the Note.limits field will be populated with the note owner's account limits.

7.75.3.2 includeContent

```
Optional< bool > qevercloud::NoteResultSpec::includeContent
```

If true, the Note.content field will be populated with the note's ENML contents.

7.75.3.3 includeNoteAppDataValues

```
Optional< bool > qevercloud::NoteResultSpec::includeNoteAppDataValues
```

If true, the Note.attributes.applicationData.fullMap field will be populated.

7.75.3.4 includeResourceAppDataValues

```
Optional< bool > qevercloud::NoteResultSpec::includeResourceAppDataValues
```

If true, the Note.resource.attributes.applicationData.fullMap field will be populated.

7.75.3.5 includeResourcesAlternateData

```
Optional< bool > qevercloud::NoteResultSpec::includeResourcesAlternateData
```

If true, any Resource elements will include the binary contents of their 'alternateData' field's body, if an alternate form is available.

7.75.3.6 includeResourcesData

```
Optional< bool > qevercloud::NoteResultSpec::includeResourcesData
```

If true, any Resource elements will include the binary contents of their 'data' field's body.

7.75.3.7 includeResourcesRecognition

```
Optional< bool > qevercloud::NoteResultSpec::includeResourcesRecognition
```

If true, any Resource elements will include the binary contents of their 'recognition' field's body if recognition data is available.

7.75.3.8 includeSharedNotes

```
Optional< bool > qevercloud::NoteResultSpec::includeSharedNotes
```

If true, the Note.sharedNotes field will be populated with the note's shares.

7.75.3.9 localData

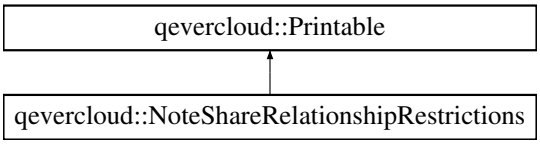
```
EverCloudLocalData qevercloud::NoteResultSpec::localData
```

See the declaration of EverCloudLocalData for details

7.76 qevercloud::NoteShareRelationshipRestrictions Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NoteShareRelationshipRestrictions:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteShareRelationshipRestrictions &other) const
- bool operator!= (const NoteShareRelationshipRestrictions &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > noSetReadNote
- Optional< bool > noSetModifyNote
- Optional< bool > noSetFullAccess

7.76.1 Detailed Description

This structure is used by the service to communicate to clients, via getNoteShareRelationships, which privilege levels are assignable to the target of a note share relationship.

7.76.2 Member Function Documentation

7.76.2.1 operator"!=()

```
bool qevercloud::NoteShareRelationshipRestrictions::operator!= (
            const NoteShareRelationshipRestrictions & other ) const  [inline]
```

7.76.2.2 operator==()

```
bool qevercloud::NoteShareRelationshipRestrictions::operator== (
            const NoteShareRelationshipRestrictions & other ) const  [inline]
```

7.76.2.3 print()

```
virtual void qevercloud::NoteShareRelationshipRestrictions::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.76.3 Member Data Documentation

7.76.3.1 localData

```
EverCloudLocalData qevercloud::NoteShareRelationshipRestrictions::localData
```

See the declaration of EverCloudLocalData for details

7.76.3.2 noSetFullAccess

```
Optional< bool > qevercloud::NoteShareRelationshipRestrictions::noSetFullAccess
```

This value is true if the user is not allowed to set the privilege level to SharedNotePrivilegeLevel.FULL_ACCESS.

7.76.3.3 noSetModifyNote

```
Optional< bool > qevercloud::NoteShareRelationshipRestrictions::noSetModifyNote
```

This value is true if the user is not allowed to set the privilege level to SharedNotePrivilegeLevel.MODIFY_NOTE.

7.76.3.4 noSetReadNote

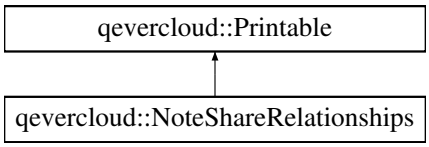
```
Optional< bool > qevercloud::NoteShareRelationshipRestrictions::noSetReadNote
```

This value is true if the user is not allowed to set the privilege level to SharedNotePrivilegeLevel.READ_NOTE.

7.77 qevercloud::NoteShareRelationships Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::NoteShareRelationships:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteShareRelationships &other) const
- bool operator!= (const NoteShareRelationships &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QList< NoteInvitationShareRelationship > > invitations
- Optional< QList< NoteMemberShareRelationship > > memberships
- Optional< NoteShareRelationshipRestrictions > invitationRestrictions

Properties

- OptionalQList< NoteInvitationShareRelationship > invitations
- OptionalQList< NoteMemberShareRelationship > memberships

7.77.1 Detailed Description

Captures a collection of share relationships for a single note, for example, as returned by the getNoteShares method. The share relationships fall into two broad categories: members, and invitations that can be used to become members.

7.77.2 Member Function Documentation

7.77.2.1 operator"!=()

```
bool qevercloud::NoteShareRelationships::operator!= (
            const NoteShareRelationships & other ) const  [inline]
```

7.77.2.2 operator==()

```
bool qevercloud::NoteShareRelationships::operator== (
            const NoteShareRelationships & other ) const  [inline]
```

7.77.2.3 print()

```
virtual void qevercloud::NoteShareRelationships::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.77.3 Member Data Documentation

7.77.3.1 invitationRestrictions

```
Optional< NoteShareRelationshipRestrictions > qevercloud::NoteShareRelationships::invitation↩
Restrictions
```

NOT DOCUMENTED

7.77.3.2 invitations

```
Optional<QList<NoteInvitationShareRelationship> > qevercloud::NoteShareRelationships::invitations
```

A list of open invitations that can be redeemed into memberships to the note.

7.77.3.3 localData

```
EverCloudLocalData qevercloud::NoteShareRelationships::localData
```

See the declaration of EverCloudLocalData for details

7.77.3.4 memberships

```
Optional<QList<NoteMemberShareRelationship> > qevercloud::NoteShareRelationships::memberships
```

A list of memberships of the noteb. A member is identified by their Evernote UserID and has rights to access the note.

7.77.4 Property Documentation

7.77.4.1 invitations

```
OptionalQList<NoteInvitationShareRelationship> qevercloud::NoteShareRelationships::invitations
```

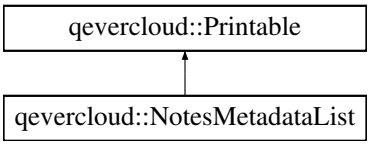
7.77.4.2 memberships

```
OptionalQList<NoteMemberShareRelationship> qevercloud::NoteShareRelationships::memberships
```

7.78 qevercloud::NotesMetadataList Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::NotesMetadataList:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NotesMetadataList &other) const
- bool operator!= (const NotesMetadataList &other) const

Public Attributes

- EverCloudLocalData localData
- qint32 startIndex = 0
- qint32 totalNotes = 0
- QList< NoteMetadata > notes
- Optional< QStringList > stoppedWords
- Optional< QStringList > searchedWords
- Optional< qint32 > updateCount
- Optional< QByteArray > searchContextBytes
- Optional< QString > debugInfo

7.78.1 Detailed Description

This structure is returned from calls to the findNotesMetadata function to give the high-level metadata about a subset of Notes that are found to match a specified NoteFilter in a search.

7.78.2 Member Function Documentation

7.78.2.1 operator"!=()

```
bool qevercloud::NotesMetadataList::operator!= (
            const NotesMetadataList & other ) const  [inline]
```

7.78.2.2 operator==()

```
bool qevercloud::NotesMetadataList::operator== (
            const NotesMetadataList & other ) const  [inline]
```

7.78.2.3 print()

```
virtual void qevercloud::NotesMetadataList::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.78.3 Member Data Documentation

7.78.3.1 debugInfo

```
Optional< QString > qevercloud::NotesMetadataList::debugInfo
```

Depends on the value of `context` in NoteFilter, this field may contain debug information if the service decides to do so.

7.78.3.2 localData

```
EverCloudLocalData qevercloud::NotesMetadataList::localData
```

See the declaration of EverCloudLocalData for details

7.78.3.3 notes

```
QList< NoteMetadata > qevercloud::NotesMetadataList::notes
```

The list of metadata for Notes in this range. The set of optional fields that are set in each metadata structure will depend on the NotesMetadataResultSpec provided by the caller when the search was performed. Only the 'guid' field will be guaranteed to be set in each Note.

7.78.3.4 searchContextBytes

```
Optional< QByteArray > qevercloud::NotesMetadataList::searchContextBytes
```

Specifies the correlating information about the current search session, in byte array.

7.78.3.5 searchedWords

```
Optional< QStringList > qevercloud::NotesMetadataList::searchedWords
```

If the NoteList was produced using a text based search query that included viable search words or quoted expressions, this will include a list of those words. Any stopped words will not be included in this list.

7.78.3.6 startIndex

```
qint32 qevercloud::NotesMetadataList::startIndex = 0
```

The starting index within the overall set of notes. This is also the number of notes that are "before" this list in the set.

7.78.3.7 stoppedWords

```
Optional< QStringList > qevercloud::NotesMetadataList::stoppedWords
```

If the NoteList was produced using a text based search query that included words that are not indexed or searched by the service, this will include a list of those ignored words.

7.78.3.8 totalNotes

```
qint32 qevercloud::NotesMetadataList::totalNotes = 0
```

The number of notes in the larger set. This can be used to calculate how many notes are "after" this note in the set. (I.e. remaining = totalNotes - (startIndex + notes.length))

7.78.3.9 updateCount

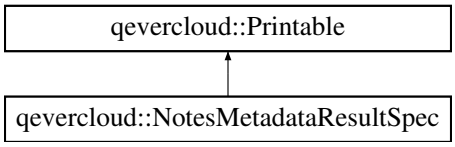
```
Optional< qint32 > qevercloud::NotesMetadataList::updateCount
```

Indicates the total number of transactions that have been committed within the account. This reflects (for example) the number of discrete additions or modifications that have been made to the data in this account (tags, notes, resources, etc.). This number is the "high water mark" for Update Sequence Numbers (USN) within the account.

7.79 qevercloud::NotesMetadataResultSpec Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::NotesMetadataResultSpec:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NotesMetadataResultSpec &other) const
- bool operator!= (const NotesMetadataResultSpec &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > includeTitle
- Optional< bool > includeContentLength
- Optional< bool > includeCreated
- Optional< bool > includeUpdated
- Optional< bool > includeDeleted
- Optional< bool > includeUpdateSequenceNum
- Optional< bool > includeNotebookGuid
- Optional< bool > includeTagGuids
- Optional< bool > includeAttributes
- Optional< bool > includeLargestResourceMime
- Optional< bool > includeLargestResourceSize

7.79.1 Detailed Description

This structure is provided to the findNotesMetadata function to specify the subset of fields that should be included in each NoteMetadata element that is returned in the NotesMetadataList. Each field on this structure is a boolean flag that indicates whether the corresponding field should be included in the NoteMetadata structure when it is returned. For example, if the 'includeTitle' field is set on this structure when calling findNotesMetadata, then each NoteMetadata in the list should have its 'title' field set. If one of the fields in this spec is not set, then it will be treated as 'false' by the server, so the default behavior is to include nothing in replies (but the mandatory GUID)

7.79.2 Member Function Documentation

7.79.2.1 operator"!=()

```
bool qevercloud::NotesMetadataResultSpec::operator!= (
            const NotesMetadataResultSpec & other ) const  [inline]
```

7.79.2.2 operator==()

```
bool qevercloud::NotesMetadataResultSpec::operator== (
            const NotesMetadataResultSpec & other ) const  [inline]
```

7.79.2.3 print()

```
virtual void qevercloud::NotesMetadataResultSpec::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.79.3 Member Data Documentation

7.79.3.1 includeAttributes

```
Optional< bool > qevercloud::NotesMetadataResultSpec::includeAttributes
```

NOT DOCUMENTED

7.79.3.2 includeContentLength

```
Optional< bool > qevercloud::NotesMetadataResultSpec::includeContentLength
```

NOT DOCUMENTED

7.79.3.3 includeCreated

```
Optional< bool > qevercloud::NotesMetadataResultSpec::includeCreated
```

NOT DOCUMENTED

7.79.3.4 includeDeleted

Optional< bool > qevercloud::NotesMetadataResultSpec::includeDeleted

NOT DOCUMENTED

7.79.3.5 includeLargestResourceMime

Optional< bool > qevercloud::NotesMetadataResultSpec::includeLargestResourceMime

NOT DOCUMENTED

7.79.3.6 includeLargestResourceSize

Optional< bool > qevercloud::NotesMetadataResultSpec::includeLargestResourceSize

NOT DOCUMENTED

7.79.3.7 includeNotebookGuid

Optional< bool > qevercloud::NotesMetadataResultSpec::includeNotebookGuid

NOT DOCUMENTED

7.79.3.8 includeTagGuids

Optional< bool > qevercloud::NotesMetadataResultSpec::includeTagGuids

NOT DOCUMENTED

7.79.3.9 includeTitle

Optional< bool > qevercloud::NotesMetadataResultSpec::includeTitle

NOT DOCUMENTED

7.79.3.10 includeUpdated

Optional< bool > qevercloud::NotesMetadataResultSpec::includeUpdated

NOT DOCUMENTED

7.79.3.11 includeUpdateSequenceNum

Optional< bool > qevercloud::NotesMetadataResultSpec::includeUpdateSequenceNum

NOT DOCUMENTED

7.79.3.12 localData

```
EverCloudLocalData qevercloud::NotesMetadataResultSpec::localData
```

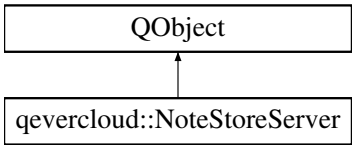
See the declaration of EverCloudLocalData for details

7.80 qevercloud::NoteStoreServer Class Reference

The NoteStoreServer class represents customizable server for NoteStore requests. It is primarily used for testing of QEverCloud.

```
#include <Servers.h>
```

Inheritance diagram for qevercloud::NoteStoreServer:



Public Slots

- void onRequest (QByteArray data)
- void onGetSyncStateRequestReady (SyncState value, EverCloudExceptionDataPtr exceptionData)
- void onGetFilteredSyncChunkRequestReady (SyncChunk value, EverCloudExceptionDataPtr exception↩ Data)
- void onGetLinkedNotebookSyncStateRequestReady (SyncState value, EverCloudExceptionDataPtr exceptionData)
- void onGetLinkedNotebookSyncChunkRequestReady (SyncChunk value, EverCloudExceptionDataPtr exceptionData)
- void onListNotebooksRequestReady (QList< Notebook > value, EverCloudExceptionDataPtr exceptionData)
- void onListAccessibleBusinessNotebooksRequestReady (QList< Notebook > value, EverCloudExceptionDataPtr exceptionData)
- void onGetNotebookRequestReady (Notebook value, EverCloudExceptionDataPtr exceptionData)
- void onGetDefaultNotebookRequestReady (Notebook value, EverCloudExceptionDataPtr exceptionData)
- void onCreateNotebookRequestReady (Notebook value, EverCloudExceptionDataPtr exceptionData)
- void onUpdateNotebookRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onExpungeNotebookRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onListTagsRequestReady (QList< Tag > value, EverCloudExceptionDataPtr exceptionData)
- void onListTagsByNotebookRequestReady (QList< Tag > value, EverCloudExceptionDataPtr exception↩ Data)
- void onGetTagRequestReady (Tag value, EverCloudExceptionDataPtr exceptionData)
- void onCreateTagRequestReady (Tag value, EverCloudExceptionDataPtr exceptionData)
- void onUpdateTagRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onUntagAllRequestReady (EverCloudExceptionDataPtr exceptionData)
- void onExpungeTagRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onListSearchesRequestReady (QList< SavedSearch > value, EverCloudExceptionDataPtr exception↩ Data)
- void onGetSearchRequestReady (SavedSearch value, EverCloudExceptionDataPtr exceptionData)
- void onCreateSearchRequestReady (SavedSearch value, EverCloudExceptionDataPtr exceptionData)
- void onUpdateSearchRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)

- void onExpungeSearchRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onFindNoteOffsetRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onFindNotesMetadataRequestReady (NotesMetadataList value, EverCloudExceptionDataPtr exception↩ Data)
- void onFindNoteCountsRequestReady (NoteCollectionCounts value, EverCloudExceptionDataPtr exception↩ Data)
- void onGetNoteWithResultSpecRequestReady (Note value, EverCloudExceptionDataPtr exceptionData)
- void onGetNoteRequestReady (Note value, EverCloudExceptionDataPtr exceptionData)
- void onGetNoteApplicationDataRequestReady (LazyMap value, EverCloudExceptionDataPtr exceptionData)
- void onGetNoteApplicationDataEntryRequestReady (QString value, EverCloudExceptionDataPtr exception↩ Data)
- void onSetNoteApplicationDataEntryRequestReady (qint32 value, EverCloudExceptionDataPtr exception↩ Data)
- void onUnsetNoteApplicationDataEntryRequestReady (qint32 value, EverCloudExceptionDataPtr exception↩ Data)
- void onGetNoteContentRequestReady (QString value, EverCloudExceptionDataPtr exceptionData)
- void onGetNoteSearchTextRequestReady (QString value, EverCloudExceptionDataPtr exceptionData)
- void onGetResourceSearchTextRequestReady (QString value, EverCloudExceptionDataPtr exceptionData)
- void onGetNoteTagNamesRequestReady (QStringList value, EverCloudExceptionDataPtr exceptionData)
- void onCreateNoteRequestReady (Note value, EverCloudExceptionDataPtr exceptionData)
- void onUpdateNoteRequestReady (Note value, EverCloudExceptionDataPtr exceptionData)
- void onDeleteNoteRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onExpungeNoteRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onCopyNoteRequestReady (Note value, EverCloudExceptionDataPtr exceptionData)
- void onListNoteVersionsRequestReady (QList< NoteVersionId > value, EverCloudExceptionDataPtr exceptionData)
- void onGetNoteVersionRequestReady (Note value, EverCloudExceptionDataPtr exceptionData)
- void onGetResourceRequestReady (Resource value, EverCloudExceptionDataPtr exceptionData)
- void onGetResourceApplicationDataRequestReady (LazyMap value, EverCloudExceptionDataPtr exception↩ Data)
- void onGetResourceApplicationDataEntryRequestReady (QString value, EverCloudExceptionDataPtr exceptionData)
- void onSetResourceApplicationDataEntryRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onUnsetResourceApplicationDataEntryRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onUpdateResourceRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onGetResourceDataRequestReady (QByteArray value, EverCloudExceptionDataPtr exceptionData)
- void onGetResourceByHashRequestReady (Resource value, EverCloudExceptionDataPtr exceptionData)
- void onGetResourceRecognitionRequestReady (QByteArray value, EverCloudExceptionDataPtr exception↩ Data)
- void onGetResourceAlternateDataRequestReady (QByteArray value, EverCloudExceptionDataPtr exceptionData)
- void onGetResourceAttributesRequestReady (ResourceAttributes value, EverCloudExceptionDataPtr exceptionData)
- void onGetPublicNotebookRequestReady (Notebook value, EverCloudExceptionDataPtr exceptionData)
- void onShareNotebookRequestReady (SharedNotebook value, EverCloudExceptionDataPtr exceptionData)
- void onCreateOrUpdateNotebookSharesRequestReady (CreateOrUpdateNotebookSharesResult value, EverCloudExceptionDataPtr exceptionData)
- void onUpdateSharedNotebookRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onSetNotebookRecipientSettingsRequestReady (Notebook value, EverCloudExceptionDataPtr exceptionData)
- void onListSharedNotebooksRequestReady (QList< SharedNotebook > value, EverCloudExceptionDataPtr exceptionData)
- void onCreateLinkedNotebookRequestReady (LinkedNotebook value, EverCloudExceptionDataPtr exceptionData)

- void onUpdateLinkedNotebookRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onListLinkedNotebooksRequestReady (QList< LinkedNotebook > value, EverCloudExceptionDataPtr exceptionData)
- void onExpungeLinkedNotebookRequestReady (qint32 value, EverCloudExceptionDataPtr exceptionData)
- void onAuthenticateToSharedNotebookRequestReady (AuthenticationResult value, EverCloudExceptionDataPtr exceptionData)
- void onGetSharedNotebookByAuthRequestReady (SharedNotebook value, EverCloudExceptionDataPtr exceptionData)
- void onEmailNoteRequestReady (EverCloudExceptionDataPtr exceptionData)
- void onShareNoteRequestReady (QString value, EverCloudExceptionDataPtr exceptionData)
- void onStopSharingNoteRequestReady (EverCloudExceptionDataPtr exceptionData)
- void onAuthenticateToSharedNoteRequestReady (AuthenticationResult value, EverCloudExceptionDataPtr exceptionData)
- void onFindRelatedRequestReady (RelatedResult value, EverCloudExceptionDataPtr exceptionData)
- void onUpdateNoteIfUsnMatchesRequestReady (UpdateNoteIfUsnMatchesResult value, EverCloudExceptionDataPtr exceptionData)
- void onManageNotebookSharesRequestReady (ManageNotebookSharesResult value, EverCloudExceptionDataPtr exceptionData)
- void onGetNotebookSharesRequestReady (ShareRelationships value, EverCloudExceptionDataPtr exceptionData)

Signals

- void getSyncStateRequest (IRequestContextPtr ctx)
- void getFilteredSyncChunkRequest (qint32 afterUSN, qint32 maxEntries, SyncChunkFilter filter, IRequestContextPtr ctx)
- void getLinkedNotebookSyncStateRequest (LinkedNotebook linkedNotebook, IRequestContextPtr ctx)
- void getLinkedNotebookSyncChunkRequest (LinkedNotebook linkedNotebook, qint32 afterUSN, qint32 maxEntries, bool fullSyncOnly, IRequestContextPtr ctx)
- void listNotebooksRequest (IRequestContextPtr ctx)
- void listAccessibleBusinessNotebooksRequest (IRequestContextPtr ctx)
- void getNotebookRequest (Guid guid, IRequestContextPtr ctx)
- void getDefaultNotebookRequest (IRequestContextPtr ctx)
- void createNotebookRequest (Notebook notebook, IRequestContextPtr ctx)
- void updateNotebookRequest (Notebook notebook, IRequestContextPtr ctx)
- void expungeNotebookRequest (Guid guid, IRequestContextPtr ctx)
- void listTagsRequest (IRequestContextPtr ctx)
- void listTagsByNotebookRequest (Guid notebookGuid, IRequestContextPtr ctx)
- void getTagRequest (Guid guid, IRequestContextPtr ctx)
- void createTagRequest (Tag tag, IRequestContextPtr ctx)
- void updateTagRequest (Tag tag, IRequestContextPtr ctx)
- void untagAllRequest (Guid guid, IRequestContextPtr ctx)
- void expungeTagRequest (Guid guid, IRequestContextPtr ctx)
- void listSearchesRequest (IRequestContextPtr ctx)
- void getSearchRequest (Guid guid, IRequestContextPtr ctx)
- void createSearchRequest (SavedSearch search, IRequestContextPtr ctx)
- void updateSearchRequest (SavedSearch search, IRequestContextPtr ctx)
- void expungeSearchRequest (Guid guid, IRequestContextPtr ctx)
- void findNoteOffsetRequest (NoteFilter filter, Guid guid, IRequestContextPtr ctx)
- void findNotesMetadataRequest (NoteFilter filter, qint32 offset, qint32 maxNotes, NotesMetadataResultSpec resultSpec, IRequestContextPtr ctx)
- void findNoteCountsRequest (NoteFilter filter, bool withTrash, IRequestContextPtr ctx)
- void getNoteWithResultSpecRequest (Guid guid, NoteResultSpec resultSpec, IRequestContextPtr ctx)

- void getNoteRequest (Guid guid, bool withContent, bool withResourcesData, bool withResources↩ Recognition, bool withResourcesAlternateData, IRequestContextPtr ctx)
- void getNoteApplicationDataRequest (Guid guid, IRequestContextPtr ctx)
- void getNoteApplicationDataEntryRequest (Guid guid, QString key, IRequestContextPtr ctx)
- void setNoteApplicationDataEntryRequest (Guid guid, QString key, QString value, IRequestContextPtr ctx)
- void unsetNoteApplicationDataEntryRequest (Guid guid, QString key, IRequestContextPtr ctx)
- void getNoteContentRequest (Guid guid, IRequestContextPtr ctx)
- void getNoteSearchTextRequest (Guid guid, bool noteOnly, bool tokenizeForIndexing, IRequestContextPtr ctx)
- void getResourceSearchTextRequest (Guid guid, IRequestContextPtr ctx)
- void getNoteTagNamesRequest (Guid guid, IRequestContextPtr ctx)
- void createNoteRequest (Note note, IRequestContextPtr ctx)
- void updateNoteRequest (Note note, IRequestContextPtr ctx)
- void deleteNoteRequest (Guid guid, IRequestContextPtr ctx)
- void expungeNoteRequest (Guid guid, IRequestContextPtr ctx)
- void copyNoteRequest (Guid noteGuid, Guid toNotebookGuid, IRequestContextPtr ctx)
- void listNoteVersionsRequest (Guid noteGuid, IRequestContextPtr ctx)
- void getNoteVersionRequest (Guid noteGuid, qint32 updateSequenceNum, bool withResourcesData, bool withResourcesRecognition, bool withResourcesAlternateData, IRequestContextPtr ctx)
- void getResourceRequest (Guid guid, bool withData, bool withRecognition, bool withAttributes, bool with↩ AlternateData, IRequestContextPtr ctx)
- void getResourceApplicationDataRequest (Guid guid, IRequestContextPtr ctx)
- void getResourceApplicationDataEntryRequest (Guid guid, QString key, IRequestContextPtr ctx)
- void setResourceApplicationDataEntryRequest (Guid guid, QString key, QString value, IRequestContextPtr ctx)
- void unsetResourceApplicationDataEntryRequest (Guid guid, QString key, IRequestContextPtr ctx)
- void updateResourceRequest (Resource resource, IRequestContextPtr ctx)
- void getResourceDataRequest (Guid guid, IRequestContextPtr ctx)
- void getResourceByHashRequest (Guid noteGuid, QByteArray contentHash, bool withData, bool with↩ Recognition, bool withAlternateData, IRequestContextPtr ctx)
- void getResourceRecognitionRequest (Guid guid, IRequestContextPtr ctx)
- void getResourceAlternateDataRequest (Guid guid, IRequestContextPtr ctx)
- void getResourceAttributesRequest (Guid guid, IRequestContextPtr ctx)
- void getPublicNotebookRequest (UserID userId, QString publicUri, IRequestContextPtr ctx)
- void shareNotebookRequest (SharedNotebook sharedNotebook, QString message, IRequestContextPtr ctx)
- void createOrUpdateNotebookSharesRequest (NotebookShareTemplate shareTemplate, IRequestContextPtr ctx)
- void updateSharedNotebookRequest (SharedNotebook sharedNotebook, IRequestContextPtr ctx)
- void setNotebookRecipientSettingsRequest (QString notebookGuid, NotebookRecipientSettings recipient↩ Settings, IRequestContextPtr ctx)
- void listSharedNotebooksRequest (IRequestContextPtr ctx)
- void createLinkedNotebookRequest (LinkedNotebook linkedNotebook, IRequestContextPtr ctx)
- void updateLinkedNotebookRequest (LinkedNotebook linkedNotebook, IRequestContextPtr ctx)
- void listLinkedNotebooksRequest (IRequestContextPtr ctx)
- void expungeLinkedNotebookRequest (Guid guid, IRequestContextPtr ctx)
- void authenticateToSharedNotebookRequest (QString shareKeyOrGlobalId, IRequestContextPtr ctx)
- void getSharedNotebookByAuthRequest (IRequestContextPtr ctx)
- void emailNoteRequest (NoteEmailParameters parameters, IRequestContextPtr ctx)
- void shareNoteRequest (Guid guid, IRequestContextPtr ctx)
- void stopSharingNoteRequest (Guid guid, IRequestContextPtr ctx)
- void authenticateToSharedNoteRequest (QString guid, QString noteKey, IRequestContextPtr ctx)
- void findRelatedRequest (RelatedQuery query, RelatedResultSpec resultSpec, IRequestContextPtr ctx)
- void updateNoteIfUsnMatchesRequest (Note note, IRequestContextPtr ctx)
- void manageNotebookSharesRequest (ManageNotebookSharesParameters parameters, IRequestContextPtr ctx)

- void getNotebookSharesRequest (QString notebookGuid, IRequestContextPtr ctx)
- void getSyncStateRequestReady (QByteArray data)
- void getFilteredSyncChunkRequestReady (QByteArray data)
- void getLinkedNotebookSyncStateRequestReady (QByteArray data)
- void getLinkedNotebookSyncChunkRequestReady (QByteArray data)
- void listNotebooksRequestReady (QByteArray data)
- void listAccessibleBusinessNotebooksRequestReady (QByteArray data)
- void getNotebookRequestReady (QByteArray data)
- void getDefaultNotebookRequestReady (QByteArray data)
- void createNotebookRequestReady (QByteArray data)
- void updateNotebookRequestReady (QByteArray data)
- void expungeNotebookRequestReady (QByteArray data)
- void listTagsRequestReady (QByteArray data)
- void listTagsByNotebookRequestReady (QByteArray data)
- void getTagRequestReady (QByteArray data)
- void createTagRequestReady (QByteArray data)
- void updateTagRequestReady (QByteArray data)
- void untagAllRequestReady (QByteArray data)
- void expungeTagRequestReady (QByteArray data)
- void listSearchesRequestReady (QByteArray data)
- void getSearchRequestReady (QByteArray data)
- void createSearchRequestReady (QByteArray data)
- void updateSearchRequestReady (QByteArray data)
- void expungeSearchRequestReady (QByteArray data)
- void findNoteOffsetRequestReady (QByteArray data)
- void findNotesMetadataRequestReady (QByteArray data)
- void findNoteCountsRequestReady (QByteArray data)
- void getNoteWithResultSpecRequestReady (QByteArray data)
- void getNoteRequestReady (QByteArray data)
- void getNoteApplicationDataRequestReady (QByteArray data)
- void getNoteApplicationDataEntryRequestReady (QByteArray data)
- void setNoteApplicationDataEntryRequestReady (QByteArray data)
- void unsetNoteApplicationDataEntryRequestReady (QByteArray data)
- void getNoteContentRequestReady (QByteArray data)
- void getNoteSearchTextRequestReady (QByteArray data)
- void getResourceSearchTextRequestReady (QByteArray data)
- void getNoteTagNamesRequestReady (QByteArray data)
- void createNoteRequestReady (QByteArray data)
- void updateNoteRequestReady (QByteArray data)
- void deleteNoteRequestReady (QByteArray data)
- void expungeNoteRequestReady (QByteArray data)
- void copyNoteRequestReady (QByteArray data)
- void listNoteVersionsRequestReady (QByteArray data)
- void getNoteVersionRequestReady (QByteArray data)
- void getResourceRequestReady (QByteArray data)
- void getResourceApplicationDataRequestReady (QByteArray data)
- void getResourceApplicationDataEntryRequestReady (QByteArray data)
- void setResourceApplicationDataEntryRequestReady (QByteArray data)
- void unsetResourceApplicationDataEntryRequestReady (QByteArray data)
- void updateResourceRequestReady (QByteArray data)
- void getResourceDataRequestReady (QByteArray data)
- void getResourceByHashRequestReady (QByteArray data)
- void getResourceRecognitionRequestReady (QByteArray data)
- void getResourceAlternateDataRequestReady (QByteArray data)
- void getResourceAttributesRequestReady (QByteArray data)

- void getPublicNotebookRequestReady (QByteArray data)
- void shareNotebookRequestReady (QByteArray data)
- void createOrUpdateNotebookSharesRequestReady (QByteArray data)
- void updateSharedNotebookRequestReady (QByteArray data)
- void setNotebookRecipientSettingsRequestReady (QByteArray data)
- void listSharedNotebooksRequestReady (QByteArray data)
- void createLinkedNotebookRequestReady (QByteArray data)
- void updateLinkedNotebookRequestReady (QByteArray data)
- void listLinkedNotebooksRequestReady (QByteArray data)
- void expungeLinkedNotebookRequestReady (QByteArray data)
- void authenticateToSharedNotebookRequestReady (QByteArray data)
- void getSharedNotebookByAuthRequestReady (QByteArray data)
- void emailNoteRequestReady (QByteArray data)
- void shareNoteRequestReady (QByteArray data)
- void stopSharingNoteRequestReady (QByteArray data)
- void authenticateToSharedNoteRequestReady (QByteArray data)
- void findRelatedRequestReady (QByteArray data)
- void updateNoteIfUsnMatchesRequestReady (QByteArray data)
- void manageNotebookSharesRequestReady (QByteArray data)
- void getNotebookSharesRequestReady (QByteArray data)

Public Member Functions

- NoteStoreServer (QObject *parent=nullptr)

7.80.1 Detailed Description

The NoteStoreServer class represents customizable server for NoteStore requests. It is primarily used for testing of QEverCloud.

7.80.2 Constructor & Destructor Documentation

7.80.2.1 NoteStoreServer()

```
qevercloud::NoteStoreServer::NoteStoreServer (
            QObject * parent = nullptr )  [explicit]
```

7.80.3 Member Function Documentation

7.80.3.1 authenticateToSharedNotebookRequest

```
void qevercloud::NoteStoreServer::authenticateToSharedNotebookRequest (
            QString shareKeyOrGlobalId,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.2 authenticateToSharedNotebookRequestReady

```
void qevercloud::NoteStoreServer::authenticateToSharedNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.3 authenticateToSharedNoteRequest

```
void qevercloud::NoteStoreServer::authenticateToSharedNoteRequest (
            QString guid,
            QString noteKey,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.4 authenticateToSharedNoteRequestReady

```
void qevercloud::NoteStoreServer::authenticateToSharedNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.5 copyNoteRequest

```
void qevercloud::NoteStoreServer::copyNoteRequest (
            Guid noteGuid,
            Guid toNotebookGuid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.6 copyNoteRequestReady

```
void qevercloud::NoteStoreServer::copyNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.7 createLinkedNotebookRequest

```
void qevercloud::NoteStoreServer::createLinkedNotebookRequest (
            LinkedNotebook linkedNotebook,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.8 createLinkedNotebookRequestReady

```
void qevercloud::NoteStoreServer::createLinkedNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.9 createNotebookRequest

```
void qevercloud::NoteStoreServer::createNotebookRequest (
            Notebook notebook,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.10 createNotebookRequestReady

```
void qevercloud::NoteStoreServer::createNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.11 createNoteRequest

```
void qevercloud::NoteStoreServer::createNoteRequest (
            Note note,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.12 createNoteRequestReady

```
void qevercloud::NoteStoreServer::createNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.13 createOrUpdateNotebookSharesRequest

```
void qevercloud::NoteStoreServer::createOrUpdateNotebookSharesRequest (
            NotebookShareTemplate shareTemplate,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.14 createOrUpdateNotebookSharesRequestReady

```
void qevercloud::NoteStoreServer::createOrUpdateNotebookSharesRequestReady (
            QByteArray data )  [signal]
```

7.80.3.15 createSearchRequest

```
void qevercloud::NoteStoreServer::createSearchRequest (
            SavedSearch search,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.16 createSearchRequestReady

```
void qevercloud::NoteStoreServer::createSearchRequestReady (
            QByteArray data )  [signal]
```

7.80.3.17 createTagRequest

```
void qevercloud::NoteStoreServer::createTagRequest (
            Tag tag,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.18 createTagRequestReady

```
void qevercloud::NoteStoreServer::createTagRequestReady (
            QByteArray data )  [signal]
```

7.80.3.19 deleteNoteRequest

```
void qevercloud::NoteStoreServer::deleteNoteRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.20 deleteNoteRequestReady

```
void qevercloud::NoteStoreServer::deleteNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.21 emailNoteRequest

```
void qevercloud::NoteStoreServer::emailNoteRequest (
            NoteEmailParameters parameters,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.22 emailNoteRequestReady

```
void qevercloud::NoteStoreServer::emailNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.23 expungeLinkedNotebookRequest

```
void qevercloud::NoteStoreServer::expungeLinkedNotebookRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.24 expungeLinkedNotebookRequestReady

```
void qevercloud::NoteStoreServer::expungeLinkedNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.25 expungeNotebookRequest

```
void qevercloud::NoteStoreServer::expungeNotebookRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.26 expungeNotebookRequestReady

```
void qevercloud::NoteStoreServer::expungeNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.27 expungeNoteRequest

```
void qevercloud::NoteStoreServer::expungeNoteRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.28 expungeNoteRequestReady

```
void qevercloud::NoteStoreServer::expungeNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.29 expungeSearchRequest

```
void qevercloud::NoteStoreServer::expungeSearchRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.30 expungeSearchRequestReady

```
void qevercloud::NoteStoreServer::expungeSearchRequestReady (
            QByteArray data )  [signal]
```

7.80.3.31 expungeTagRequest

```
void qevercloud::NoteStoreServer::expungeTagRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.32 expungeTagRequestReady

```
void qevercloud::NoteStoreServer::expungeTagRequestReady (
            QByteArray data )  [signal]
```

7.80.3.33 findNoteCountsRequest

```
void qevercloud::NoteStoreServer::findNoteCountsRequest (
            NoteFilter filter,
            bool withTrash,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.34 findNoteCountsRequestReady

```
void qevercloud::NoteStoreServer::findNoteCountsRequestReady (
            QByteArray data )  [signal]
```

7.80.3.35 findNoteOffsetRequest

```
void qevercloud::NoteStoreServer::findNoteOffsetRequest (
            NoteFilter filter,
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.36 findNoteOffsetRequestReady

```
void qevercloud::NoteStoreServer::findNoteOffsetRequestReady (
            QByteArray data )  [signal]
```

7.80.3.37 findNotesMetadataRequest

```
void qevercloud::NoteStoreServer::findNotesMetadataRequest (
            NoteFilter filter,
            qint32 offset,
            qint32 maxNotes,
            NotesMetadataResultSpec resultSpec,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.38 findNotesMetadataRequestReady

```
void qevercloud::NoteStoreServer::findNotesMetadataRequestReady (
            QByteArray data )  [signal]
```

7.80.3.39 findRelatedRequest

```
void qevercloud::NoteStoreServer::findRelatedRequest (
            RelatedQuery query,
            RelatedResultSpec resultSpec,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.40 findRelatedRequestReady

```
void qevercloud::NoteStoreServer::findRelatedRequestReady (
            QByteArray data )  [signal]
```

7.80.3.41 getDefaultNotebookRequest

```
void qevercloud::NoteStoreServer::getDefaultNotebookRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.42 getDefaultNotebookRequestReady

```
void qevercloud::NoteStoreServer::getDefaultNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.43 getFilteredSyncChunkRequest

```
void qevercloud::NoteStoreServer::getFilteredSyncChunkRequest (
            qint32 afterUSN,
            qint32 maxEntries,
            SyncChunkFilter filter,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.44 getFilteredSyncChunkRequestReady

```
void qevercloud::NoteStoreServer::getFilteredSyncChunkRequestReady (
            QByteArray data )  [signal]
```

7.80.3.45 getLinkedNotebookSyncChunkRequest

```
void qevercloud::NoteStoreServer::getLinkedNotebookSyncChunkRequest (
            LinkedNotebook linkedNotebook,
            qint32 afterUSN,
            qint32 maxEntries,
            bool fullSyncOnly,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.46 getLinkedNotebookSyncChunkRequestReady

```
void qevercloud::NoteStoreServer::getLinkedNotebookSyncChunkRequestReady (
            QByteArray data )  [signal]
```

7.80.3.47 getLinkedNotebookSyncStateRequest

```
void qevercloud::NoteStoreServer::getLinkedNotebookSyncStateRequest (
            LinkedNotebook linkedNotebook,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.48 getLinkedNotebookSyncStateRequestReady

```
void qevercloud::NoteStoreServer::getLinkedNotebookSyncStateRequestReady (
            QByteArray data )  [signal]
```

7.80.3.49 getNoteApplicationDataEntryRequest

```
void qevercloud::NoteStoreServer::getNoteApplicationDataEntryRequest (
            Guid guid,
            QString key,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.50 getNoteApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::getNoteApplicationDataEntryRequestReady (
            QByteArray data )  [signal]
```

7.80.3.51 getNoteApplicationDataRequest

```
void qevercloud::NoteStoreServer::getNoteApplicationDataRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.52 getNoteApplicationDataRequestReady

```
void qevercloud::NoteStoreServer::getNoteApplicationDataRequestReady (
            QByteArray data )  [signal]
```

7.80.3.53 getNotebookRequest

```
void qevercloud::NoteStoreServer::getNotebookRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.54 getNotebookRequestReady

```
void qevercloud::NoteStoreServer::getNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.55 getNotebookSharesRequest

```
void qevercloud::NoteStoreServer::getNotebookSharesRequest (
            QString notebookGuid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.56 getNotebookSharesRequestReady

```
void qevercloud::NoteStoreServer::getNotebookSharesRequestReady (
            QByteArray data )  [signal]
```

7.80.3.57 getNoteContentRequest

```
void qevercloud::NoteStoreServer::getNoteContentRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.58 getNoteContentRequestReady

```
void qevercloud::NoteStoreServer::getNoteContentRequestReady (
            QByteArray data )  [signal]
```

7.80.3.59 getNoteRequest

```
void qevercloud::NoteStoreServer::getNoteRequest (
            Guid guid,
            bool withContent,
            bool withResourcesData,
            bool withResourcesRecognition,
            bool withResourcesAlternateData,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.60 getNoteRequestReady

```
void qevercloud::NoteStoreServer::getNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.61 getNoteSearchTextRequest

```
void qevercloud::NoteStoreServer::getNoteSearchTextRequest (
            Guid guid,
            bool noteOnly,
            bool tokenizeForIndexing,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.62 getNoteSearchTextRequestReady

```
void qevercloud::NoteStoreServer::getNoteSearchTextRequestReady (
            QByteArray data )  [signal]
```

7.80.3.63 getNoteTagNamesRequest

```
void qevercloud::NoteStoreServer::getNoteTagNamesRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.64 getNoteTagNamesRequestReady

```
void qevercloud::NoteStoreServer::getNoteTagNamesRequestReady (
            QByteArray data )  [signal]
```

7.80.3.65 getNoteVersionRequest

```
void qevercloud::NoteStoreServer::getNoteVersionRequest (
            Guid noteGuid,
            qint32 updateSequenceNum,
            bool withResourcesData,
            bool withResourcesRecognition,
            bool withResourcesAlternateData,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.66 getNoteVersionRequestReady

```
void qevercloud::NoteStoreServer::getNoteVersionRequestReady (
            QByteArray data )  [signal]
```

7.80.3.67 getNoteWithResultSpecRequest

```
void qevercloud::NoteStoreServer::getNoteWithResultSpecRequest (
            Guid guid,
            NoteResultSpec resultSpec,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.68 getNoteWithResultSpecRequestReady

```
void qevercloud::NoteStoreServer::getNoteWithResultSpecRequestReady (
            QByteArray data )  [signal]
```

7.80.3.69 getPublicNotebookRequest

```
void qevercloud::NoteStoreServer::getPublicNotebookRequest (
            UserID userId,
            QString publicUri,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.70 getPublicNotebookRequestReady

```
void qevercloud::NoteStoreServer::getPublicNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.71 getResourceAlternateDataRequest

```
void qevercloud::NoteStoreServer::getResourceAlternateDataRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.72 getResourceAlternateDataRequestReady

```
void qevercloud::NoteStoreServer::getResourceAlternateDataRequestReady (
            QByteArray data )  [signal]
```

7.80.3.73 getResourceApplicationDataEntryRequest

```
void qevercloud::NoteStoreServer::getResourceApplicationDataEntryRequest (
            Guid guid,
            QString key,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.74 getResourceApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::getResourceApplicationDataEntryRequestReady (
            QByteArray data )  [signal]
```

7.80.3.75 getResourceApplicationDataRequest

```
void qevercloud::NoteStoreServer::getResourceApplicationDataRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.76 getResourceApplicationDataRequestReady

```
void qevercloud::NoteStoreServer::getResourceApplicationDataRequestReady (
            QByteArray data )  [signal]
```

7.80.3.77 getResourceAttributesRequest

```
void qevercloud::NoteStoreServer::getResourceAttributesRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.78 getResourceAttributesRequestReady

```
void qevercloud::NoteStoreServer::getResourceAttributesRequestReady (
            QByteArray data )  [signal]
```

7.80.3.79 getResourceByHashRequest

```
void qevercloud::NoteStoreServer::getResourceByHashRequest (
            Guid noteGuid,
            QByteArray contentHash,
            bool withData,
            bool withRecognition,
            bool withAlternateData,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.80 getResourceByHashRequestReady

```
void qevercloud::NoteStoreServer::getResourceByHashRequestReady (
            QByteArray data )  [signal]
```

7.80.3.81 getResourceDataRequest

```
void qevercloud::NoteStoreServer::getResourceDataRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.82 getResourceDataRequestReady

```
void qevercloud::NoteStoreServer::getResourceDataRequestReady (
            QByteArray data )  [signal]
```

7.80.3.83 getResourceRecognitionRequest

```
void qevercloud::NoteStoreServer::getResourceRecognitionRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.84 getResourceRecognitionRequestReady

```
void qevercloud::NoteStoreServer::getResourceRecognitionRequestReady (
            QByteArray data )  [signal]
```

7.80.3.85 getResourceRequest

```
void qevercloud::NoteStoreServer::getResourceRequest (
            Guid guid,
            bool withData,
            bool withRecognition,
            bool withAttributes,
            bool withAlternateData,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.86 getResourceRequestReady

```
void qevercloud::NoteStoreServer::getResourceRequestReady (
            QByteArray data )  [signal]
```

7.80.3.87 getResourceSearchTextRequest

```
void qevercloud::NoteStoreServer::getResourceSearchTextRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.88 getResourceSearchTextRequestReady

```
void qevercloud::NoteStoreServer::getResourceSearchTextRequestReady (
            QByteArray data )  [signal]
```

7.80.3.89 getSearchRequest

```
void qevercloud::NoteStoreServer::getSearchRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.90 getSearchRequestReady

```
void qevercloud::NoteStoreServer::getSearchRequestReady (
            QByteArray data )  [signal]
```

7.80.3.91 getSharedNotebookByAuthRequest

```
void qevercloud::NoteStoreServer::getSharedNotebookByAuthRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.92 getSharedNotebookByAuthRequestReady

```
void qevercloud::NoteStoreServer::getSharedNotebookByAuthRequestReady (
            QByteArray data )  [signal]
```

7.80.3.93 getSyncStateRequest

```
void qevercloud::NoteStoreServer::getSyncStateRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.94 getSyncStateRequestReady

```
void qevercloud::NoteStoreServer::getSyncStateRequestReady (
            QByteArray data )  [signal]
```

7.80.3.95 getTagRequest

```
void qevercloud::NoteStoreServer::getTagRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.96 getTagRequestReady

```
void qevercloud::NoteStoreServer::getTagRequestReady (
            QByteArray data )  [signal]
```

7.80.3.97 listAccessibleBusinessNotebooksRequest

```
void qevercloud::NoteStoreServer::listAccessibleBusinessNotebooksRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.98 listAccessibleBusinessNotebooksRequestReady

```
void qevercloud::NoteStoreServer::listAccessibleBusinessNotebooksRequestReady (
            QByteArray data )  [signal]
```

7.80.3.99 listLinkedNotebooksRequest

```
void qevercloud::NoteStoreServer::listLinkedNotebooksRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.100 listLinkedNotebooksRequestReady

```
void qevercloud::NoteStoreServer::listLinkedNotebooksRequestReady (
            QByteArray data )  [signal]
```

7.80.3.101 listNotebooksRequest

```
void qevercloud::NoteStoreServer::listNotebooksRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.102 listNotebooksRequestReady

```
void qevercloud::NoteStoreServer::listNotebooksRequestReady (
            QByteArray data )  [signal]
```

7.80.3.103 listNoteVersionsRequest

```
void qevercloud::NoteStoreServer::listNoteVersionsRequest (
            Guid noteGuid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.104 listNoteVersionsRequestReady

```
void qevercloud::NoteStoreServer::listNoteVersionsRequestReady (
            QByteArray data )  [signal]
```

7.80.3.105 listSearchesRequest

```
void qevercloud::NoteStoreServer::listSearchesRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.106 listSearchesRequestReady

```
void qevercloud::NoteStoreServer::listSearchesRequestReady (
            QByteArray data )  [signal]
```

7.80.3.107 listSharedNotebooksRequest

```
void qevercloud::NoteStoreServer::listSharedNotebooksRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.108 listSharedNotebooksRequestReady

```
void qevercloud::NoteStoreServer::listSharedNotebooksRequestReady (
            QByteArray data )  [signal]
```

7.80.3.109 listTagsByNotebookRequest

```
void qevercloud::NoteStoreServer::listTagsByNotebookRequest (
            Guid notebookGuid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.110 listTagsByNotebookRequestReady

```
void qevercloud::NoteStoreServer::listTagsByNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.111 listTagsRequest

```
void qevercloud::NoteStoreServer::listTagsRequest (
            IRequestContextPtr ctx )  [signal]
```

7.80.3.112 listTagsRequestReady

```
void qevercloud::NoteStoreServer::listTagsRequestReady (
            QByteArray data )  [signal]
```

7.80.3.113 manageNotebookSharesRequest

```
void qevercloud::NoteStoreServer::manageNotebookSharesRequest (
            ManageNotebookSharesParameters parameters,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.114 manageNotebookSharesRequestReady

```
void qevercloud::NoteStoreServer::manageNotebookSharesRequestReady (
            QByteArray data )  [signal]
```

7.80.3.115 onAuthenticateToSharedNotebookRequestReady

```
void qevercloud::NoteStoreServer::onAuthenticateToSharedNotebookRequestReady (
            AuthenticationResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.116 onAuthenticateToSharedNoteRequestReady

```
void qevercloud::NoteStoreServer::onAuthenticateToSharedNoteRequestReady (
            AuthenticationResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.117 onCopyNoteRequestReady

```
void qevercloud::NoteStoreServer::onCopyNoteRequestReady (
            Note value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.118 onCreateLinkedNotebookRequestReady

```
void qevercloud::NoteStoreServer::onCreateLinkedNotebookRequestReady (
            LinkedNotebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.119 onCreateNotebookRequestReady

```
void qevercloud::NoteStoreServer::onCreateNotebookRequestReady (
            Notebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.120 onCreateNoteRequestReady

```
void qevercloud::NoteStoreServer::onCreateNoteRequestReady (
            Note value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.121 onCreateOrUpdateNotebookSharesRequestReady

```
void qevercloud::NoteStoreServer::onCreateOrUpdateNotebookSharesRequestReady (
            CreateOrUpdateNotebookSharesResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.122 onCreateSearchRequestReady

```
void qevercloud::NoteStoreServer::onCreateSearchRequestReady (
            SavedSearch value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.123 onCreateTagRequestReady

```
void qevercloud::NoteStoreServer::onCreateTagRequestReady (
            Tag value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.124 onDeleteNoteRequestReady

```
void qevercloud::NoteStoreServer::onDeleteNoteRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.125 onEmailNoteRequestReady

```
void qevercloud::NoteStoreServer::onEmailNoteRequestReady (
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.126 onExpungeLinkedNotebookRequestReady

```
void qevercloud::NoteStoreServer::onExpungeLinkedNotebookRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.127 onExpungeNotebookRequestReady

```
void qevercloud::NoteStoreServer::onExpungeNotebookRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.128 onExpungeNoteRequestReady

```
void qevercloud::NoteStoreServer::onExpungeNoteRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.129 onExpungeSearchRequestReady

```
void qevercloud::NoteStoreServer::onExpungeSearchRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.130 onExpungeTagRequestReady

```
void qevercloud::NoteStoreServer::onExpungeTagRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.131 onFindNoteCountsRequestReady

```
void qevercloud::NoteStoreServer::onFindNoteCountsRequestReady (
            NoteCollectionCounts value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.132 onFindNoteOffsetRequestReady

```
void qevercloud::NoteStoreServer::onFindNoteOffsetRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.133 onFindNotesMetadataRequestReady

```
void qevercloud::NoteStoreServer::onFindNotesMetadataRequestReady (
            NotesMetadataList value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.134 onFindRelatedRequestReady

```
void qevercloud::NoteStoreServer::onFindRelatedRequestReady (
            RelatedResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.135 onGetDefaultNotebookRequestReady

```
void qevercloud::NoteStoreServer::onGetDefaultNotebookRequestReady (
            Notebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.136 onGetFilteredSyncChunkRequestReady

```
void qevercloud::NoteStoreServer::onGetFilteredSyncChunkRequestReady (
            SyncChunk value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.137 onGetLinkedNotebookSyncChunkRequestReady

```
void qevercloud::NoteStoreServer::onGetLinkedNotebookSyncChunkRequestReady (
            SyncChunk value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.138 onGetLinkedNotebookSyncStateRequestReady

```
void qevercloud::NoteStoreServer::onGetLinkedNotebookSyncStateRequestReady (
            SyncState value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.139 onGetNoteApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteApplicationDataEntryRequestReady (
            QString value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.140 onGetNoteApplicationDataRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteApplicationDataRequestReady (
            LazyMap value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.141 onGetNotebookRequestReady

```
void qevercloud::NoteStoreServer::onGetNotebookRequestReady (
            Notebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.142 onGetNotebookSharesRequestReady

```
void qevercloud::NoteStoreServer::onGetNotebookSharesRequestReady (
            ShareRelationships value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.143 onGetNoteContentRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteContentRequestReady (
            QString value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.144 onGetNoteRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteRequestReady (
            Note value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.145 onGetNoteSearchTextRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteSearchTextRequestReady (
            QString value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.146 onGetNoteTagNamesRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteTagNamesRequestReady (
            QStringList value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.147 onGetNoteVersionRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteVersionRequestReady (
            Note value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.148 onGetNoteWithResultSpecRequestReady

```
void qevercloud::NoteStoreServer::onGetNoteWithResultSpecRequestReady (
            Note value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.149 onGetPublicNotebookRequestReady

```
void qevercloud::NoteStoreServer::onGetPublicNotebookRequestReady (
            Notebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.150 onGetResourceAlternateDataRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceAlternateDataRequestReady (
            QByteArray value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.151 onGetResourceApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceApplicationDataEntryRequestReady (
            QString value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.152 onGetResourceApplicationDataRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceApplicationDataRequestReady (
            LazyMap value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.153 onGetResourceAttributesRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceAttributesRequestReady (
            ResourceAttributes value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.154 onGetResourceByHashRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceByHashRequestReady (
            Resource value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.155 onGetResourceDataRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceDataRequestReady (
            QByteArray value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.156 onGetResourceRecognitionRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceRecognitionRequestReady (
            QByteArray value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.157 onGetResourceRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceRequestReady (
            Resource value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.158 onGetResourceSearchTextRequestReady

```
void qevercloud::NoteStoreServer::onGetResourceSearchTextRequestReady (
            QString value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.159 onGetSearchRequestReady

```
void qevercloud::NoteStoreServer::onGetSearchRequestReady (
            SavedSearch value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.160 onGetSharedNotebookByAuthRequestReady

```
void qevercloud::NoteStoreServer::onGetSharedNotebookByAuthRequestReady (
            SharedNotebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.161 onGetSyncStateRequestReady

```
void qevercloud::NoteStoreServer::onGetSyncStateRequestReady (
            SyncState value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.162 onGetTagRequestReady

```
void qevercloud::NoteStoreServer::onGetTagRequestReady (
            Tag value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.163 onListAccessibleBusinessNotebooksRequestReady

```
void qevercloud::NoteStoreServer::onListAccessibleBusinessNotebooksRequestReady (
            QList< Notebook > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.164 onListLinkedNotebooksRequestReady

```
void qevercloud::NoteStoreServer::onListLinkedNotebooksRequestReady (
            QList< LinkedNotebook > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.165 onListNotebooksRequestReady

```
void qevercloud::NoteStoreServer::onListNotebooksRequestReady (
            QList< Notebook > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.166 onListNoteVersionsRequestReady

```
void qevercloud::NoteStoreServer::onListNoteVersionsRequestReady (
            QList< NoteVersionId > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.167 onListSearchesRequestReady

```
void qevercloud::NoteStoreServer::onListSearchesRequestReady (
            QList< SavedSearch > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.168 onListSharedNotebooksRequestReady

```
void qevercloud::NoteStoreServer::onListSharedNotebooksRequestReady (
            QList< SharedNotebook > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.169 onListTagsByNotebookRequestReady

```
void qevercloud::NoteStoreServer::onListTagsByNotebookRequestReady (
            QList< Tag > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.170 onListTagsRequestReady

```
void qevercloud::NoteStoreServer::onListTagsRequestReady (
            QList< Tag > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.171 onManageNotebookSharesRequestReady

```
void qevercloud::NoteStoreServer::onManageNotebookSharesRequestReady (
            ManageNotebookSharesResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.172 onRequest

```
void qevercloud::NoteStoreServer::onRequest (
            QByteArray data )  [slot]
```

7.80.3.173 onSetNoteApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::onSetNoteApplicationDataEntryRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.174 onSetNotebookRecipientSettingsRequestReady

```
void qevercloud::NoteStoreServer::onSetNotebookRecipientSettingsRequestReady (
            Notebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.175 onSetResourceApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::onSetResourceApplicationDataEntryRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.176 onShareNotebookRequestReady

```
void qevercloud::NoteStoreServer::onShareNotebookRequestReady (
            SharedNotebook value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.177 onShareNoteRequestReady

```
void qevercloud::NoteStoreServer::onShareNoteRequestReady (
            QString value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.178 onStopSharingNoteRequestReady

```
void qevercloud::NoteStoreServer::onStopSharingNoteRequestReady (
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.179 onUnsetNoteApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::onUnsetNoteApplicationDataEntryRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.180 onUnsetResourceApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::onUnsetResourceApplicationDataEntryRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.181 onUntagAllRequestReady

```
void qevercloud::NoteStoreServer::onUntagAllRequestReady (
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.182 onUpdateLinkedNotebookRequestReady

```
void qevercloud::NoteStoreServer::onUpdateLinkedNotebookRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.183 onUpdateNotebookRequestReady

```
void qevercloud::NoteStoreServer::onUpdateNotebookRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.184 onUpdateNoteIfUsnMatchesRequestReady

```
void qevercloud::NoteStoreServer::onUpdateNoteIfUsnMatchesRequestReady (
            UpdateNoteIfUsnMatchesResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.185 onUpdateNoteRequestReady

```
void qevercloud::NoteStoreServer::onUpdateNoteRequestReady (
            Note value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.186 onUpdateResourceRequestReady

```
void qevercloud::NoteStoreServer::onUpdateResourceRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.187 onUpdateSearchRequestReady

```
void qevercloud::NoteStoreServer::onUpdateSearchRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.188 onUpdateSharedNotebookRequestReady

```
void qevercloud::NoteStoreServer::onUpdateSharedNotebookRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.189 onUpdateTagRequestReady

```
void qevercloud::NoteStoreServer::onUpdateTagRequestReady (
            qint32 value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.80.3.190 setNoteApplicationDataEntryRequest

```
void qevercloud::NoteStoreServer::setNoteApplicationDataEntryRequest (
            Guid guid,
            QString key,
            QString value,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.191 setNoteApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::setNoteApplicationDataEntryRequestReady (
            QByteArray data )  [signal]
```

7.80.3.192 setNotebookRecipientSettingsRequest

```
void qevercloud::NoteStoreServer::setNotebookRecipientSettingsRequest (
            QString notebookGuid,
            NotebookRecipientSettings recipientSettings,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.193 setNotebookRecipientSettingsRequestReady

```
void qevercloud::NoteStoreServer::setNotebookRecipientSettingsRequestReady (
            QByteArray data )  [signal]
```

7.80.3.194 setResourceApplicationDataEntryRequest

```
void qevercloud::NoteStoreServer::setResourceApplicationDataEntryRequest (
            Guid guid,
            QString key,
            QString value,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.195 setResourceApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::setResourceApplicationDataEntryRequestReady (
            QByteArray data )  [signal]
```

7.80.3.196 shareNotebookRequest

```
void qevercloud::NoteStoreServer::shareNotebookRequest (
            SharedNotebook sharedNotebook,
            QString message,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.197 shareNotebookRequestReady

```
void qevercloud::NoteStoreServer::shareNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.198 shareNoteRequest

```
void qevercloud::NoteStoreServer::shareNoteRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.199 shareNoteRequestReady

```
void qevercloud::NoteStoreServer::shareNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.200 stopSharingNoteRequest

```
void qevercloud::NoteStoreServer::stopSharingNoteRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.201 stopSharingNoteRequestReady

```
void qevercloud::NoteStoreServer::stopSharingNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.202 unsetNoteApplicationDataEntryRequest

```
void qevercloud::NoteStoreServer::unsetNoteApplicationDataEntryRequest (
            Guid guid,
            QString key,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.203 unsetNoteApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::unsetNoteApplicationDataEntryRequestReady (
            QByteArray data )  [signal]
```

7.80.3.204 unsetResourceApplicationDataEntryRequest

```
void qevercloud::NoteStoreServer::unsetResourceApplicationDataEntryRequest (
            Guid guid,
            QString key,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.205 unsetResourceApplicationDataEntryRequestReady

```
void qevercloud::NoteStoreServer::unsetResourceApplicationDataEntryRequestReady (
            QByteArray data )  [signal]
```

7.80.3.206 untagAllRequest

```
void qevercloud::NoteStoreServer::untagAllRequest (
            Guid guid,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.207 untagAllRequestReady

```
void qevercloud::NoteStoreServer::untagAllRequestReady (
            QByteArray data )  [signal]
```

7.80.3.208 updateLinkedNotebookRequest

```
void qevercloud::NoteStoreServer::updateLinkedNotebookRequest (
            LinkedNotebook linkedNotebook,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.209 updateLinkedNotebookRequestReady

```
void qevercloud::NoteStoreServer::updateLinkedNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.210 updateNotebookRequest

```
void qevercloud::NoteStoreServer::updateNotebookRequest (
            Notebook notebook,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.211 updateNotebookRequestReady

```
void qevercloud::NoteStoreServer::updateNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.212 updateNoteIfUsnMatchesRequest

```
void qevercloud::NoteStoreServer::updateNoteIfUsnMatchesRequest (
            Note note,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.213 updateNoteIfUsnMatchesRequestReady

```
void qevercloud::NoteStoreServer::updateNoteIfUsnMatchesRequestReady (
            QByteArray data )  [signal]
```

7.80.3.214 updateNoteRequest

```
void qevercloud::NoteStoreServer::updateNoteRequest (
            Note note,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.215 updateNoteRequestReady

```
void qevercloud::NoteStoreServer::updateNoteRequestReady (
            QByteArray data )  [signal]
```

7.80.3.216 updateResourceRequest

```
void qevercloud::NoteStoreServer::updateResourceRequest (
            Resource resource,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.217 updateResourceRequestReady

```
void qevercloud::NoteStoreServer::updateResourceRequestReady (
            QByteArray data )  [signal]
```

7.80.3.218 updateSearchRequest

```
void qevercloud::NoteStoreServer::updateSearchRequest (
            SavedSearch search,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.219 updateSearchRequestReady

```
void qevercloud::NoteStoreServer::updateSearchRequestReady (
            QByteArray data )  [signal]
```

7.80.3.220 updateSharedNotebookRequest

```
void qevercloud::NoteStoreServer::updateSharedNotebookRequest (
            SharedNotebook sharedNotebook,
            IRequestContextPtr ctx )  [signal]
```

7.80.3.221 updateSharedNotebookRequestReady

```
void qevercloud::NoteStoreServer::updateSharedNotebookRequestReady (
            QByteArray data )  [signal]
```

7.80.3.222 updateTagRequest

```
void qevercloud::NoteStoreServer::updateTagRequest (
            Tag tag,
            IRequestContextPtr ctx )  [signal]
```

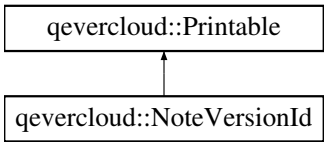
7.80.3.223 updateTagRequestReady

```
void qevercloud::NoteStoreServer::updateTagRequestReady (
            QByteArray data )  [signal]
```

7.81 qevercloud::NoteVersionId Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::NoteVersionId:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const NoteVersionId &other) const
- bool operator!= (const NoteVersionId &other) const

Public Attributes

- EverCloudLocalData localData
- qint32 updateSequenceNum = 0
- Timestamp updated = 0
- Timestamp saved = 0
- QString title
- Optional< UserID > lastEditorId

7.81.1 Detailed Description

Identifying information about previous versions of a note that are backed up within Evernote's servers. Used in the return value of the listNoteVersions call.

7.81.2 Member Function Documentation

7.81.2.1 operator"!=()

```
bool qevercloud::NoteVersionId::operator!= (
            const NoteVersionId & other ) const  [inline]
```

7.81.2.2 operator==()

```
bool qevercloud::NoteVersionId::operator== (
            const NoteVersionId & other ) const  [inline]
```

7.81.2.3 print()

```
virtual void qevercloud::NoteVersionId::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.81.3 Member Data Documentation

7.81.3.1 lastEditorId

```
Optional< UserID > qevercloud::NoteVersionId::lastEditorId
```

The ID of the user who made the change to this version of the note. This will be unset if the note version was edited by the owner of the account.

7.81.3.2 localData

```
EverCloudLocalData qevercloud::NoteVersionId::localData
```

See the declaration of EverCloudLocalData for details

7.81.3.3 saved

```
Timestamp qevercloud::NoteVersionId::saved = 0
```

A timestamp that holds the date and time when this version of the note was backed up by Evernote's servers.

7.81.3.4 title

```
QString qevercloud::NoteVersionId::title
```

The title of the note when this particular version was saved. (The current title of the note may differ from this value.)

7.81.3.5 updated

```
Timestamp qevercloud::NoteVersionId::updated = 0
```

The 'updated' time that was set on the Note when it had this version of the content. This is the user-modifiable modification time on the note, so it's not reliable for guaranteeing the order of various versions. (E.g. if someone modifies the note, then changes this time manually into the past and then updates the note again.)

7.81.3.6 updateSequenceNum

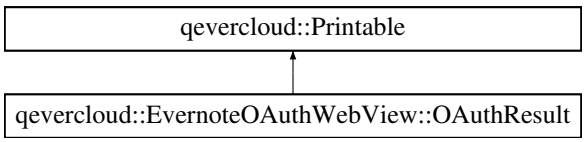
```
qint32 qevercloud::NoteVersionId::updateSequenceNum = 0
```

The update sequence number for the Note when it last had this content. This serves to uniquely identify each version of the note, since USN values are unique within an account for each update.

7.82 qevercloud::EvernoteOAuthWebView::OAuthResult Struct Reference

`#include <OAuth.h>`

Inheritance diagram for qevercloud::EvernoteOAuthWebView::OAuthResult:



Public Member Functions

- virtual void print (QTextStream &strm) const override

Public Attributes

- QString noteStoreUrl
- Timestamp expires

  authenticationToken time of expiration.
- QString shardId

  usually is not used
- UserID userId

  same as PublicUserInfo::userId
- QString webApiUrlPrefix

  see PublicUserInfo::webApiUrlPrefix
- QString authenticationToken

  This is what this all was for!
- QList< QNetworkCookie > cookies

7.82.1 Detailed Description

Holds data that is returned by Evernote on a successful authentication

7.82.2 Member Function Documentation

7.82.2.1 print()

```
virtual void qevercloud::EvernoteOAuthWebView::OAuthResult::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.82.3 Member Data Documentation

7.82.3.1 authenticationToken

```
QString qevercloud::EvernoteOAuthWebView::OAuthResult::authenticationToken
```

This is what this all was for!

Cookies set by Evernote during OAuth procedure. In April 2020 these cookies silently started to be required for UserStore API calls. Probably it was a bug on Evernote side which hopefully would be fixed at some point but nevertheless cookies set during OAuth procedure are now available as a part of OAuth result and can be used in subsequent calls to Evernote service. These cookies can be set when creating an instance of IRequestContext. Then this context can be used in QEver↩ Cloud calls. Cookies from context would propagate to HTTP requests performed by QEverCloud. See this thread on Evernote discussions for more details: https://discussion.evernote.↩ com/topic/124257-calls-to-userstore-from-evernote-api-stopped-working

7.82.3.2 cookies

```
QList<QNetworkCookie> qevercloud::EvernoteOAuthWebView::OAuthResult::cookies
```

7.82.3.3 expires

```
Timestamp qevercloud::EvernoteOAuthWebView::OAuthResult::expires
```

authenticationToken time of expiration.

7.82.3.4 noteStoreUrl

```
QString qevercloud::EvernoteOAuthWebView::OAuthResult::noteStoreUrl
```

note store url for the user; no need to question UserStore::getNoteStoreUrl for it.

7.82.3.5 shardId

```
QString qevercloud::EvernoteOAuthWebView::OAuthResult::shardId
```

usually is not used

7.82.3.6 userId

```
UserID qevercloud::EvernoteOAuthWebView::OAuthResult::userId
```

same as PublicUserInfo::userId

7.82.3.7 webApiUrlPrefix

```
QString qevercloud::EvernoteOAuthWebView::OAuthResult::webApiUrlPrefix
```

see PublicUserInfo::webApiUrlPrefix

7.83 qevercloud::Optional< T > Class Template Reference

```
#include <Optional.h>
```

Public Member Functions

- Optional ()
- Optional (const Optional &o)
- template<typename X >
  Optional (const Optional< X > &o)
- Optional (const T &value)
- template<typename X >
  Optional (const X &value)
- Optional & operator= (const Optional &o)
- template<typename X >
  Optional & operator= (const Optional< X > &o)
- Optional & operator= (const T &value)
- template<typename X >
  Optional & operator= (const X &value)
- operator const T & () const
- operator T& ()
- const T & ref () const
- T & ref ()
- bool isSet () const
  Checks if value is set.
- void clear ()
- Optional & init ()
- T * operator-> ()
- const T * operator-> () const
- T value (T defaultValue=T()) const
- bool isEqual (const Optional< T > &other) const
- bool operator== (const Optional< T > &other) const
- bool operator!= (const Optional< T > &other) const
- bool operator== (const T &other) const
- bool operator!= (const T &other) const
- Optional (Optional &&other)
- Optional & operator= (Optional &&other)
- Optional (T &&other)
- Optional & operator= (T &&other)

Friends

- template<typename X >
  class Optional
- void swap (Optional &first, Optional &second)

7.83.1 Detailed Description

template<typename T>
class qevercloud::Optional< T >

Supports optional values.

Most of the fields in the Evernote API structs are optional. But C++ does not support this notion directly.

To implement the concept of optional values conventional Thrift C++ wrapper uses a special field of a struct type where each field is of type bool with the same name as a field in the struct. This bool flag indicated was the field with the same name in the outer struct assigned or not.

While this method have its advantages (obviousness and simplicity) I found it very inconvenient to work with. You have to check by hand that both values (value itself and its __isset flag) are in sync. There is no checks whatsoever against an error and such an error is too easy to make.

So for my library I created a special class that supports the optional value notion explicitly. Basically Optional class just holds a bool value that tracks the fact that a value was assigned. But this tracking is done automatically and attempts to use unassigned values throw exceptions. In this way errors are much harder to make and it's harder for them to slip through testing unnoticed too.

7.83.2 Constructor & Destructor Documentation

7.83.2.1 Optional() [1/7]

```
template<typename T >
qevercloud::Optional< T >::Optional ( )  [inline]
```

Default constructor. Default Optional is not set.

7.83.2.2 Optional() [2/7]

```
template<typename T >
qevercloud::Optional< T >::Optional (
            const Optional< T > & o )  [inline]
```

Copy constructor.

7.83.2.3 Optional() [3/7]

```
template<typename T >
template<typename X >
qevercloud::Optional< T >::Optional (
            const Optional< X > & o )  [inline]
```

Template copy constructor. Allows to be initialized with Optional of any compatible type.

7.83.2.4 Optional() [4/7]

```
template<typename T >
qevercloud::Optional< T >::Optional (
            const T & value )  [inline]
```

Initialization with a value of the type T. Note: it's implicit.

7.83.2.5 Optional() [5/7]

```
template<typename T >
template<typename X >
qevercloud::Optional< T >::Optional (
            const X & value )  [inline]
```

Template initialization with a value of any compatible type.

7.83.2.6 Optional() [6/7]

```
template<typename T >
qevercloud::Optional< T >::Optional (
            Optional< T > && other )  [inline]
```

7.83.2.7 Optional() [7/7]

```
template<typename T >
qevercloud::Optional< T >::Optional (
            T && other )  [inline]
```

7.83.3 Member Function Documentation

7.83.3.1 clear()

```
template<typename T >
void qevercloud::Optional< T >::clear ( )  [inline]
```

Clears an Optional.

```
Optional<int> o(1);
o.clear();
cout « o; // exception
```

7.83.3.2 init()

```
template<typename T >
Optional & qevercloud::Optional< T >::init ( )  [inline]
```

Fast way to initialize an Optional with a default value.

It's very useful for structs.

```
struct S2 {int f;};
struct S {int f1; Optional<S2> f2};
Optional<S> o; // o.isSet() != ture
// without init() it's cumbersome to access struct fields
// it's especially true for nested Optionals
o = S(); // now o is set
o->f2 = S2(); // and o.f2 is set
o->f2->f = 1; // so at last it can be used
// with init() it's simpler
o.init()->f2.init()->f = 1;
```

Returns

reference to itself

7.83.3.3 isEqual()

```
template<typename T >
bool qevercloud::Optional< T >::isEqual (
            const Optional< T > & other ) const  [inline]
```

Two optionals are equal if they are both not set or have equal values.

7.83.3.4 isSet()

```
template<typename T >
bool qevercloud::Optional< T >::isSet ( ) const  [inline]
```

Checks if value is set.

Returns

true if Optional have been assigned a value and false otherwise.

Access to an unassigned ("not set") Optional lead to an exception.

7.83.3.5 operator const T &()

```
template<typename T >
qevercloud::Optional< T >::operator const T & ( ) const  [inline]
```

Implicit conversion of Optional<T> to T.

const version.

7.83.3.6 operator T&()

```
template<typename T >
qevercloud::Optional< T >::operator T& ( )  [inline]
```

Implicit conversion of Optional<T> to T.

Note: a reference is returned, not a copy.

7.83.3.7 operator"!=() [1/2]

```
template<typename T >
bool qevercloud::Optional< T >::operator!= (
            const Optional< T > & other ) const  [inline]
```

7.83.3.8 operator"!=() [2/2]

```
template<typename T >
bool qevercloud::Optional< T >::operator!= (
            const T & other ) const  [inline]
```

7.83.3.9 operator->() [1/2]

```
template<typename T >
T * qevercloud::Optional< T >::operator-> ( )  [inline]
```

Two syntatic constructs come to mind to use for implementation of access to a struct's/class's field directly from Optional.

One is the dereference operator. This is what boost::optional uses. While it's conceptually nice I found it to be not a very convenient way to refer to structs, especially nested ones. So I overloaded the operator-> and use smart pointer semantics.

```
struct S1 {int f1;};
struct S2 {Optional<S1> f2;};
Optional<S2> o;
*((*o).f2).f1; // boost way, not implemented
o->f2->f1;     // QEverCloud way
```

I admit, boost::optional is much more elegant overall. It uses pointer semantics quite clearly and in an instantly understandable way. It's universal (works for any type and not just structs). There is no need for implicit type concersions and so there is no subtleties because of it. And so on.

But then referring to struct fields is a chore. And this is the most common use case of Optionals in QEverCloud.

So I decided to use non-obvious-on-the-first-sight semantics for my Optional. IMO it's much more convenient when gotten used to.

7.83.3.10 operator->() [2/2]

```
template<typename T >
const T * qevercloud::Optional< T >::operator-> ( ) const  [inline]
```

const version.

7.83.3.11 operator=() [1/6]

```
template<typename T >
Optional & qevercloud::Optional< T >::operator= (
            const Optional< T > & o )  [inline]
```

Assignment.

7.83.3.12 operator=() [2/6]

```
template<typename T >
template<typename X >
Optional & qevercloud::Optional< T >::operator= (
            const Optional< X > & o )  [inline]
```

Template assignment with an Optional of any compatible value.

7.83.3.13 operator=() [3/6]

```
template<typename T >
Optional & qevercloud::Optional< T >::operator= (
            const T & value )  [inline]
```

Assignment with a value of the type T.

7.83.3.14 operator=() [4/6]

```
template<typename T >
template<typename X >
Optional & qevercloud::Optional< T >::operator= (
            const X & value )  [inline]
```

Template assignment with a value of any compatible type.

7.83.3.15 operator=() [5/6]

```
template<typename T >
Optional & qevercloud::Optional< T >::operator= (
            Optional< T > && other )  [inline]
```

7.83.3.16 operator=() [6/6]

```
template<typename T >
Optional & qevercloud::Optional< T >::operator= (
            T && other )  [inline]
```

7.83.3.17 operator==() [1/2]

```
template<typename T >
bool qevercloud::Optional< T >::operator== (
            const Optional< T > & other ) const  [inline]
```

7.83.3.18 operator==() [2/2]

```
template<typename T >
bool qevercloud::Optional< T >::operator== (
            const T & other ) const  [inline]
```

7.83.3.19 ref() [1/2]

```
template<typename T >
T & qevercloud::Optional< T >::ref ( )  [inline]
```

Returs reference to the holded value.

There are contexts in C++ where impicit type conversions can't help. For example:

```
Optional<QStringList> l;
for(auto s :  l); // you will hear from your compiler
```

Explicit type conversion can be used...

```
Optional<QStringList> l;
for(auto s :  static_cast<QStringList&>(l)); // ugh...
```

... but this is indeed ugly as hell.

So I implemented ref() function that returns a reference to the holded value.

```
Optional<QStringList> l;
for(auto s :  l.ref()); // not ideal but OK
```

7.83.3.20 ref() [2/2]

```
template<typename T >
const T & qevercloud::Optional< T >::ref ( ) const  [inline]
```

Returs a reference to the holded value.

const version.

7.83.3.21 value()

```
template<typename T >
T qevercloud::Optional< T >::value (
            T defaultValue = T() ) const  [inline]
```

The function is sometimes useful to simplify checking for the value being set.

Parameters

defaultValue	The value to return if Optional is not set.

Returns

Optional value if set and defaultValue otherwise.

7.83.4 Friends And Related Function Documentation

7.83.4.1 Optional

```
template<typename T >
template<typename X >
friend class Optional  [friend]
```

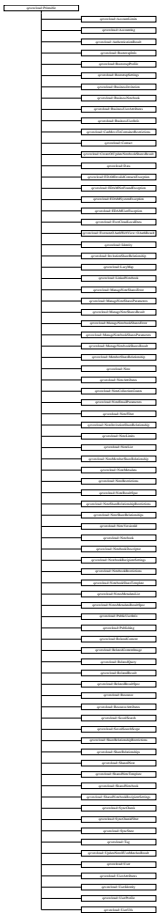
7.83.4.2 swap

```
template<typename T >
void swap (
            Optional< T > & first,
            Optional< T > & second )  [friend]
```

7.84 qevercloud::Printable Class Reference

```
#include <Printable.h>
```

Inheritance diagram for qevercloud::Printable:



Public Member Functions

- Printable ()=default
- virtual ~Printable ()=default
- virtual void print (QTextStream &strm) const =0
- virtual QString toString () const

Friends

- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &strm, const Printable &printable)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &dbg, const Printable &printable)

7.84.1 Constructor & Destructor Documentation

7.84.1.1 Printable()

```
qevercloud::Printable::Printable ( )  [default]
```

7.84.1.2 ~Printable()

```
virtual qevercloud::Printable::~Printable ( )  [virtual], [default]
```

7.84.2 Member Function Documentation

7.84.2.1 print()

```
virtual void qevercloud::Printable::print (
            QTextStream & strm ) const  [pure virtual]
```

Implemented in qevercloud::EverCloudLocalData, qevercloud::SyncState, qevercloud::SyncChunkFilter, qevercloud::NoteFilter, qevercloud::NotesMetadataResultSpec, qevercloud::NoteCollectionCounts, qevercloud::NoteResultSpec, qevercloud::NoteVersionId, qevercloud::RelatedQuery, qevercloud::RelatedResultSpec, qevercloud::ShareRelationshipRestrictions, qevercloud::MemberShareRe qevercloud::NoteShareRelationshipRestrictions, qevercloud::NoteMemberShareRelationship, qevercloud::NoteInvitationShareRelatio qevercloud::NoteShareRelationships, qevercloud::ManageNoteSharesParameters, qevercloud::Data, qevercloud::UserAttributes, qevercloud::BusinessUserAttributes, qevercloud::Accounting, qevercloud::BusinessUserInfo, qevercloud::AccountLimits, qevercloud::User, qevercloud::Contact, qevercloud::Identity, qevercloud::Tag, qevercloud::LazyMap, qevercloud::ResourceAttributes, qevercloud::Resource, qevercloud::NoteAttributes, qevercloud::SharedNote, qevercloud::NoteRestrictions, qevercloud::NoteLimits, qevercloud::Note, qevercloud::Publishing, qevercloud::BusinessNotebook, qevercloud::SavedSearchScope, qevercloud::SavedSearch, qevercloud::SharedNotebookRecipientSettings, qevercloud::NotebookRecipientSettings, qevercloud::SharedNotebook, qevercloud::CanMoveToContainerRestrictions, qevercloud::NotebookRestrictions, qevercloud::Notebook, qevercloud::LinkedNotebook, qevercloud::NotebookDescriptor, qevercloud::UserProfile, qevercloud::RelatedContentImage, qevercloud::RelatedContent, qevercloud::BusinessInvitation, qevercloud::UserIdentity, qevercloud::PublicUserInfo, qevercloud::UserUrls, qevercloud::AuthenticationResult, qevercloud::BootstrapSettings, qevercloud::BootstrapProfile, qevercloud::BootstrapInfo, qevercloud::EDAMUserException, qevercloud::EDAMSystemException, qevercloud::EDAMNotFoundException, qevercloud::EDAMInvalidContactsException, qevercloud::SyncChunk, qevercloud::NoteList, qevercloud::NoteMetadata, qevercloud::NotesMetadataList, qevercloud::NoteEmailParameters, qevercloud::RelatedResult, qevercloud::UpdateNoteIfUsnMatchesResult, qevercloud::InvitationShareRelationship, qevercloud::ShareRelationships, qevercloud::ManageNotebookSharesParameters, qevercloud::ManageNotebookSharesError, qevercloud::ManageNotebookSharesResult, qevercloud::SharedNoteTemplate, qevercloud::NotebookShareTemplate, qevercloud::CreateOrUpdateNotebookSharesResult, qevercloud::ManageNoteSharesError, qevercloud::ManageNoteSharesResult, and qevercloud::EvernoteOAuthWebView::OAuthResult.

7.84.2.2 toString()

```
virtual QString qevercloud::Printable::toString ( ) const  [virtual]
```

7.84.3 Friends And Related Function Documentation

7.84.3.1 operator<< [1/2]

```
QEVERCLOUD_EXPORT QDebug & operator<< (
            QDebug & dbg,
            const Printable & printable )  [friend]
```

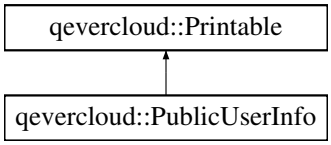
7.84.3.2 operator<< [2/2]

```
QEVERCLOUD_EXPORT QTextStream & operator<< (
            QTextStream & strm,
            const Printable & printable )  [friend]
```

7.85 qevercloud::PublicUserInfo Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::PublicUserInfo:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const PublicUserInfo &other) const
- bool operator!= (const PublicUserInfo &other) const

Public Attributes

- EverCloudLocalData localData
- UserID userId = 0
- Optional< ServiceLevel > serviceLevel
- Optional< QString > username
- Optional< QString > noteStoreUrl
- Optional< QString > webApiUrlPrefix

7.85.1 Detailed Description

This structure is used to provide publicly-available user information about a particular account.

7.85.2 Member Function Documentation

7.85.2.1 operator"!=()

```
bool qevercloud::PublicUserInfo::operator!= (
            const PublicUserInfo & other ) const  [inline]
```

7.85.2.2 operator==()

```
bool qevercloud::PublicUserInfo::operator== (
            const PublicUserInfo & other ) const  [inline]
```

7.85.2.3 print()

```
virtual void qevercloud::PublicUserInfo::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.85.3 Member Data Documentation

7.85.3.1 localData

```
EverCloudLocalData qevercloud::PublicUserInfo::localData
```

See the declaration of EverCloudLocalData for details

7.85.3.2 noteStoreUrl

```
Optional< QString > qevercloud::PublicUserInfo::noteStoreUrl
```

This field will contain the full URL that clients should use to make NoteStore requests to the server shard that contains that user's data. I.e. this is the URL that should be used to create the Thrift HTTP client transport to send messages to the NoteStore service for the account.

7.85.3.3 serviceLevel

```
Optional< ServiceLevel > qevercloud::PublicUserInfo::serviceLevel
```

The service level of the account.

7.85.3.4 userId

```
UserID qevercloud::PublicUserInfo::userId = 0
```

The unique numeric user identifier for the user account.

7.85.3.5 username

```
Optional< QString > qevercloud::PublicUserInfo::username
```

NOT DOCUMENTED

7.85.3.6 webApiUrlPrefix

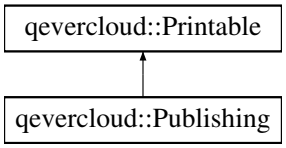
```
Optional< QString > qevercloud::PublicUserInfo::webApiUrlPrefix
```

This field will contain the initial part of the URLs that should be used to make requests to Evernote's thin client "web API", which provide optimized operations for clients that aren't capable of manipulating the full contents of accounts via the full Thrift data model. Clients should concatenate the relative path for the various servlets onto the end of this string to construct the full URL, as documented on our developer web site.

7.86 qevercloud::Publishing Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::Publishing:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Publishing &other) const
- bool operator!= (const Publishing &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > uri
- Optional< NoteSortOrder > order
- Optional< bool > ascending
- Optional< QString > publicDescription

7.86.1 Detailed Description

If a Notebook has been opened to the public, the Notebook will have a reference to one of these structures, which gives the location and optional description of the externally-visible public Notebook.

7.86.2 Member Function Documentation

7.86.2.1 operator"!=()

```
bool qevercloud::Publishing::operator!= (
            const Publishing & other ) const  [inline]
```

7.86.2.2 operator==()

```
bool qevercloud::Publishing::operator== (
            const Publishing & other ) const  [inline]
```

7.86.2.3 print()

```
virtual void qevercloud::Publishing::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.86.3 Member Data Documentation

7.86.3.1 ascending

```
Optional< bool > qevercloud::Publishing::ascending
```

If this is set to true, then the public notes will be displayed in ascending order (e.g. from oldest to newest). Otherwise, the notes will be displayed in descending order (e.g. newest to oldest).

7.86.3.2 localData

```
EverCloudLocalData qevercloud::Publishing::localData
```

See the declaration of EverCloudLocalData for details

7.86.3.3 order

```
Optional< NoteSortOrder > qevercloud::Publishing::order
```

When the notes are publicly displayed, they will be sorted based on the requested criteria.

7.86.3.4 publicDescription

```
Optional< QString > qevercloud::Publishing::publicDescription
```

This field may be used to provide a short description of the notebook, which may be displayed when (e.g.) the notebook is shown in a public view. Can't begin or end with a space.
Length: EDAM_PUBLISHING_DESCRIPTION_LEN_MIN - EDAM_PUBLISHING_DESCRIPTION_LEN_MAX
Regex: EDAM_PUBLISHING_DESCRIPTION_REGEX

7.86.3.5 uri

```
Optional< QString > qevercloud::Publishing::uri
```

If this field is present, then the notebook is published for mass consumption on the Internet under the provided URI, which is relative to a defined base publishing URI defined by the service. This field can only be modified via the web service GUI ... publishing cannot be modified via an offline client.
Length: EDAM_PUBLISHING_URI_LEN_MIN - EDAM_PUBLISHING_URI_LEN_MAX
Regex: EDAM_PUBLISHING_URI_REGEX

7.87 qevercloud::QAssociativeContainerConstReferenceWrapper< Container > Class Template Reference

```
#include <Helpers.h>
```

Classes

- struct iterator

Public Member Functions

- QAssociativeContainerConstReferenceWrapper (const Container &container)
- iterator begin () const
- iterator end () const

7.87.1 Constructor & Destructor Documentation

7.87.1.1 QAssociativeContainerConstReferenceWrapper()

```
template<typename Container >
qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::QAssociativeContainer↩
ConstReferenceWrapper (
            const Container & container )  [inline]
```

7.87.2 Member Function Documentation

7.87.2.1 begin()

```
template<typename Container >
iterator qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::begin ( ) const
[inline]
```

7.87.2.2 end()

```
template<typename Container >
iterator qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::end ( ) const
[inline]
```

7.88 qevercloud::QAssociativeContainerReferenceWrapper< Container > Class Template Reference

```
#include <Helpers.h>
```

Classes

- struct iterator

Public Member Functions

- QAssociativeContainerReferenceWrapper (Container &container)
- iterator begin ()
- iterator end ()

7.88.1 Constructor & Destructor Documentation

7.88.1.1 QAssociativeContainerReferenceWrapper()

```
template<typename Container >
qevercloud::QAssociativeContainerReferenceWrapper< Container >::QAssociativeContainerReference↩
Wrapper (
            Container & container )  [inline]
```

7.88.2 Member Function Documentation

7.88.2.1 begin()

```
template<typename Container >
iterator qevercloud::QAssociativeContainerReferenceWrapper< Container >::begin ( )  [inline]
```

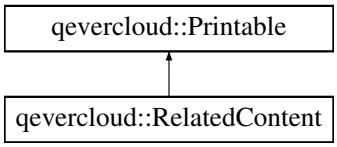
7.88.2.2 end()

```
template<typename Container >
iterator qevercloud::QAssociativeContainerReferenceWrapper< Container >::end ( )  [inline]
```

7.89 qevercloud::RelatedContent Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::RelatedContent:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const RelatedContent &other) const
- bool operator!= (const RelatedContent &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > contentId
- Optional< QString > title
- Optional< QString > url
- Optional< QString > sourceId
- Optional< QString > sourceUrl
- Optional< QString > sourceFaviconUrl
- Optional< QString > sourceName
- Optional< Timestamp > date
- Optional< QString > teaser
- Optional< QList< RelatedContentImage > > thumbnails
- Optional< RelatedContentType > contentType
- Optional< RelatedContentAccess > accessType
- Optional< QString > visibleUrl
- Optional< QString > clipUrl
- Optional< Contact > contact
- Optional< QStringList > authors

Properties

- OptionalQList< RelatedContentImage > thumbnails

7.89.1 Detailed Description

A structure identifying one snippet of related content (some information that is not part of an Evernote account but might still be relevant to the user).

7.89.2 Member Function Documentation

7.89.2.1 operator"!=()

```
bool qevercloud::RelatedContent::operator!= (
            const RelatedContent & other ) const  [inline]
```

7.89.2.2 operator==()

```
bool qevercloud::RelatedContent::operator== (
            const RelatedContent & other ) const  [inline]
```

7.89.2.3 print()

```
virtual void qevercloud::RelatedContent::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.89.3 Member Data Documentation

7.89.3.1 accessType

```
Optional< RelatedContentAccess > qevercloud::RelatedContent::accessType
```

An indication of how this content can be accessed. This type influences the semantics of the `url` parameter.

7.89.3.2 authors

```
Optional< QStringList > qevercloud::RelatedContent::authors
```

For News articles only. A list of names of the article authors, if available.

7.89.3.3 clipUrl

```
Optional< QString > qevercloud::RelatedContent::clipUrl
```

If set, the client should use this URL for clipping purposes, instead of the URL that was used to retrieve the content. The clipUrl may directly point to an .enex file, for example.

7.89.3.4 contact

```
Optional< Contact > qevercloud::RelatedContent::contact
```

If set, the client may use this Contact for messaging purposes. This will typically only be set for user profiles.

7.89.3.5 contentId

```
Optional< QString > qevercloud::RelatedContent::contentId
```

An identifier that uniquely identifies the content.

7.89.3.6 contentType

```
Optional< RelatedContentType > qevercloud::RelatedContent::contentType
```

The type of this related content.

7.89.3.7 date

```
Optional< Timestamp > qevercloud::RelatedContent::date
```

A timestamp telling the user about the recency of the content.

7.89.3.8 localData

```
EverCloudLocalData qevercloud::RelatedContent::localData
```

See the declaration of EverCloudLocalData for details

7.89.3.9 sourceFaviconUrl

```
Optional< QString > qevercloud::RelatedContent::sourceFaviconUrl
```

The favicon URL of the source which the content belongs to.

7.89.3.10 sourceId

```
Optional< QString > qevercloud::RelatedContent::sourceId
```

An identifier that uniquely identifies the source.

7.89.3.11 sourceName

```
Optional< QString > qevercloud::RelatedContent::sourceName
```

A human-readable name of the source that provided this content.

7.89.3.12 sourceUrl

```
Optional< QString > qevercloud::RelatedContent::sourceUrl
```

A URL the client can access to know more about the source.

7.89.3.13 teaser

```
Optional< QString > qevercloud::RelatedContent::teaser
```

A teaser text to show to the user; usually the first few sentences of the content, excluding the title.

7.89.3.14 thumbnails

```
Optional<QList<RelatedContentImage> > qevercloud::RelatedContent::thumbnails
```

A list of thumbnails the client can show in the snippet.

7.89.3.15 title

```
Optional< QString > qevercloud::RelatedContent::title
```

The main title to show.

7.89.3.16 url

```
Optional< QString > qevercloud::RelatedContent::url
```

The URL the client can use to retrieve the content.

7.89.3.17 visibleUrl

```
Optional< QString > qevercloud::RelatedContent::visibleUrl
```

If set, the client should show this URL to the user, instead of the URL that was used to retrieve the content. This URL should be used when opening the content in an external browser window, or when sharing with another person.

7.89.4 Property Documentation

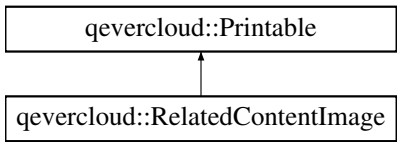
7.89.4.1 thumbnails

```
OptionalQList<RelatedContentImage> qevercloud::RelatedContent::thumbnails
```

7.90 qevercloud::RelatedContentImage Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::RelatedContentImage:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const RelatedContentImage &other) const
- bool operator!= (const RelatedContentImage &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > url
- Optional< qint32 > width
- Optional< qint32 > height
- Optional< double > pixelRatio
- Optional< qint32 > fileSize

7.90.1 Detailed Description

An external image that can be shown with a related content snippet, usually either a JPEG or PNG image. It is up to the client which image(s) are shown, depending on available screen real estate, resolution and aspect ratio.

7.90.2 Member Function Documentation

7.90.2.1 operator"!=()

```
bool qevercloud::RelatedContentImage::operator!= (
            const RelatedContentImage & other ) const  [inline]
```

7.90.2.2 operator==()

```
bool qevercloud::RelatedContentImage::operator== (
            const RelatedContentImage & other ) const  [inline]
```

7.90.2.3 print()

```
virtual void qevercloud::RelatedContentImage::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.90.3 Member Data Documentation

7.90.3.1 fileSize

`Optional< qint32 > qevercloud::RelatedContentImage::fileSize`

the size of the image file, in bytes

7.90.3.2 height

`Optional< qint32 > qevercloud::RelatedContentImage::height`

The height of the image, in pixels.

7.90.3.3 localData

`EverCloudLocalData qevercloud::RelatedContentImage::localData`

See the declaration of EverCloudLocalData for details

7.90.3.4 pixelRatio

`Optional< double > qevercloud::RelatedContentImage::pixelRatio`

the pixel ratio (usually either 1.0, 1.5 or 2.0)

7.90.3.5 url

`Optional< QString > qevercloud::RelatedContentImage::url`

The external URL of the image

7.90.3.6 width

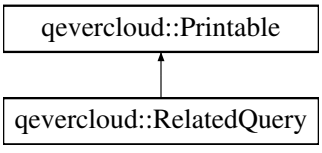
`Optional< qint32 > qevercloud::RelatedContentImage::width`

The width of the image, in pixels.

7.91 qevercloud::RelatedQuery Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::RelatedQuery:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const RelatedQuery &other) const
- bool operator!= (const RelatedQuery &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > noteGuid
- Optional< QString > plainText
- Optional< NoteFilter > filter
- Optional< QString > referenceUri
- Optional< QString > context
- Optional< QString > cacheKey

7.91.1 Detailed Description

A description of the thing for which we are searching for related entities.

You must specify either *noteGuid* or *plainText*, but not both. *filter* and *referenceUri* are optional.

7.91.2 Member Function Documentation

7.91.2.1 operator"!=()

```
bool qevercloud::RelatedQuery::operator!= (
            const RelatedQuery & other ) const  [inline]
```

7.91.2.2 operator==()

```
bool qevercloud::RelatedQuery::operator== (
            const RelatedQuery & other ) const  [inline]
```

7.91.2.3 print()

```
virtual void qevercloud::RelatedQuery::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.91.3 Member Data Documentation

7.91.3.1 cacheKey

```
Optional< QString > qevercloud::RelatedQuery::cacheKey
```

If set and non-empty, this is an indicator for the server whether it is actually necessary to perform a new findRelated call at all. Cache Keys are opaque strings which are returned by the server as part of "RelatedResult" in response to a "NoteStore.findRelated" query. Cache Keys are inherently query specific.

If set to an empty string, this indicates that the server should generate a cache key in the response as part of "RelatedResult".

If not set, the server will not attempt to generate a cache key at all.

7.91.3.2 context

```
Optional< QString > qevercloud::RelatedQuery::context
```

Specifies the context to consider when determining related results. Clients must leave this value unset unless they wish to explicitly specify a known non-default context.

7.91.3.3 filter

```
Optional< NoteFilter > qevercloud::RelatedQuery::filter
```

The list of criteria that will constrain the notes being considered related. Please note that some of the parameters may be ignored, such as *order* and *ascending*.

7.91.3.4 localData

```
EverCloudLocalData qevercloud::RelatedQuery::localData
```

See the declaration of EverCloudLocalData for details

7.91.3.5 noteGuid

```
Optional< QString > qevercloud::RelatedQuery::noteGuid
```

The GUID of an existing note in your account for which related entities will be found.

7.91.3.6 plainText

```
Optional< QString > qevercloud::RelatedQuery::plainText
```

A string of plain text for which to find related entities. You should provide a text block with a number of characters between EDAM_RELATED_PLAINTEXT_LEN_MIN and EDAM_RELATED_PLAINTEXT_LEN_MAX.

7.91.3.7 referenceUri

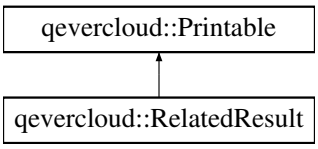
```
Optional< QString > qevercloud::RelatedQuery::referenceUri
```

A URI string specifying a reference entity, around which "relatedness" should be based. This can be an URL pointing to a web page, for example.

7.92 qevercloud::RelatedResult Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::RelatedResult:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const RelatedResult &other) const
- bool operator!= (const RelatedResult &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QList< Note > > notes
- Optional< QList< Notebook > > notebooks
- Optional< QList< Tag > > tags
- Optional< QList< NotebookDescriptor > > containingNotebooks
- Optional< QString > debugInfo
- Optional< QList< UserProfile > > experts
- Optional< QList< RelatedContent > > relatedContent
- Optional< QString > cacheKey
- Optional< qint32 > cacheExpires

Properties

- OptionalQList< Note > notes
- OptionalQList< Notebook > notebooks
- OptionalQList< Tag > tags
- OptionalQList< NotebookDescriptor > containingNotebooks
- OptionalQList< UserProfile > experts
- OptionalQList< RelatedContent > relatedContent

7.92.1 Detailed Description

The result of calling findRelated(). The contents of the notes, notebooks, and tags fields will be in decreasing order of expected relevance. It is possible that fewer results than requested will be returned even if there are enough distinct entities in the account in cases where the relevance is estimated to be low.

7.92.2 Member Function Documentation

7.92.2.1 operator"!=()

```
bool qevercloud::RelatedResult::operator!= (
            const RelatedResult & other ) const  [inline]
```

7.92.2.2 operator==()

```
bool qevercloud::RelatedResult::operator== (
            const RelatedResult & other ) const  [inline]
```

7.92.2.3 print()

```
virtual void qevercloud::RelatedResult::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.92.3 Member Data Documentation

7.92.3.1 cacheExpires

```
Optional< qint32 > qevercloud::RelatedResult::cacheExpires
```

If set, clients should reuse this response for any situations where the same input parameters are applicable for up to this many seconds after receiving this result.

After this time has passed, the client may request a new result from the service, but it should supply the stored cacheKey to the service when checking for an update.

7.92.3.2 cacheKey

`Optional< QString > qevercloud::RelatedResult::cacheKey`

If set and non-empty, this cache key may be used in subsequent "NoteStore.findRelated" calls (via "RelatedQuery") to re-use previous responses that were cached on the client-side, instead of actually performing another search.

If set to an empty string, this indicates that the server could not determine a specific key for this response, but the client should nevertheless remove any previously cached result for this request.

If unset/null, it is up to the client whether to re-use cached results or to use the server's response.

If set to the exact non-empty cache key that was specified in "RelatedQuery.cacheKey", this indicates that the server decided that cached results could be reused.

Depending on the cache key specified in the query, the "RelatedResult" may only be partially filled. For each set field, the client should replace the corresponding part in the previously cached result with the new partial result.

For example, for a specific query that has both "RelatedResultSpec.maxNotes" and "RelatedResultSpec.max↩ RelatedContent" set to positive values, the server may decide that the previously requested and cached *Related Content* are unchanged, but new results for *Related Notes* are available. The response will have a new cache key and have "RelatedResult.notes" set, but have "RelatedResult.relatedContent" unset (not just empty, but really unset).

In this situation, the client should replace any cached notes with the newly returned "RelatedResult.notes", but it can re-use the previously cached entries for "RelatedResult.relatedContent". List fields that are set, but empty indicate that no results could be found; the cache should be updated correspondingly.

7.92.3.3 containingNotebooks

`Optional<QList<NotebookDescriptor> > qevercloud::RelatedResult::containingNotebooks`

If `includeContainingNotebooks` is set to `true` in the RelatedResultSpec, return the list of notebooks to to which the returned related notes belong. The notebooks in this list will occur once per notebook GUID and are represented as NotebookDescriptor objects.

7.92.3.4 debugInfo

`Optional< QString > qevercloud::RelatedResult::debugInfo`

NOT DOCUMENTED

7.92.3.5 experts

`Optional<QList<UserProfile> > qevercloud::RelatedResult::experts`

If experts have been requested to be included, this will return a list of users within your business who have knowledge about the specified query.

7.92.3.6 localData

```
EverCloudLocalData qevercloud::RelatedResult::localData
```

See the declaration of EverCloudLocalData for details

7.92.3.7 notebooks

```
Optional<QList<Notebook> > qevercloud::RelatedResult::notebooks
```

If notebooks have been requested to be included, this will be the list of notebooks.

7.92.3.8 notes

```
Optional<QList<Note> > qevercloud::RelatedResult::notes
```

If notes have been requested to be included, this will be the list of notes.

7.92.3.9 relatedContent

```
Optional<QList<RelatedContent> > qevercloud::RelatedResult::relatedContent
```

If related content has been requested to be included, this will be the list of related content snippets.

7.92.3.10 tags

```
Optional<QList<Tag> > qevercloud::RelatedResult::tags
```

If tags have been requested to be included, this will be the list of tags.

7.92.4 Property Documentation

7.92.4.1 containingNotebooks

```
OptionalQList<NotebookDescriptor> qevercloud::RelatedResult::containingNotebooks
```

7.92.4.2 experts

```
OptionalQList<UserProfile> qevercloud::RelatedResult::experts
```

7.92.4.3 notebooks

```
OptionalQList<Notebook> qevercloud::RelatedResult::notebooks
```

7.92.4.4 notes

```
OptionalQList<Note> qevercloud::RelatedResult::notes
```

7.92.4.5 relatedContent

```
OptionalQList<RelatedContent> qevercloud::RelatedResult::relatedContent
```

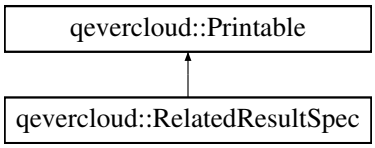
7.92.4.6 tags

```
OptionalQList<Tag> qevercloud::RelatedResult::tags
```

7.93 qevercloud::RelatedResultSpec Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::RelatedResultSpec:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const RelatedResultSpec &other) const
- bool operator!= (const RelatedResultSpec &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint32 > maxNotes
- Optional< qint32 > maxNotebooks
- Optional< qint32 > maxTags
- Optional< bool > writableNotebooksOnly
- Optional< bool > includeContainingNotebooks
- Optional< bool > includeDebugInfo
- Optional< qint32 > maxExperts
- Optional< qint32 > maxRelatedContent
- Optional< QSet< RelatedContentType > > relatedContentTypes

Properties

- OptionalQSet< RelatedContentType > relatedContentTypes

7.93.1 Detailed Description

A description of the thing for which the service will find related entities, via findRelated(), together with a description of what type of entities and how many you are seeking in the RelatedResult.

7.93.2 Member Function Documentation

7.93.2.1 operator"!=()

```
bool qevercloud::RelatedResultSpec::operator!= (
            const RelatedResultSpec & other ) const  [inline]
```

7.93.2.2 operator==()

```
bool qevercloud::RelatedResultSpec::operator== (
            const RelatedResultSpec & other ) const  [inline]
```

7.93.2.3 print()

```
virtual void qevercloud::RelatedResultSpec::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.93.3 Member Data Documentation

7.93.3.1 includeContainingNotebooks

```
Optional< bool > qevercloud::RelatedResultSpec::includeContainingNotebooks
```

If set to `true`, return the containingNotebooks field in the RelatedResult, which will contain the list of notebooks to to which the returned related notes belong.

7.93.3.2 includeDebugInfo

```
Optional< bool > qevercloud::RelatedResultSpec::includeDebugInfo
```

If set to `true`, indicate that debug information should be returned in the 'debugInfo' field of RelatedResult. Note that the call may be slower if this flag is set.

7.93.3.3 localData

```
EverCloudLocalData qevercloud::RelatedResultSpec::localData
```

See the declaration of EverCloudLocalData for details

7.93.3.4 maxExperts

```
Optional< qint32 > qevercloud::RelatedResultSpec::maxExperts
```

This can only be used when making a findRelated call against a business. Find users within your business who have knowledge about the specified query. No more than this many users will be returned. Any value greater than EDAM_RELATED_MAX_EXPERTS will be silently capped.

7.93.3.5 maxNotebooks

```
Optional< qint32 > qevercloud::RelatedResultSpec::maxNotebooks
```

Return notebooks that are related to the query, but no more than this many. Any value greater than EDAM↩ _RELATED_MAX_NOTEBOOKS will be silently capped. If you do not set this field, then no notebooks will be returned.

7.93.3.6 maxNotes

```
Optional< qint32 > qevercloud::RelatedResultSpec::maxNotes
```

Return notes that are related to the query, but no more than this many. Any value greater than EDAM_RELATED↩ _MAX_NOTES will be silently capped. If you do not set this field, then no notes will be returned.

7.93.3.7 maxRelatedContent

```
Optional< qint32 > qevercloud::RelatedResultSpec::maxRelatedContent
```

Return snippets of related content that is related to the query, but no more than this many. Any value greater than EDAM_RELATED_MAX_RELATED_CONTENT will be silently capped. If you do not set this field, then no related content will be returned.

7.93.3.8 maxTags

```
Optional< qint32 > qevercloud::RelatedResultSpec::maxTags
```

Return tags that are related to the query, but no more than this many. Any value greater than EDAM_RELATED_↩ MAX_TAGS will be silently capped. If you do not set this field, then no tags will be returned.

7.93.3.9 relatedContentTypes

```
Optional<QSet<RelatedContentType> > qevercloud::RelatedResultSpec::relatedContentTypes
```

Specifies the types of Related Content that should be returned.

7.93.3.10 writableNotebooksOnly

```
Optional< bool > qevercloud::RelatedResultSpec::writableNotebooksOnly
```

Require that all returned related notebooks are writable. The user will be able to create notes in all returned notebooks. However, individual notes returned may still belong to notebooks in which the user lacks the ability to create notes.

7.93.4 Property Documentation

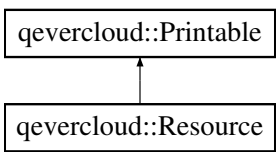
7.93.4.1 relatedContentTypes

```
OptionalQSet<RelatedContentType> qevercloud::RelatedResultSpec::relatedContentTypes
```

7.94 qevercloud::Resource Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::Resource:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Resource &other) const
- bool operator!= (const Resource &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > guid
- Optional< Guid > noteGuid
- Optional< Data > data
- Optional< QString > mime
- Optional< qint16 > width
- Optional< qint16 > height
- Optional< qint16 > duration
- Optional< bool > active
- Optional< Data > recognition
- Optional< ResourceAttributes > attributes
- Optional< qint32 > updateSequenceNum
- Optional< Data > alternateData

7.94.1 Detailed Description

Every media file that is embedded or attached to a note is represented through a Resource entry.

7.94.2 Member Function Documentation

7.94.2.1 operator"!=()

```
bool qevercloud::Resource::operator!= (
            const Resource & other ) const  [inline]
```

7.94.2.2 operator==()

```
bool qevercloud::Resource::operator== (
            const Resource & other ) const  [inline]
```

7.94.2.3 print()

```
virtual void qevercloud::Resource::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.94.3 Member Data Documentation

7.94.3.1 active

```
Optional< bool > qevercloud::Resource::active
```

If the resource is active or not.

7.94.3.2 alternateData

```
Optional< Data > qevercloud::Resource::alternateData
```

Some Resources may be assigned an alternate data format by the service which may be more appropriate for indexing or rendering than the original data provided by the user. In these cases, the alternate data form will be available via this Data element. If a Resource has no alternate form, this field will be unset.

7.94.3.3 attributes

```
Optional< ResourceAttributes > qevercloud::Resource::attributes
```

A list of the attributes for this resource.

7.94.3.4 data

```
Optional< Data > qevercloud::Resource::data
```

The contents of the resource. Maximum length: The data.body is limited to EDAM_RESOURCE_SIZE_MAX_FREE for free accounts and EDAM_RESOURCE_SIZE_MAX_PREMIUM for premium accounts.

7.94.3.5 duration

```
Optional< qint16 > qevercloud::Resource::duration
```

DEPRECATED: ignored.

7.94.3.6 guid

`Optional< Guid > qevercloud::Resource::guid`

The unique identifier of this resource. Will be set whenever a resource is retrieved from the service, but may be null when a client is creating a resource.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.94.3.7 height

`Optional< qint16 > qevercloud::Resource::height`

If set, this contains the display height of this resource, in pixels.

7.94.3.8 localData

`EverCloudLocalData qevercloud::Resource::localData`

See the declaration of EverCloudLocalData for details

7.94.3.9 mime

`Optional< QString > qevercloud::Resource::mime`

The MIME type for the embedded resource. E.g. "image/gif"
Length: EDAM_MIME_LEN_MIN - EDAM_MIME_LEN_MAX
Regex: EDAM_MIME_REGEX

7.94.3.10 noteGuid

`Optional< Guid > qevercloud::Resource::noteGuid`

The unique identifier of the Note that holds this Resource. Will be set whenever the resource is retrieved from the service, but may be null when a client is creating a resource.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.94.3.11 recognition

`Optional< Data > qevercloud::Resource::recognition`

If set, this will hold the encoded data that provides information on search and recognition within this resource.

7.94.3.12 updateSequenceNum

`Optional< qint32 > qevercloud::Resource::updateSequenceNum`

A number identifying the last transaction to modify the state of this object. The USN values are sequential within an account, and can be used to compare the order of modifications within the service.

7.94.3.13 width

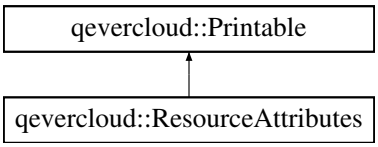
```
Optional< qint16 > qevercloud::Resource::width
```

If set, this contains the display width of this resource, in pixels.

7.95 qevercloud::ResourceAttributes Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::ResourceAttributes:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ResourceAttributes &other) const
- bool operator!= (const ResourceAttributes &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > sourceURL
- Optional< Timestamp > timestamp
- Optional< double > latitude
- Optional< double > longitude
- Optional< double > altitude
- Optional< QString > cameraMake
- Optional< QString > cameraModel
- Optional< bool > clientWillIndex
- Optional< QString > recoType
- Optional< QString > fileName
- Optional< bool > attachment
- Optional< LazyMap > applicationData

7.95.1 Detailed Description

Structure holding the optional attributes of a Resource

7.95.2 Member Function Documentation

7.95.2.1 operator"!=()

```
bool qevercloud::ResourceAttributes::operator!= (
            const ResourceAttributes & other ) const  [inline]
```

7.95.2.2 operator==()

```
bool qevercloud::ResourceAttributes::operator== (
            const ResourceAttributes & other ) const  [inline]
```

7.95.2.3 print()

```
virtual void qevercloud::ResourceAttributes::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.95.3 Member Data Documentation

7.95.3.1 altitude

```
Optional< double > qevercloud::ResourceAttributes::altitude
```

the altitude where the resource was captured

7.95.3.2 applicationData

```
Optional< LazyMap > qevercloud::ResourceAttributes::applicationData
```

Provides a location for applications to store a relatively small (4kb) blob of data associated with a Resource that is not visible to the user and that is opaque to the Evernote service. A single application may use at most one entry in this map, using its API consumer key as the map key. See the documentation for LazyMap for a description of when the actual map values are returned by the service.

To safely add or modify your application's entry in the map, use NoteStore.setResourceApplicationDataEntry. To safely remove your application's entry from the map, use NoteStore.unsetResourceApplicationDataEntry.

Minimum length of a name (key): EDAM_APPLICATIONDATA_NAME_LEN_MIN
Sum max size of key and value: EDAM_APPLICATIONDATA_ENTRY_LEN_MAX
Syntax regex for name (key): EDAM_APPLICATIONDATA_NAME_REGEX

7.95.3.3 attachment

```
Optional< bool > qevercloud::ResourceAttributes::attachment
```

this will be true if the resource should be displayed as an attachment, or false if the resource should be displayed inline (if possible).

7.95.3.4 cameraMake

```
Optional< QString > qevercloud::ResourceAttributes::cameraMake
```

information about an image's camera, e.g. as embedded in the image's EXIF data
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.95.3.5 cameraModel

```
Optional< QString > qevercloud::ResourceAttributes::cameraModel
```

information about an image's camera, e.g. as embedded in the image's EXIF data
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.95.3.6 clientWillIndex

```
Optional< bool > qevercloud::ResourceAttributes::clientWillIndex
```

if true, then the original client that submitted the resource plans to submit the recognition index for this resource at a later time.

7.95.3.7 fileName

```
Optional< QString > qevercloud::ResourceAttributes::fileName
```

if the resource came from a source that provided an explicit file name, the original name will be stored here. Many resources come from unnamed sources, so this will not always be set.

7.95.3.8 latitude

```
Optional< double > qevercloud::ResourceAttributes::latitude
```

the latitude where the resource was captured

7.95.3.9 localData

```
EverCloudLocalData qevercloud::ResourceAttributes::localData
```

See the declaration of EverCloudLocalData for details

7.95.3.10 longitude

```
Optional< double > qevercloud::ResourceAttributes::longitude
```

the longitude where the resource was captured

7.95.3.11 recoType

```
Optional< QString > qevercloud::ResourceAttributes::recoType
```

DEPRECATED - this field is no longer set by the service, so should be ignored.

7.95.3.12 sourceURL

```
Optional< QString > qevercloud::ResourceAttributes::sourceURL
```

the original location where the resource was hosted
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.95.3.13 timestamp

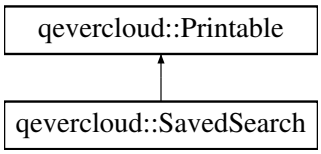
```
Optional< Timestamp > qevercloud::ResourceAttributes::timestamp
```

the date and time that is associated with this resource (e.g. the time embedded in an image from a digital camera with a clock)

7.96 qevercloud::SavedSearch Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::SavedSearch:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SavedSearch &other) const
- bool operator!= (const SavedSearch &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > guid
- Optional< QString > name
- Optional< QString > query
- Optional< QueryFormat > format
- Optional< qint32 > updateSequenceNum
- Optional< SavedSearchScope > scope

7.96.1 Detailed Description

A named search associated with the account that can be quickly re-used.

7.96.2 Member Function Documentation

7.96.2.1 operator"!=()

```
bool qevercloud::SavedSearch::operator!= (
            const SavedSearch & other ) const  [inline]
```

7.96.2.2 operator==()

```
bool qevercloud::SavedSearch::operator== (
            const SavedSearch & other ) const  [inline]
```

7.96.2.3 print()

```
virtual void qevercloud::SavedSearch::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.96.3 Member Data Documentation

7.96.3.1 format

`Optional< QueryFormat > qevercloud::SavedSearch::format`

The format of the query string, to determine how to parse and process it.

7.96.3.2 guid

`Optional< Guid > qevercloud::SavedSearch::guid`

The unique identifier of this search. Will be set by the service, so may be omitted by the client when creating.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.96.3.3 localData

`EverCloudLocalData qevercloud::SavedSearch::localData`

See the declaration of EverCloudLocalData for details

7.96.3.4 name

`Optional< QString > qevercloud::SavedSearch::name`

The name of the saved search to display in the GUI. The account may only contain one search with a given name (case-insensitive compare). Can't begin or end with a space.
Length: EDAM_SAVED_SEARCH_NAME_LEN_MIN - EDAM_SAVED_SEARCH_NAME_LEN_MAX
Regex: EDAM_SAVED_SEARCH_NAME_REGEX

7.96.3.5 query

`Optional< QString > qevercloud::SavedSearch::query`

A string expressing the search to be performed.
Length: EDAM_SAVED_SEARCH_QUERY_LEN_MIN - EDAM_SAVED_SEARCH_QUERY_LEN_MAX

7.96.3.6 scope

`Optional< SavedSearchScope > qevercloud::SavedSearch::scope`

Specifies the set of notes that should be included in the search, if possible.

Clients are expected to search as much of the desired scope as possible, with the understanding that a given client may not be able to cover the full specified scope. For example, when executing a search that includes notes in both the owner's account and business notebooks, a mobile client may choose to only search within the user's account because it is not capable of searching both scopes simultaneously. When a search across multiple scopes is not possible, a client may choose which scope to search based on the current application context. If a client cannot search any of the desired scopes, it should refuse to execute the search.

7.96.3.7 updateSequenceNum

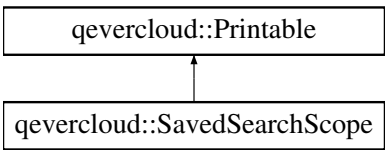
```
Optional< qint32 > qevercloud::SavedSearch::updateSequenceNum
```

A number identifying the last transaction to modify the state of this object. The USN values are sequential within an account, and can be used to compare the order of modifications within the service.

7.97 qevercloud::SavedSearchScope Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::SavedSearchScope:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SavedSearchScope &other) const
- bool operator!= (const SavedSearchScope &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > includeAccount
- Optional< bool > includePersonalLinkedNotebooks
- Optional< bool > includeBusinessLinkedNotebooks

7.97.1 Detailed Description

A structure defining the scope of a SavedSearch.

7.97.2 Member Function Documentation

7.97.2.1 operator"!=()

```
bool qevercloud::SavedSearchScope::operator!= (
            const SavedSearchScope & other ) const  [inline]
```

7.97.2.2 operator==()

```
bool qevercloud::SavedSearchScope::operator== (
            const SavedSearchScope & other ) const  [inline]
```

7.97.2.3 print()

```
virtual void qevercloud::SavedSearchScope::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.97.3 Member Data Documentation

7.97.3.1 includeAccount

```
Optional< bool > qevercloud::SavedSearchScope::includeAccount
```

The search should include notes from the account that contains the SavedSearch.

7.97.3.2 includeBusinessLinkedNotebooks

```
Optional< bool > qevercloud::SavedSearchScope::includeBusinessLinkedNotebooks
```

The search should include notes within those shared notebooks that the user has joined that are business notebooks in the business that the user is currently a member of.

7.97.3.3 includePersonalLinkedNotebooks

```
Optional< bool > qevercloud::SavedSearchScope::includePersonalLinkedNotebooks
```

The search should include notes within those shared notebooks that the user has joined that are NOT business notebooks.

7.97.3.4 localData

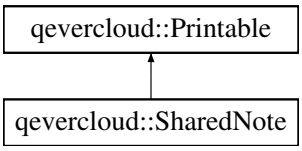
```
EverCloudLocalData qevercloud::SavedSearchScope::localData
```

See the declaration of EverCloudLocalData for details

7.98 qevercloud::SharedNote Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::SharedNote:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SharedNote &other) const
- bool operator!= (const SharedNote &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< UserID > sharerUserID
- Optional< Identity > recipientIdentity
- Optional< SharedNotePrivilegeLevel > privilege
- Optional< Timestamp > serviceCreated
- Optional< Timestamp > serviceUpdated
- Optional< Timestamp > serviceAssigned

7.98.1 Detailed Description

Represents a relationship between a note and a single share invitation recipient. The recipient is identified via an Identity, and has a given privilege that specifies what actions they may take on the note.

7.98.2 Member Function Documentation

7.98.2.1 operator"!=()

```
bool qevercloud::SharedNote::operator!= (
            const SharedNote & other ) const  [inline]
```

7.98.2.2 operator==()

```
bool qevercloud::SharedNote::operator== (
            const SharedNote & other ) const  [inline]
```

7.98.2.3 print()

```
virtual void qevercloud::SharedNote::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.98.3 Member Data Documentation

7.98.3.1 localData

```
EverCloudLocalData qevercloud::SharedNote::localData
```

See the declaration of EverCloudLocalData for details

7.98.3.2 privilege

```
Optional< SharedNotePrivilegeLevel > qevercloud::SharedNote::privilege
```

The privilege level that the share grants to the recipient.

7.98.3.3 recipientIdentity

```
Optional< Identity > qevercloud::SharedNote::recipientIdentity
```

The identity of the recipient of the share. For a given note, there may be only one SharedNote per recipient identity. Only recipientIdentity.id is guaranteed to be set. Other fields on the Identity may or my not be set based on the requesting user's relationship with the recipient.

7.98.3.4 serviceAssigned

```
Optional< Timestamp > qevercloud::SharedNote::serviceAssigned
```

The time at which the share was assigned to a specific recipient user ID.

7.98.3.5 serviceCreated

`Optional< Timestamp > qevercloud::SharedNote::serviceCreated`

The time at which the share was created.

7.98.3.6 serviceUpdated

`Optional< Timestamp > qevercloud::SharedNote::serviceUpdated`

The time at which the share was last updated.

7.98.3.7 sharerUserID

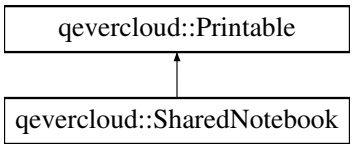
`Optional< UserID > qevercloud::SharedNote::sharerUserID`

The user ID of the user who shared the note with the recipient.

7.99 qevercloud::SharedNotebook Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::SharedNotebook:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SharedNotebook &other) const
- bool operator!= (const SharedNotebook &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< qint64 > id
- Optional< UserID > userId
- Optional< Guid > notebookGuid
- Optional< QString > email
- Optional< IdentityID > recipientIdentityId
- Optional< bool > notebookModifiable
- Optional< Timestamp > serviceCreated
- Optional< Timestamp > serviceUpdated
- Optional< QString > globalId
- Optional< QString > username
- Optional< SharedNotebookPrivilegeLevel > privilege
- Optional< SharedNotebookRecipientSettings > recipientSettings
- Optional< UserID > sharerUserId
- Optional< QString > recipientUsername
- Optional< UserID > recipientUserId
- Optional< Timestamp > serviceAssigned

7.99.1 Detailed Description

Shared notebooks represent a relationship between a notebook and a single share invitation recipient.

7.99.2 Member Function Documentation

7.99.2.1 operator"!=()

```
bool qevercloud::SharedNotebook::operator!= (
            const SharedNotebook & other ) const  [inline]
```

7.99.2.2 operator==()

```
bool qevercloud::SharedNotebook::operator== (
            const SharedNotebook & other ) const  [inline]
```

7.99.2.3 print()

```
virtual void qevercloud::SharedNotebook::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.99.3 Member Data Documentation

7.99.3.1 email

```
Optional< QString > qevercloud::SharedNotebook::email
```

A string containing a display name for the recipient of the share. This may be an email address, a phone number, a full name, or some other descriptive string This field is read-only to clients. It will be filled in by the service when returning shared notebooks.

7.99.3.2 globalId

```
Optional< QString > qevercloud::SharedNotebook::globalId
```

An immutable, opaque string that acts as a globally unique identifier for this shared notebook record. You can use this field to match linked notebook and shared notebook records as well as to create new LinkedNotebook records. This field replaces the deprecated shareKey field.

7.99.3.3 id

`Optional< qint64 > qevercloud::SharedNotebook::id`

The primary identifier of the share, which is not globally unique.

7.99.3.4 localData

`EverCloudLocalData qevercloud::SharedNotebook::localData`

See the declaration of EverCloudLocalData for details

7.99.3.5 notebookGuid

`Optional< Guid > qevercloud::SharedNotebook::notebookGuid`

The GUID of the notebook that has been shared.

7.99.3.6 notebookModifiable

`Optional< bool > qevercloud::SharedNotebook::notebookModifiable`

DEPRECATED

7.99.3.7 privilege

`Optional< SharedNotebookPrivilegeLevel > qevercloud::SharedNotebook::privilege`

The privilege level granted to the notebook, activity stream, and invitations. See the corresponding enumeration for details.

7.99.3.8 recipientIdentityId

`Optional< IdentityID > qevercloud::SharedNotebook::recipientIdentityId`

The IdentityID of the share recipient. If present, only the user who has claimed that identity may access this share.

7.99.3.9 recipientSettings

`Optional< SharedNotebookRecipientSettings > qevercloud::SharedNotebook::recipientSettings`

Settings intended for use only by the recipient of this shared notebook. You should skip setting this value unless you want to change the value contained inside the structure, and only if you are the recipient.

7.99.3.10 recipientUserId

`Optional< UserID > qevercloud::SharedNotebook::recipientUserId`

The id of the user who can access this share. This is the id for the user with the username in recipientUsername. This value is read-only and set by the service. Value set by clients will be ignored. This field may be unset for unjoined notebooks and is always set if serviceAssigned is set. Clients should prefer this field over recipient↩ Username unless they need to use usernames directly.

7.99.3.11 recipientUsername

`Optional< QString > qevercloud::SharedNotebook::recipientUsername`

The username of the user who can access this share. This is the username for the user with the id in recipientUserId. This value can be set by clients when calling shareNotebook(...), and that will result in the created SharedNotebook being assigned to a user. This value is always set if serviceAssigned is set.

7.99.3.12 serviceAssigned

`Optional< Timestamp > qevercloud::SharedNotebook::serviceAssigned`

The date this SharedNotebook was assigned (i.e. has been associated with an Evernote user whose user ID is set in recipientUserId). Unset if the SharedNotebook is not assigned. This field is a read-only value that is set by the service.

7.99.3.13 serviceCreated

`Optional< Timestamp > qevercloud::SharedNotebook::serviceCreated`

The date that the owner first created the share with the specific email address.

7.99.3.14 serviceUpdated

`Optional< Timestamp > qevercloud::SharedNotebook::serviceUpdated`

The date the shared notebook was last updated on the service. This will be updated when authenticateToShared↩ Notebook is called the first time with a shared notebook (i.e. when the username is bound to that shared notebook), and also when the SharedNotebook privilege is updated as part of a shareNotebook(...) call, as well as on any calls to updateSharedNotebook(...).

7.99.3.15 sharerUserId

`Optional< UserID > qevercloud::SharedNotebook::sharerUserId`

The user id of the user who shared a notebook via this shared notebook instance. This may not be the same as userId, since a user with full access to a notebook may have created a new share for that notebook. For Business, this represents the user who shared the business notebook. This field is currently unset for a SharedNotebook created by joining a notebook that has been published to the business.

7.99.3.16 userId

```
Optional< UserID > qevercloud::SharedNotebook::userId
```

The user id of the owner of the notebook.

7.99.3.17 username

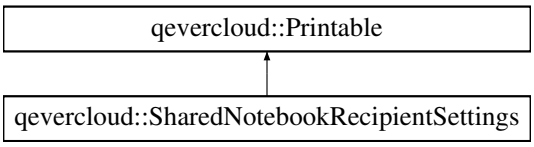
```
Optional< QString > qevercloud::SharedNotebook::username
```

DEPRECATED. The username of the user who can access this share. This value is read-only to clients. It will be filled in by the service when returning shared notebooks.

7.100 qevercloud::SharedNotebookRecipientSettings Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::SharedNotebookRecipientSettings:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SharedNotebookRecipientSettings &other) const
- bool operator!= (const SharedNotebookRecipientSettings &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > reminderNotifyEmail
- Optional< bool > reminderNotifyInApp

7.100.1 Detailed Description

Settings meant for the recipient of a shared notebook, such as for indicating which types of notifications the recipient wishes for reminders, etc.

The reminderNotifyEmail and reminderNotifyInApp fields have a 3-state read value but a 2-state write value. On read, it is possible to observe "unset", true, or false. The initial state is "unset". When you choose to set a value, you may set it to either true or false, but you cannot unset the value. Once one of these members has a true/false value, it will always have a true/false value.

7.100.2 Member Function Documentation

7.100.2.1 operator"!=()

```
bool qevercloud::SharedNotebookRecipientSettings::operator!= (
            const SharedNotebookRecipientSettings & other ) const  [inline]
```

7.100.2.2 operator==()

```
bool qevercloud::SharedNotebookRecipientSettings::operator== (
            const SharedNotebookRecipientSettings & other ) const  [inline]
```

7.100.2.3 print()

```
virtual void qevercloud::SharedNotebookRecipientSettings::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.100.3 Member Data Documentation

7.100.3.1 localData

```
EverCloudLocalData qevercloud::SharedNotebookRecipientSettings::localData
```

See the declaration of EverCloudLocalData for details

7.100.3.2 reminderNotifyEmail

```
Optional< bool > qevercloud::SharedNotebookRecipientSettings::reminderNotifyEmail
```

Indicates that the user wishes to receive daily e-mail notifications for reminders associated with the notebook. This may be true only for business notebooks that belong to the business of which the user is a member. You may only set this value on a notebook in your business.

7.100.3.3 reminderNotifyInApp

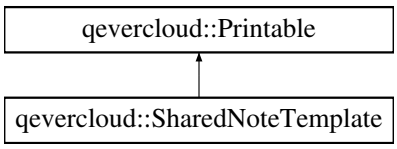
```
Optional< bool > qevercloud::SharedNotebookRecipientSettings::reminderNotifyInApp
```

Indicates that the user wishes to receive notifications for reminders by applications that support providing such notifications. The exact nature of the notification is defined by the individual applications.

7.101 qevercloud::SharedNoteTemplate Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::SharedNoteTemplate:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SharedNoteTemplate &other) const
- bool operator!= (const SharedNoteTemplate &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > noteGuid
- Optional< MessageThreadID > recipientThreadId
- Optional< QList< Contact > > recipientContacts
- Optional< SharedNotePrivilegeLevel > privilege

Properties

- OptionalQList< Contact > recipientContacts

7.101.1 Detailed Description

A structure used to share a note with one or more recipients at a given privilege.

7.101.2 Member Function Documentation

7.101.2.1 operator"!=()

```
bool qevercloud::SharedNoteTemplate::operator!= (
            const SharedNoteTemplate & other ) const  [inline]
```

7.101.2.2 operator==()

```
bool qevercloud::SharedNoteTemplate::operator== (
            const SharedNoteTemplate & other ) const  [inline]
```

7.101.2.3 print()

```
virtual void qevercloud::SharedNoteTemplate::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.101.3 Member Data Documentation

7.101.3.1 localData

```
EverCloudLocalData qevercloud::SharedNoteTemplate::localData
```

See the declaration of EverCloudLocalData for details

7.101.3.2 noteGuid

```
Optional< Guid > qevercloud::SharedNoteTemplate::noteGuid
```

The GUID of the note.

7.101.3.3 privilege

```
Optional< SharedNotePrivilegeLevel > qevercloud::SharedNoteTemplate::privilege
```

The privilege level to be granted.

7.101.3.4 recipientContacts

```
Optional<QList<Contact> > qevercloud::SharedNoteTemplate::recipientContacts
```

The recipients of the note share specified as a list of contacts. This should only be set if the sharing takes place before the thread is created. Use recipientThreadId instead when sharing with an existing thread. Either this field or recipientThreadId must be set.

7.101.3.5 recipientThreadId

```
Optional< MessageThreadID > qevercloud::SharedNoteTemplate::recipientThreadId
```

The recipients of the note share specified as a messaging thread ID. If you have an existing messaging thread to share the note with, specify its ID here instead of recipientContacts in order to properly support defunct identities. The sharer must be a participant of the thread. Either this field or recipientContacts must be set.

7.101.4 Property Documentation

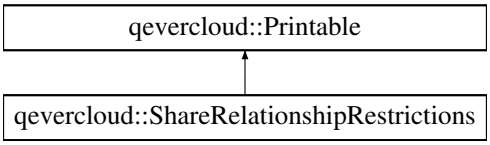
7.101.4.1 recipientContacts

```
OptionalQList<Contact> qevercloud::SharedNoteTemplate::recipientContacts
```

7.102 qevercloud::ShareRelationshipRestrictions Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::ShareRelationshipRestrictions:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ShareRelationshipRestrictions &other) const
- bool operator!= (const ShareRelationshipRestrictions &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > noSetReadOnly
- Optional< bool > noSetReadPlusActivity
- Optional< bool > noSetModify
- Optional< bool > noSetFullAccess

7.102.1 Detailed Description

NO DOC COMMENT ID FOUND

7.102.2 Member Function Documentation

7.102.2.1 operator"!=()

```
bool qevercloud::ShareRelationshipRestrictions::operator!= (
            const ShareRelationshipRestrictions & other ) const  [inline]
```

7.102.2.2 operator==()

```
bool qevercloud::ShareRelationshipRestrictions::operator== (
            const ShareRelationshipRestrictions & other ) const  [inline]
```

7.102.2.3 print()

```
virtual void qevercloud::ShareRelationshipRestrictions::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.102.3 Member Data Documentation

7.102.3.1 localData

```
EverCloudLocalData qevercloud::ShareRelationshipRestrictions::localData
```

See the declaration of EverCloudLocalData for details

7.102.3.2 noSetFullAccess

```
Optional< bool > qevercloud::ShareRelationshipRestrictions::noSetFullAccess
```

NOT DOCUMENTED

7.102.3.3 noSetModify

```
Optional< bool > qevercloud::ShareRelationshipRestrictions::noSetModify
```

NOT DOCUMENTED

7.102.3.4 noSetReadOnly

```
Optional< bool > qevercloud::ShareRelationshipRestrictions::noSetReadOnly
```

NOT DOCUMENTED

7.102.3.5 noSetReadPlusActivity

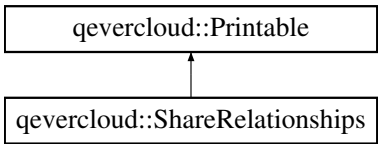
```
Optional< bool > qevercloud::ShareRelationshipRestrictions::noSetReadPlusActivity
```

NOT DOCUMENTED

7.103 qevercloud::ShareRelationships Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::ShareRelationships:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const ShareRelationships &other) const
- bool operator!= (const ShareRelationships &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QList< InvitationShareRelationship > > invitations
- Optional< QList< MemberShareRelationship > > memberships
- Optional< ShareRelationshipRestrictions > invitationRestrictions

Properties

- OptionalQList< InvitationShareRelationship > invitations
- OptionalQList< MemberShareRelationship > memberships

7.103.1 Detailed Description

Captures a collection of share relationships for a notebook, for example, as returned by the getNotebookShares method. The share relationships fall into two broad categories: members, and invitations that can be used to become members.

7.103.2 Member Function Documentation

7.103.2.1 operator"!=()

```
bool qevercloud::ShareRelationships::operator!= (
            const ShareRelationships & other ) const  [inline]
```

7.103.2.2 operator==()

```
bool qevercloud::ShareRelationships::operator== (
            const ShareRelationships & other ) const  [inline]
```

7.103.2.3 print()

```
virtual void qevercloud::ShareRelationships::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.103.3 Member Data Documentation

7.103.3.1 invitationRestrictions

```
Optional< ShareRelationshipRestrictions > qevercloud::ShareRelationships::invitationRestrictions
```

The restrictions on what privileges may be granted to invitees to this notebook. These restrictions may be specific to the calling user or to the notebook itself. They represent the union of all possible invite cases, so it is possible that once the recipient of the invitation has been identified by the service, such as by a business auto-join, the actual assigned privilege may change.

7.103.3.2 invitations

```
Optional<QList<InvitationShareRelationship> > qevercloud::ShareRelationships::invitations
```

A list of open invitations that can be redeemed into memberships to the notebook.

7.103.3.3 localData

```
EverCloudLocalData qevercloud::ShareRelationships::localData
```

See the declaration of EverCloudLocalData for details

7.103.3.4 memberships

```
Optional<QList<MemberShareRelationship> > qevercloud::ShareRelationships::memberships
```

A list of memberships of the notebook. A member is identified by their Evernote UserID and has rights to access the notebook.

7.103.4 Property Documentation

7.103.4.1 invitations

```
OptionalQList<InvitationShareRelationship> qevercloud::ShareRelationships::invitations
```

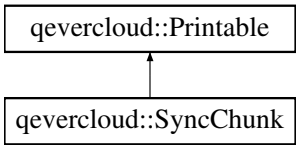
7.103.4.2 memberships

```
OptionalQList<MemberShareRelationship> qevercloud::ShareRelationships::memberships
```

7.104 qevercloud::SyncChunk Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::SyncChunk:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SyncChunk &other) const
- bool operator!= (const SyncChunk &other) const

Public Attributes

- EverCloudLocalData localData
- Timestamp currentTime = 0
- Optional< qint32 > chunkHighUSN
- qint32 updateCount = 0
- Optional< QList< Note > > notes
- Optional< QList< Notebook > > notebooks
- Optional< QList< Tag > > tags
- Optional< QList< SavedSearch > > searches
- Optional< QList< Resource > > resources
- Optional< QList< Guid > > expungedNotes
- Optional< QList< Guid > > expungedNotebooks
- Optional< QList< Guid > > expungedTags
- Optional< QList< Guid > > expungedSearches
- Optional< QList< LinkedNotebook > > linkedNotebooks
- Optional< QList< Guid > > expungedLinkedNotebooks

Properties

- OptionalQList< Note > notes
- OptionalQList< Notebook > notebooks
- OptionalQList< Tag > tags
- OptionalQList< SavedSearch > searches
- OptionalQList< Resource > resources
- OptionalQList< Guid > expungedNotes
- OptionalQList< Guid > expungedNotebooks
- OptionalQList< Guid > expungedTags
- OptionalQList< Guid > expungedSearches
- OptionalQList< LinkedNotebook > linkedNotebooks
- OptionalQList< Guid > expungedLinkedNotebooks

7.104.1 Detailed Description

This structure is given out by the NoteStore when a client asks to receive the current state of an account. The client asks for the server's state one chunk at a time in order to allow clients to retrieve the state of a large account without needing to transfer the entire account in a single message.

The server always gives SyncChunks using an ascending series of Update Sequence Numbers (USNs).

7.104.2 Member Function Documentation

7.104.2.1 operator"!=()

```
bool qevercloud::SyncChunk::operator!= (
            const SyncChunk & other ) const  [inline]
```

7.104.2.2 operator==()

```
bool qevercloud::SyncChunk::operator== (
            const SyncChunk & other ) const  [inline]
```

7.104.2.3 print()

```
virtual void qevercloud::SyncChunk::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.104.3 Member Data Documentation

7.104.3.1 chunkHighUSN

```
Optional< qint32 > qevercloud::SyncChunk::chunkHighUSN
```

The highest USN for any of the data objects represented in this sync chunk. If there are no objects in the chunk, this will not be set.

7.104.3.2 currentTime

```
Timestamp qevercloud::SyncChunk::currentTime = 0
```

The server's current date and time.

7.104.3.3 expungedLinkedNotebooks

```
Optional<QList<Guid> > qevercloud::SyncChunk::expungedLinkedNotebooks
```

If present, the GUIDs of all of the LinkedNotebooks that were permanently expunged in this chunk.

7.104.3.4 expungedNotebooks

```
Optional<QList<Guid> > qevercloud::SyncChunk::expungedNotebooks
```

If present, the GUIDs of all of the notebooks that were permanently expunged in this chunk. When a notebook is expunged, this implies that all of its child notes (and their resources) were also expunged.

7.104.3.5 expungedNotes

```
Optional<QList<Guid> > qevercloud::SyncChunk::expungedNotes
```

If present, the GUIDs of all of the notes that were permanently expunged in this chunk.

7.104.3.6 expungedSearches

```
Optional<QList<Guid> > qevercloud::SyncChunk::expungedSearches
```

If present, the GUIDs of all of the saved searches that were permanently expunged in this chunk.

7.104.3.7 expungedTags

```
Optional<QList<Guid> > qevercloud::SyncChunk::expungedTags
```

If present, the GUIDs of all of the tags that were permanently expunged in this chunk.

7.104.3.8 linkedNotebooks

```
Optional<QList<LinkedNotebook> > qevercloud::SyncChunk::linkedNotebooks
```

If present, this is a list of non-expunged LinkedNotebooks that have a USN in this chunk.

7.104.3.9 localData

```
EverCloudLocalData qevercloud::SyncChunk::localData
```

See the declaration of EverCloudLocalData for details

7.104.3.10 notebooks

```
Optional<QList<Notebook> > qevercloud::SyncChunk::notebooks
```

If present, this is a list of non-expunged notebooks that have a USN in this chunk.

7.104.3.11 notes

```
Optional<QList<Note> > qevercloud::SyncChunk::notes
```

If present, this is a list of non-expunged notes that have a USN in this chunk. This will include notes that are "deleted" but not expunged (i.e. in the trash). The notes will include their list of tags and resources, but the note content, resource content, resource recognition data and resource alternate data will not be supplied.

7.104.3.12 resources

```
Optional<QList<Resource> > qevercloud::SyncChunk::resources
```

If present, this is a list of the non-expunged resources that have a USN in this chunk. This will include the metadata for each resource, but not its binary contents or recognition data, which must be retrieved separately.

7.104.3.13 searches

```
Optional<QList<SavedSearch> > qevercloud::SyncChunk::searches
```

If present, this is a list of non-expunged searches that have a USN in this chunk.

7.104.3.14 tags

```
Optional<QList<Tag> > qevercloud::SyncChunk::tags
```

If present, this is a list of the non-expunged tags that have a USN in this chunk.

7.104.3.15 updateCount

```
qint32 qevercloud::SyncChunk::updateCount = 0
```

The total number of updates that have been performed in the service for this account. This is equal to the highest USN within the account at the point that this SyncChunk was generated. If updateCount and chunkHighUSN are identical, that means that this is the last chunk in the account ... there is no more recent information.

7.104.4 Property Documentation

7.104.4.1 expungedLinkedNotebooks

```
OptionalQList<Guid> qevercloud::SyncChunk::expungedLinkedNotebooks
```

7.104.4.2 expungedNotebooks

```
OptionalQList<Guid> qevercloud::SyncChunk::expungedNotebooks
```

7.104.4.3 expungedNotes

```
OptionalQList<Guid> qevercloud::SyncChunk::expungedNotes
```

7.104.4.4 expungedSearches

```
OptionalQList<Guid> qevercloud::SyncChunk::expungedSearches
```

7.104.4.5 expungedTags

```
OptionalQList<Guid> qevercloud::SyncChunk::expungedTags
```

7.104.4.6 linkedNotebooks

```
OptionalQList<LinkedNotebook> qevercloud::SyncChunk::linkedNotebooks
```

7.104.4.7 notebooks

```
OptionalQList<Notebook> qevercloud::SyncChunk::notebooks
```

7.104.4.8 notes

```
OptionalQList<Note> qevercloud::SyncChunk::notes
```

7.104.4.9 resources

```
OptionalQList<Resource> qevercloud::SyncChunk::resources
```

7.104.4.10 searches

```
OptionalQList<SavedSearch> qevercloud::SyncChunk::searches
```

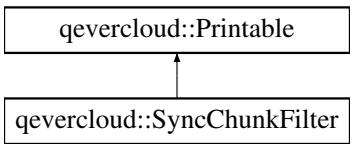
7.104.4.11 tags

```
OptionalQList<Tag> qevercloud::SyncChunk::tags
```

7.105 qevercloud::SyncChunkFilter Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::SyncChunkFilter:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SyncChunkFilter &other) const
- bool operator!= (const SyncChunkFilter &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< bool > includeNotes
- Optional< bool > includeNoteResources
- Optional< bool > includeNoteAttributes
- Optional< bool > includeNotebooks
- Optional< bool > includeTags
- Optional< bool > includeSearches
- Optional< bool > includeResources
- Optional< bool > includeLinkedNotebooks
- Optional< bool > includeExpunged
- Optional< bool > includeNoteApplicationDataFullMap
- Optional< bool > includeResourceApplicationDataFullMap
- Optional< bool > includeNoteResourceApplicationDataFullMap
- Optional< bool > includeSharedNotes
- Optional< bool > omitSharedNotebooks
- Optional< QString > requireNoteContentClass
- Optional< QSet< QString > > notebookGuids

Properties

- OptionalQSet< QString > notebookGuids

7.105.1 Detailed Description

This structure is used with the 'getFilteredSyncChunk' call to provide fine-grained control over the data that's returned when a client needs to synchronize with the service. Each flag in this structure specifies whether to include one class of data in the results of that call.

7.105.2 Member Function Documentation

7.105.2.1 operator"!=()

```
bool qevercloud::SyncChunkFilter::operator!= (
            const SyncChunkFilter & other ) const  [inline]
```

7.105.2.2 operator==()

```
bool qevercloud::SyncChunkFilter::operator== (
            const SyncChunkFilter & other ) const  [inline]
```

7.105.2.3 print()

```
virtual void qevercloud::SyncChunkFilter::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.105.3 Member Data Documentation

7.105.3.1 includeExpunged

```
Optional< bool > qevercloud::SyncChunkFilter::includeExpunged
```

If true, then the server will include the 'expunged' data for any type of included data. For example, if 'includeTags' and 'includeExpunged' are both true, then the SyncChunks.expungedTags field will be set with the GUIDs of tags that have been expunged from the server.

7.105.3.2 includeLinkedNotebooks

```
Optional< bool > qevercloud::SyncChunkFilter::includeLinkedNotebooks
```

If true, then the server will include the SyncChunks.linkedNotebooks field.

7.105.3.3 includeNoteApplicationDataFullMap

```
Optional< bool > qevercloud::SyncChunkFilter::includeNoteApplicationDataFullMap
```

If true, then the values for the applicationData map will be filled in, assuming notes and note attributes are being returned. Otherwise, only the keysOnly field will be filled in.

7.105.3.4 includeNoteAttributes

```
Optional< bool > qevercloud::SyncChunkFilter::includeNoteAttributes
```

If true, then the server will include the 'attributes' field on all of the Notes that are in SyncChunks.notes. If 'include↩ Notes' is false, then this will have no effect.

7.105.3.5 includeNotebooks

```
Optional< bool > qevercloud::SyncChunkFilter::includeNotebooks
```

If true, then the server will include the SyncChunks.notebooks field

7.105.3.6 includeNoteResourceApplicationDataFullMap

```
Optional< bool > qevercloud::SyncChunkFilter::includeNoteResourceApplicationDataFullMap
```

If true, then the fullMap values for the applicationData map will be filled in for resources found inside of notes, assuming resources are being returned in notes (includeNoteResources is true). Otherwise, only the keysOnly field will be filled in.

7.105.3.7 includeNoteResources

```
Optional< bool > qevercloud::SyncChunkFilter::includeNoteResources
```

If true, then the server will include the 'resources' field on all of the Notes that are in SyncChunk.notes. If 'include↩ Notes' is false, then this will have no effect.

7.105.3.8 includeNotes

```
Optional< bool > qevercloud::SyncChunkFilter::includeNotes
```

If true, then the server will include the SyncChunks.notes field

7.105.3.9 includeResourceApplicationDataFullMap

```
Optional< bool > qevercloud::SyncChunkFilter::includeResourceApplicationDataFullMap
```

If true, then the fullMap values for the applicationData map will be filled in, assuming resources and resource attributes are being returned (includeResources is true). Otherwise, only the keysOnly field will be filled in.

7.105.3.10 includeResources

```
Optional< bool > qevercloud::SyncChunkFilter::includeResources
```

If true, then the server will include the SyncChunks.resources field. Since the Resources are also provided with their Note (in the Notes.resources list), this is primarily useful for clients that want to watch for changes to individual Resources due to recognition data being added.

7.105.3.11 includeSearches

```
Optional< bool > qevercloud::SyncChunkFilter::includeSearches
```

If true, then the server will include the SyncChunks.searches field

7.105.3.12 includeSharedNotes

```
Optional< bool > qevercloud::SyncChunkFilter::includeSharedNotes
```

If true, then the service will include the sharedNotes field on all notes that are in SyncChunk.notes. If 'includeNotes' is false, then this will have no effect.

7.105.3.13 includeTags

```
Optional< bool > qevercloud::SyncChunkFilter::includeTags
```

If true, then the server will include the SyncChunks.tags field

7.105.3.14 localData

```
EverCloudLocalData qevercloud::SyncChunkFilter::localData
```

See the declaration of EverCloudLocalData for details

7.105.3.15 notebookGuids

```
Optional<QSet<QString> > qevercloud::SyncChunkFilter::notebookGuids
```

If set, then restrict the returned notebooks, notes, and resources to those associated with one of the notebooks whose GUID is provided in this list. If not set, then no filtering on notebook GUID will be performed. If you set this field, you may not also set includeExpunged else an EDAMUserException with an error code of DATA_CONFLICT will be thrown. You only need to set this field if you want to restrict the returned entities more than what your authentication token allows you to access. For example, there is no need to set this field for single notebook tokens such as for shared notebooks. You can use this field to synchronize a newly discovered business notebook while incrementally synchronizing a business account, in which case you will only need to consider setting includeNotes, includeNotebooks, includeNoteAttributes, includeNoteResources, and maybe some of the "FullMap" fields.

7.105.3.16 omitSharedNotebooks

```
Optional< bool > qevercloud::SyncChunkFilter::omitSharedNotebooks
```

NOT DOCUMENTED

7.105.3.17 requireNoteContentClass

```
Optional< QString > qevercloud::SyncChunkFilter::requireNoteContentClass
```

If set, then only send notes whose content class matches this value. The value can be a literal match or, if the last character is an asterisk, a prefix match.

7.105.4 Property Documentation

7.105.4.1 notebookGuids

```
OptionalQSet<QString> qevercloud::SyncChunkFilter::notebookGuids
```

7.106 qevercloud::IDurableService::SyncRequest Struct Reference

```
#include <DurableService.h>
```

Public Member Functions

- SyncRequest (const char *name, QString description, SyncServiceCall &&call)

Public Attributes

- const char * m_name
- QString m_description
- SyncServiceCall m_call

7.106.1 Constructor & Destructor Documentation

7.106.1.1 SyncRequest()

```
qevercloud::IDurableService::SyncRequest::SyncRequest (
            const char * name,
            QString description,
            SyncServiceCall && call )  [inline]
```

7.106.2 Member Data Documentation

7.106.2.1 m_call

```
SyncServiceCall qevercloud::IDurableService::SyncRequest::m_call
```

7.106.2.2 m_description

```
QString qevercloud::IDurableService::SyncRequest::m_description
```

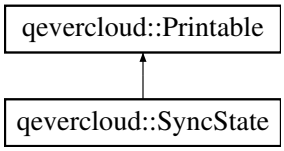
7.106.2.3 m_name

```
const char* qevercloud::IDurableService::SyncRequest::m_name
```

7.107 qevercloud::SyncState Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::SyncState:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const SyncState &other) const
- bool operator!= (const SyncState &other) const

Public Attributes

- EverCloudLocalData localData
- Timestamp currentTime = 0
- Timestamp fullSyncBefore = 0
- qint32 updateCount = 0
- Optional< qint64 > uploaded
- Optional< Timestamp > userLastUpdated
- Optional< MessageEventID > userMaxMessageEventId

7.107.1 Detailed Description

This structure encapsulates the information about the state of the user's account for the purpose of "state based" synchronization.

7.107.2 Member Function Documentation

7.107.2.1 operator"!=()

```
bool qevercloud::SyncState::operator!= (
            const SyncState & other ) const  [inline]
```

7.107.2.2 operator==()

```
bool qevercloud::SyncState::operator== (
            const SyncState & other ) const  [inline]
```

7.107.2.3 print()

```
virtual void qevercloud::SyncState::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.107.3 Member Data Documentation

7.107.3.1 currentTime

```
Timestamp qevercloud::SyncState::currentTime = 0
```

The server's current date and time.

7.107.3.2 fullSyncBefore

```
Timestamp qevercloud::SyncState::fullSyncBefore = 0
```

The cutoff date and time for client caches to be updated via incremental synchronization. Any clients that were last synched with the server before this date/time must do a full resync of all objects. This cutoff point will change over time as archival data is deleted or special circumstances on the service require resynchronization.

7.107.3.3 localData

```
EverCloudLocalData qevercloud::SyncState::localData
```

See the declaration of EverCloudLocalData for details

7.107.3.4 updateCount

```
qint32 qevercloud::SyncState::updateCount = 0
```

Indicates the total number of transactions that have been committed within the account. This reflects (for example) the number of discrete additions or modifications that have been made to the data in this account (tags, notes, resources, etc.). This number is the "high water mark" for Update Sequence Numbers (USN) within the account.

7.107.3.5 uploaded

```
Optional< qint64 > qevercloud::SyncState::uploaded
```

The total number of bytes that have been uploaded to this account in the current monthly period. This can be compared against Accounting.uploadLimit (from the UserStore) to determine how close the user is to their monthly upload limit. This value may not be present if the SyncState has been retrieved by a caller that only has read access to the account.

7.107.3.6 userLastUpdated

```
Optional< Timestamp > qevercloud::SyncState::userLastUpdated
```

The last time when a user's account level information was changed. This value is the latest time when a modification was made to any of the following: accounting information (billing, quota, premium status, etc.), user attributes and business user information (business name, business user attributes, etc.) if the user is in a business. Clients who need to maintain account information about a User should watch this field for updates rather than polling User↩ Store.getUser for updates. Here is the basic flow that clients should follow:

1. Call NoteStore.getSyncState to retrieve the SyncState object
2. Compare SyncState.userLastUpdated to previously stored value: if (SyncState.userLastUpdated > previousValue) call UserStore.getUser to get the latest User object; else do nothing;
3. Update previousValue = SyncState.userLastUpdated

7.107.3.7 userMaxMessageEventId

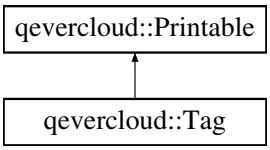
```
Optional< MessageEventID > qevercloud::SyncState::userMaxMessageEventId
```

The greatest MessageEventID for this user's account. Clients that do a full sync should store this value locally and compare their local copy to the value returned by getSyncState to determine if they need to sync with MessageStore. This value will be omitted if the user has never sent or received a message.

7.108 qevercloud::Tag Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::Tag:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const Tag &other) const
- bool operator!= (const Tag &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Guid > guid
- Optional< QString > name
- Optional< Guid > parentGuid
- Optional< qint32 > updateSequenceNum

7.108.1 Detailed Description

A tag within a user's account is a unique name which may be organized a simple hierarchy.

7.108.2 Member Function Documentation

7.108.2.1 operator"!=()

```
bool qevercloud::Tag::operator!= (
            const Tag & other ) const  [inline]
```

7.108.2.2 operator==()

```
bool qevercloud::Tag::operator== (
            const Tag & other ) const  [inline]
```

7.108.2.3 print()

```
virtual void qevercloud::Tag::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.108.3 Member Data Documentation

7.108.3.1 guid

```
Optional< Guid > qevercloud::Tag::guid
```

The unique identifier of this tag. Will be set by the service, so may be omitted by the client when creating the Tag.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.108.3.2 localData

```
EverCloudLocalData qevercloud::Tag::localData
```

See the declaration of EverCloudLocalData for details

7.108.3.3 name

```
Optional< QString > qevercloud::Tag::name
```

A sequence of characters representing the tag's identifier. Case is preserved, but is ignored for comparisons. This means that an account may only have one tag with a given name, via case-insensitive comparison, so an account may not have both "food" and "Food" tags. May not contain a comma (','), and may not begin or end with a space.
Length: EDAM_TAG_NAME_LEN_MIN - EDAM_TAG_NAME_LEN_MAX
Regex: EDAM_TAG_NAME_REGEX

7.108.3.4 parentGuid

```
Optional< Guid > qevercloud::Tag::parentGuid
```

If this is set, then this is the GUID of the tag that holds this tag within the tag organizational hierarchy. If this is not set, then the tag has no parent and it is a "top level" tag. Cycles are not allowed (e.g. a->parent->parent == a) and will be rejected by the service.
Length: EDAM_GUID_LEN_MIN - EDAM_GUID_LEN_MAX
Regex: EDAM_GUID_REGEX

7.108.3.5 updateSequenceNum

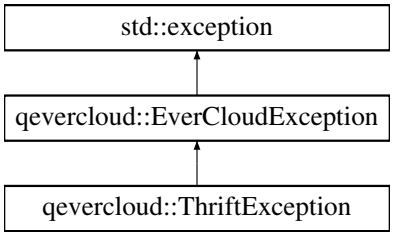
```
Optional< qint32 > qevercloud::Tag::updateSequenceNum
```

A number identifying the last transaction to modify the state of this object. The USN values are sequential within an account, and can be used to compare the order of modifications within the service.

7.109 qevercloud::ThriftException Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::ThriftException:



Public Types

- enum class Type {
  UNKNOWN = 0 , UNKNOWN_METHOD = 1 , INVALID_MESSAGE_TYPE = 2 , WRONG_METHOD_NAME = 3 ,
  BAD_SEQUENCE_ID = 4 , MISSING_RESULT = 5 , INTERNAL_ERROR = 6 , PROTOCOL_ERROR = 7 ,
  INVALID_DATA = 8 }

Public Member Functions

- ThriftException ()
- ThriftException (Type type)
- ThriftException (Type type, QString message)
- virtual ~ThriftException () noexcept override
- bool operator== (const ThriftException &other) const
- bool operator!= (const ThriftException &other) const
- Type type () const
- const char * what () const noexcept override
- virtual EverCloudExceptionDataPtr exceptionData () const override

Protected Attributes

- Type m_type

Friends

- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &strm, const Type type)

7.109.1 Detailed Description

Errors of the Thrift protocol level. It could be wrongly formatted parameters or return values for example.

7.109.2 Member Enumeration Documentation

7.109.2.1 Type

```
enum class qevercloud::ThriftException::Type  [strong]
```

Enumerator

UNKNOWN	
UNKNOWN_METHOD	
INVALID_MESSAGE_TYPE	
WRONG_METHOD_NAME	
BAD_SEQUENCE_ID	
MISSING_RESULT	
INTERNAL_ERROR	
PROTOCOL_ERROR	
INVALID_DATA	

7.109.3 Constructor & Destructor Documentation

7.109.3.1 ThriftException() [1/3]

```
qevercloud::ThriftException::ThriftException ( )
```

7.109.3.2 ThriftException() [2/3]

```
qevercloud::ThriftException::ThriftException (
            Type type )
```

7.109.3.3 ThriftException() [3/3]

```
qevercloud::ThriftException::ThriftException (
            Type type,
            QString message )
```

7.109.3.4 ~ThriftException()

```
virtual qevercloud::ThriftException::~ThriftException ( )  [override], [virtual], [noexcept]
```

7.109.4 Member Function Documentation

7.109.4.1 exceptionData()

```
virtual EverCloudExceptionDataPtr qevercloud::ThriftException::exceptionData ( ) const  [override],
[virtual]
```

Reimplemented from qevercloud::EverCloudException.

7.109.4.2 operator"!=()

```
bool qevercloud::ThriftException::operator!= (
            const ThriftException & other ) const
```

7.109.4.3 operator==()

```
bool qevercloud::ThriftException::operator== (
            const ThriftException & other ) const
```

7.109.4.4 type()

```
Type qevercloud::ThriftException::type ( ) const
```

7.109.4.5 what()

```
const char * qevercloud::ThriftException::what ( ) const  [override], [virtual], [noexcept]
```

Reimplemented from qevercloud::EverCloudException.

7.109.5 Friends And Related Function Documentation

7.109.5.1 operator<<

```
QEVERCLOUD_EXPORT QTextStream & operator<< (
            QTextStream & strm,
            const Type type )  [friend]
```

7.109.6 Member Data Documentation

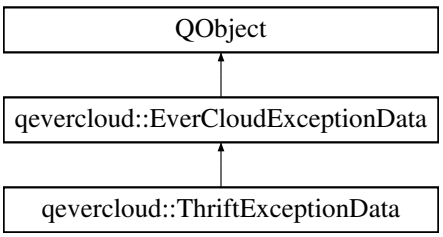
7.109.6.1 m_type

```
Type qevercloud::ThriftException::m_type  [protected]
```

7.110 qevercloud::ThriftExceptionData Class Reference

```
#include <Exceptions.h>
```

Inheritance diagram for qevercloud::ThriftExceptionData:



Public Member Functions

- ThriftExceptionData (QString error, ThriftException::Type type)
- virtual void throwException () const override

Protected Attributes

- ThriftException::Type m_type

Additional Inherited Members

7.110.1 Detailed Description

Asynchronous API counterpart of ThriftException. See EverCloudExceptionData for more details.

7.110.2 Constructor & Destructor Documentation

7.110.2.1 ThriftExceptionData()

```
qevercloud::ThriftExceptionData::ThriftExceptionData (
            QString error,
            ThriftException::Type type )  [explicit]
```

7.110.3 Member Function Documentation

7.110.3.1 throwException()

```
virtual void qevercloud::ThriftExceptionData::throwException ( ) const  [override], [virtual]
```

If you want to throw an exception that corresponds to a received EverCloudExceptionData descendant than call this function. Do not use `throw` statement, it's not polymorphic.

Reimplemented from qevercloud::EverCloudExceptionData.

7.110.4 Member Data Documentation

7.110.4.1 m_type

```
ThriftException::Type qevercloud::ThriftExceptionData::m_type  [protected]
```

7.111 qevercloud::Thumbnail Class Reference

The class is for downloading thumbnails for notes and resources from Evernote servers.

```
#include <Thumbnail.h>
```

Public Types

- enum class ImageType { PNG , JPEG , GIF , BMP }

Public Member Functions

- Thumbnail ()

  Default constructor.
- Thumbnail (QString host, QString shardId, QString authenticationToken, int size=300, ImageType image↩ Type=ImageType::PNG)

  Constructs Thumbnail.
- virtual ~Thumbnail ()
- Thumbnail & setHost (QString host)
- Thumbnail & setShardId (QString shardId)
- Thumbnail & setAuthenticationToken (QString authenticationToken)
- Thumbnail & setSize (int size)
- Thumbnail & setImageType (ImageType imageType)
- QByteArray download (Guid guid, const bool isPublic=false, const bool isResourceGuid=false, const qint64 timeoutMsec=30000)

  Downloads the thumbnail for a resource or a note.
- AsyncResult * downloadAsync (Guid guid, const bool isPublic=false, const bool isResourceGuid=false, const qint64 timeoutMsec=30000)
- std::pair< QNetworkRequest, QByteArray > createPostRequest (qevercloud::Guid guid, bool isPublic=false, bool isResourceGuid=false)

  Prepares a POST request for a thumbnail download.

Friends

- QEVERCLOUD_EXPORT QTextStream & operator<< (QTextStream &strm, const ImageType imageType)
- QEVERCLOUD_EXPORT QDebug & operator<< (QDebug &dbg, const ImageType imageType)

7.111.1 Detailed Description

The class is for downloading thumbnails for notes and resources from Evernote servers.

These thumbnails are not available with general EDAM Thrift interface as explained in the documentation.

Usage:

```
Thumbnail thumb("www.evernote.com", sharId, authenticationToken);
QByteArray pngImage = thumb.download(noteGuid);
```

By default 300x300 PNG images are requested.

7.111.2 Member Enumeration Documentation

7.111.2.1 ImageType

```
enum class qevercloud::Thumbnail::ImageType  [strong]
```

Specifies image type of the returned thumbnail.

Can be PNG, JPEG, GIF or BMP.

Enumerator

PNG	
JPEG	
GIF	
BMP	

7.111.3 Constructor & Destructor Documentation

7.111.3.1 Thumbnail() [1/2]

```
qevercloud::Thumbnail::Thumbnail ( )
```

Default constructor.

host, shardId, authenticationToken have to be specified before calling download or createPostRequest

7.111.3.2 Thumbnail() [2/2]

```
qevercloud::Thumbnail::Thumbnail (
            QString host,
            QString shardId,
            QString authenticationToken,
            int size = 300,
            ImageType imageType = ImageType::PNG )
```

Constructs Thumbnail.

Parameters

host	www.evernote.com or sandbox.evernote.com
shardId	You can get the value from UserStore service or as a result of an authentication.
authenticationToken	For working private notes/resources you must supply a valid authentication token. For public resources the value specified is not used.
size	The size of the thumbnail. Evernote supports values from from 1 to 300. By default 300 is used.
imageType	Thumbnail image type. See ImageType. By default PNG is used.

7.111.3.3 ~Thumbnail()

```
virtual qevercloud::Thumbnail::~Thumbnail ( )  [virtual]
```

7.111.4 Member Function Documentation

7.111.4.1 createPostRequest()

```
std::pair< QNetworkRequest, QByteArray > qevercloud::Thumbnail::createPostRequest (
            qevercloud::Guid guid,
            bool isPublic = false,
            bool isResourceGuid = false )
```

Prepares a POST request for a thumbnail download.

Parameters

guid	The note or resource guid
isPublic	Specify true for public notes/resources. In this case authentication token is not sent to with the request as it shoud be according to the docs.
isResourceGuid	true if guid denotes a resource and false if it denotes a note.

Returns

a pair of QNetworkRequest for the POST request and data that must be posted with the request.

7.111.4.2 download()

```
QByteArray qevercloud::Thumbnail::download (
            Guid guid,
            const bool isPublic = false,
            const bool isResourceGuid = false,
            const qint64 timeoutMsec = 30000 )
```

Downloads the thumbnail for a resource or a note.

Parameters

guid	The note or resource guid
isPublic	Specify true for public notes/resources. In this case authentication token is not sent to with the request as it shoud be according to the docs.
isResourceGuid	true if guid denotes a resource and false if it denotes a note.
timeoutMsec	Timeout for download request in milliseconds

Returns

downloaded data.

7.111.4.3 downloadAsync()

```
AsyncResult * qevercloud::Thumbnail::downloadAsync (
            Guid guid,
            const bool isPublic = false,
            const bool isResourceGuid = false,
            const qint64 timeoutMsec = 30000 )
```

Asynchronous version of download function

7.111.4.4 setAuthenticationToken()

```
Thumbnail & qevercloud::Thumbnail::setAuthenticationToken (
            QString authenticationToken )
```

Parameters

authenticationToken	For working private notes/resources you must supply a valid authentication token. For public resources the value specified is not used.

7.111.4.5 setHost()

```
Thumbnail & qevercloud::Thumbnail::setHost (
            QString host )
```

Parameters

host	www.evernote.com or sandbox.evernote.com

7.111.4.6 setImageType()

```
Thumbnail & qevercloud::Thumbnail::setImageType (
            ImageType imageType )
```

Parameters

imageType	Thumbnail image type. See ImageType. By default PNG is used.

7.111.4.7 setShardId()

```
Thumbnail & qevercloud::Thumbnail::setShardId (
            QString shardId )
```

Parameters

shard↩ Id	You can get the value from UserStore service or as a result of an authentication.

7.111.4.8 setSize()

```
Thumbnail & qevercloud::Thumbnail::setSize (
            int size )
```

Parameters

size	The size of the thumbnail. Evernote supports values from from 1 to 300. By default 300 is used.

7.111.5 Friends And Related Function Documentation

7.111.5.1 operator<< [1/2]

```
QEVERCLOUD_EXPORT QDebug & operator<< (
            QDebug & dbg,
            const ImageType imageType )  [friend]
```

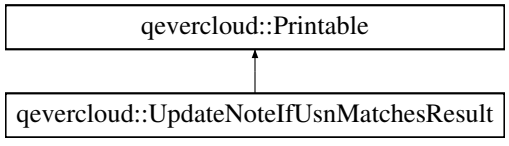
7.111.5.2 operator<< [2/2]

```
QEVERCLOUD_EXPORT QTextStream & operator<< (
            QTextStream & strm,
            const ImageType imageType )  [friend]
```

7.112 qevercloud::UpdateNoteIfUsnMatchesResult Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::UpdateNoteIfUsnMatchesResult:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const UpdateNoteIfUsnMatchesResult &other) const
- bool operator!= (const UpdateNoteIfUsnMatchesResult &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< Note > note
- Optional< bool > updated

7.112.1 Detailed Description

The result of a call to updateNoteIfUsnMatches, which optionally updates a note based on the current value of the note's update sequence number on the service.

7.112.2 Member Function Documentation

7.112.2.1 operator"!=()

```
bool qevercloud::UpdateNoteIfUsnMatchesResult::operator!= (
            const UpdateNoteIfUsnMatchesResult & other ) const  [inline]
```

7.112.2.2 operator==()

```
bool qevercloud::UpdateNoteIfUsnMatchesResult::operator== (
            const UpdateNoteIfUsnMatchesResult & other ) const  [inline]
```

7.112.2.3 print()

```
virtual void qevercloud::UpdateNoteIfUsnMatchesResult::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.112.3 Member Data Documentation

7.112.3.1 localData

```
EverCloudLocalData qevercloud::UpdateNoteIfUsnMatchesResult::localData
```

See the declaration of EverCloudLocalData for details

7.112.3.2 note

```
Optional< Note > qevercloud::UpdateNoteIfUsnMatchesResult::note
```

Either the current state of the note if `updated` is false or the result of updating the note as would be done via the `updateNote` method. If the note was not updated, you will receive a Note that does not include note content, resources data, resources recognition data, or resources alternate data. You can check for updates to these large objects by checking the Data.bodyHash values and downloading accordingly.

7.112.3.3 updated

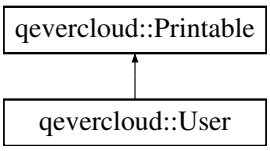
```
Optional< bool > qevercloud::UpdateNoteIfUsnMatchesResult::updated
```

Whether or not the note was updated by the operation.

7.113 qevercloud::User Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::User:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const User &other) const
- bool operator!= (const User &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< UserID > id
- Optional< QString > username
- Optional< QString > email
- Optional< QString > name
- Optional< QString > timezone
- Optional< PrivilegeLevel > privilege
- Optional< ServiceLevel > serviceLevel
- Optional< Timestamp > created
- Optional< Timestamp > updated
- Optional< Timestamp > deleted
- Optional< bool > active
- Optional< QString > shardId
- Optional< UserAttributes > attributes
- Optional< Accounting > accounting
- Optional< BusinessUserInfo > businessUserInfo
- Optional< QString > photoUrl
- Optional< Timestamp > photoLastUpdated
- Optional< AccountLimits > accountLimits

7.113.1 Detailed Description

This represents the information about a single user account.

7.113.2 Member Function Documentation

7.113.2.1 operator"!=()

```
bool qevercloud::User::operator!= (
            const User & other ) const  [inline]
```

7.113.2.2 operator==()

```
bool qevercloud::User::operator== (
            const User & other ) const  [inline]
```

7.113.2.3 print()

```
virtual void qevercloud::User::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.113.3 Member Data Documentation

7.113.3.1 accounting

`Optional< Accounting > qevercloud::User::accounting`

Bookkeeping information for the user's subscription.

7.113.3.2 accountLimits

`Optional< AccountLimits > qevercloud::User::accountLimits`

Account limits applicable for this user.

7.113.3.3 active

`Optional< bool > qevercloud::User::active`

If the user account is available for login and synchronization, this flag will be set to true.

7.113.3.4 attributes

`Optional< UserAttributes > qevercloud::User::attributes`

If present, this will contain a list of the attributes for this user account.

7.113.3.5 businessUserInfo

`Optional< BusinessUserInfo > qevercloud::User::businessUserInfo`

If present, this will contain a set of business information relating to the user's business membership. If not present, the user is not currently part of a business.

7.113.3.6 created

`Optional< Timestamp > qevercloud::User::created`

The date and time when this user account was created in the service.

7.113.3.7 deleted

`Optional< Timestamp > qevercloud::User::deleted`

If the account has been deleted from the system (e.g. as the result of a legal request by the user), the date and time of the deletion will be represented here. If not, this value will not be set.

7.113.3.8 email

```
Optional< QString > qevercloud::User::email
```

The email address registered for the user. Must comply with RFC 2821 and RFC 2822.
Third party applications that authenticate using OAuth do not have access to this field. Length: EDAM_EMAIL_↩
LEN_MIN - EDAM_EMAIL_LEN_MAX
Regex: EDAM_EMAIL_REGEX

7.113.3.9 id

```
Optional< UserID > qevercloud::User::id
```

The unique numeric identifier for the account, which will not change for the lifetime of the account.

7.113.3.10 localData

```
EverCloudLocalData qevercloud::User::localData
```

See the declaration of EverCloudLocalData for details

7.113.3.11 name

```
Optional< QString > qevercloud::User::name
```

The printable name of the user, which may be a combination of given and family names. This is used instead of separate "first" and "last" names due to variations in international name format/order. May not start or end with a whitespace character. May contain any character but carriage return or newline (Unicode classes Zl and Zp).
Length: EDAM_USER_NAME_LEN_MIN - EDAM_USER_NAME_LEN_MAX
Regex: EDAM_USER_NAME_REGEX

7.113.3.12 photoLastUpdated

```
Optional< Timestamp > qevercloud::User::photoLastUpdated
```

The time at which the photo at 'photoUrl' was last updated by this User. This field will be null if the User never set a profile photo. This field is filled in by the service and is read-only to clients.

7.113.3.13 photoUrl

```
Optional< QString > qevercloud::User::photoUrl
```

The URL of the photo that represents this User. This field is filled in by the service and is read-only to clients. If `photoLastUpdated` is not set, this url will point to a placeholder user photo generated by the service.

7.113.3.14 privilege

```
Optional< PrivilegeLevel > qevercloud::User::privilege
```

NOT DOCUMENTED

7.113.3.15 serviceLevel

```
Optional< ServiceLevel > qevercloud::User::serviceLevel
```

The level of service the user currently receives. This will always be populated for users retrieved from the Evernote service.

7.113.3.16 shardId

```
Optional< QString > qevercloud::User::shardId
```

DEPRECATED - Client applications should have no need to use this field.

7.113.3.17 timezone

```
Optional< QString > qevercloud::User::timezone
```

The zone ID for the user's default location. If present, this may be used to localize the display of any timestamp for which no other timezone is available. The format must be encoded as a standard zone ID such as "America/Los↩
_Angeles" or "GMT+08:00"
Length: EDAM_TIMEZONE_LEN_MIN - EDAM_TIMEZONE_LEN_MAX
Regex: EDAM_TIMEZONE_REGEX

7.113.3.18 updated

```
Optional< Timestamp > qevercloud::User::updated
```

The date and time when this user account was last modified in the service.

7.113.3.19 username

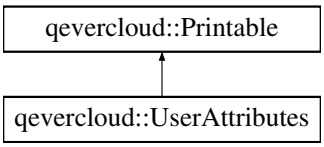
```
Optional< QString > qevercloud::User::username
```

The name that uniquely identifies a single user account. This name may be presented by the user, along with their password, to log into their account. May only contain a-z, 0-9, or '-', and may not start or end with the '-'
Length: EDAM_USER_USERNAME_LEN_MIN - EDAM_USER_USERNAME_LEN_MAX
Regex: EDAM_USER_USERNAME_REGEX

7.114 qevercloud::UserAttributes Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::UserAttributes:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const UserAttributes &other) const
- bool operator!= (const UserAttributes &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > defaultLocationName
- Optional< double > defaultLatitude
- Optional< double > defaultLongitude
- Optional< bool > preactivation
- Optional< QStringList > viewedPromotions
- Optional< QString > incomingEmailAddress
- Optional< QStringList > recentMailedAddresses
- Optional< QString > comments
- Optional< Timestamp > dateAgreedToTermsOfService
- Optional< qint32 > maxReferrals
- Optional< qint32 > referralCount
- Optional< QString > refererCode
- Optional< Timestamp > sentEmailDate
- Optional< qint32 > sentEmailCount
- Optional< qint32 > dailyEmailLimit
- Optional< Timestamp > emailOptOutDate
- Optional< Timestamp > partnerEmailOptInDate
- Optional< QString > preferredLanguage
- Optional< QString > preferredCountry
- Optional< bool > clipFullPage
- Optional< QString > twitterUserName
- Optional< QString > twitterId
- Optional< QString > groupName
- Optional< QString > recognitionLanguage
- Optional< QString > referralProof
- Optional< bool > educationalDiscount
- Optional< QString > businessAddress
- Optional< bool > hideSponsorBilling
- Optional< bool > useEmailAutoFiling
- Optional< ReminderEmailConfig > reminderEmailConfig
- Optional< Timestamp > emailAddressLastConfirmed
- Optional< Timestamp > passwordUpdated
- Optional< bool > salesforcePushEnabled
- Optional< bool > shouldLogClientEvent
- Optional< bool > optOutMachineLearning

7.114.1 Detailed Description

A structure holding the optional attributes that can be stored on a User. These are generally less critical than the core User fields.

7.114.2 Member Function Documentation

7.114.2.1 operator"!=()

```
bool qevercloud::UserAttributes::operator!= (
            const UserAttributes & other ) const  [inline]
```

7.114.2.2 operator==()

```
bool qevercloud::UserAttributes::operator== (
            const UserAttributes & other ) const  [inline]
```

7.114.2.3 print()

```
virtual void qevercloud::UserAttributes::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.114.3 Member Data Documentation

7.114.3.1 businessAddress

```
Optional< QString > qevercloud::UserAttributes::businessAddress
```

A string recording the business address of a Sponsored Account user who has requested invoicing.

7.114.3.2 clipFullPage

```
Optional< bool > qevercloud::UserAttributes::clipFullPage
```

Boolean flag set to true if the user wants to clip full pages by default when they use the web clipper without a selection.

7.114.3.3 comments

```
Optional< QString > qevercloud::UserAttributes::comments
```

Free-form text field that may hold general support information, etc.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.114.3.4 dailyEmailLimit

```
Optional< qint32 > qevercloud::UserAttributes::dailyEmailLimit
```

If set, this is the maximum number of emails that may be sent in a given day from this account. If unset, the server will use the configured default limit.

7.114.3.5 dateAgreedToTermsOfService

```
Optional< Timestamp > qevercloud::UserAttributes::dateAgreedToTermsOfService
```

The date/time when the user agreed to the terms of service. This can be used as the effective "start date" for the account.

7.114.3.6 defaultLatitude

```
Optional< double > qevercloud::UserAttributes::defaultLatitude
```

if set, this is the latitude that should be assigned to any notes that have no other latitude information.

7.114.3.7 defaultLocationName

```
Optional< QString > qevercloud::UserAttributes::defaultLocationName
```

the location string that should be associated with the user in order to determine where notes are taken if not otherwise specified.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.114.3.8 defaultLongitude

```
Optional< double > qevercloud::UserAttributes::defaultLongitude
```

if set, this is the longitude that should be assigned to any notes that have no other longitude information.

7.114.3.9 educationalDiscount

```
Optional< bool > qevercloud::UserAttributes::educationalDiscount
```

NOT DOCUMENTED

7.114.3.10 emailAddressLastConfirmed

```
Optional< Timestamp > qevercloud::UserAttributes::emailAddressLastConfirmed
```

If set, this contains the time at which the user last confirmed that the configured email address for this account is correct and up-to-date. If this is unset that indicates that the user's email address is unverified.

7.114.3.11 emailOptOutDate

```
Optional< Timestamp > qevercloud::UserAttributes::emailOptOutDate
```

If set, this is the date when the user asked to be excluded from offers and promotions sent by Evernote. If not set, then the user currently agrees to receive these messages.

7.114.3.12 groupName

```
Optional< QString > qevercloud::UserAttributes::groupName
```

A name identifier used to identify a particular set of branding and light customization.

7.114.3.13 hideSponsorBilling

```
Optional< bool > qevercloud::UserAttributes::hideSponsorBilling
```

A flag indicating whether to hide the billing information on a sponsored account owner's settings page

7.114.3.14 incomingEmailAddress

```
Optional< QString > qevercloud::UserAttributes::incomingEmailAddress
```

if set, this is the email address that the user may send email to in order to add an email note directly into the account via the SMTP email gateway. This is the part of the email address before the '@' symbol ... our domain is not included. If this is not set, the user may not add notes via the gateway.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.114.3.15 localData

```
EverCloudLocalData qevercloud::UserAttributes::localData
```

See the declaration of EverCloudLocalData for details

7.114.3.16 maxReferrals

```
Optional< qint32 > qevercloud::UserAttributes::maxReferrals
```

The number of referrals that the user is permitted to make.

7.114.3.17 optOutMachineLearning

```
Optional< bool > qevercloud::UserAttributes::optOutMachineLearning
```

If set to True, no Machine Learning nor human review will be done to this user's note contents.

7.114.3.18 partnerEmailOptInDate

```
Optional< Timestamp > qevercloud::UserAttributes::partnerEmailOptInDate
```

If set, this is the date when the user asked to be included in offers and promotions sent by Evernote's partners. If not sent, then the user currently does not agree to receive these emails.

7.114.3.19 passwordUpdated

```
Optional< Timestamp > qevercloud::UserAttributes::passwordUpdated
```

If set, this contains the time at which the user's password last changed. This will be unset for users created before the addition of this field who have not changed their passwords since the addition of this field.

7.114.3.20 preactivation

```
Optional< bool > qevercloud::UserAttributes::preactivation
```

if set, the user account is not yet confirmed for login. I.e. the account has been created, but we are still waiting for the user to complete the activation step.

7.114.3.21 preferredCountry

```
Optional< QString > qevercloud::UserAttributes::preferredCountry
```

Preferred country code based on ISO 3166-1-alpha-2 indicating the users preferred country

7.114.3.22 preferredLanguage

```
Optional< QString > qevercloud::UserAttributes::preferredLanguage
```

a 2 character language codes based on: http://ftp.ics.uci.edu/pub/ietf/http/related/iso639.↩txt used for localization purposes to determine what language to use for the web interface and for other direct communication (e.g. emails).

7.114.3.23 recentMailedAddresses

```
Optional< QStringList > qevercloud::UserAttributes::recentMailedAddresses
```

if set, this will contain a list of email addresses that have recently been used as recipients of outbound emails by the user. This can be used to pre-populate a list of possible destinations when a user wishes to send a note via email.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX each
Max: EDAM_USER_RECENT_MAILED_ADDRESSES_MAX entries

7.114.3.24 recognitionLanguage

```
Optional< QString > qevercloud::UserAttributes::recognitionLanguage
```

a 2 character language codes based on: http://ftp.ics.uci.edu/pub/ietf/http/related/iso639.txt If set, this is used to determine the language that should be used when processing images and PDF files to find text. If not set, then the 'preferredLanguage' will be used.

7.114.3.25 refererCode

```
Optional< QString > qevercloud::UserAttributes::refererCode
```

A code indicating where the user was sent from. AKA promotion code

7.114.3.26 referralCount

```
Optional< qint32 > qevercloud::UserAttributes::referralCount
```

The number of referrals sent from this account.

7.114.3.27 referralProof

```
Optional< QString > qevercloud::UserAttributes::referralProof
```

NOT DOCUMENTED

7.114.3.28 reminderEmailConfig

```
Optional< ReminderEmailConfig > qevercloud::UserAttributes::reminderEmailConfig
```

Configuration state for whether or not the user wishes to receive reminder e-mail. This setting applies to both the reminder e-mail sent for personal reminder notes and for the reminder e-mail sent for reminder notes in the user's business notebooks that the user has configured for e-mail notifications.

7.114.3.29 salesforcePushEnabled

```
Optional< bool > qevercloud::UserAttributes::salesforcePushEnabled
```

NOT DOCUMENTED

7.114.3.30 sentEmailCount

```
Optional< qint32 > qevercloud::UserAttributes::sentEmailCount
```

The number of emails that were sent from the user via the service on sentEmailDate. Used to enforce a limit on the number of emails per user per day to prevent spamming.

7.114.3.31 sentEmailDate

`Optional< Timestamp > qevercloud::UserAttributes::sentEmailDate`

The most recent date when the user sent outbound emails from the service. Used with sentEmailCount to limit the number of emails that can be sent per day.

7.114.3.32 shouldLogClientEvent

`Optional< bool > qevercloud::UserAttributes::shouldLogClientEvent`

If set to True, the server will record LogRequest send from clients of this user as ClientEventLog.

7.114.3.33 twitterId

`Optional< QString > qevercloud::UserAttributes::twitterId`

The unique identifier of the user's Twitter account if that user has chosen to enable Twittering into Evernote.

7.114.3.34 twitterUserName

`Optional< QString > qevercloud::UserAttributes::twitterUserName`

The username of the account of someone who has chosen to enable Twittering into Evernote. This value is subject to change, since users may change their Twitter user name.

7.114.3.35 useEmailAutoFiling

`Optional< bool > qevercloud::UserAttributes::useEmailAutoFiling`

A flag indicating whether the user chooses to allow Evernote to automatically file and tag emailed notes

7.114.3.36 viewedPromotions

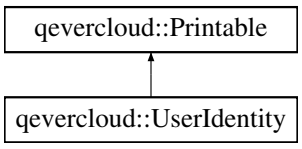
`Optional< QStringList > qevercloud::UserAttributes::viewedPromotions`

a list of promotions the user has seen. This list may occasionally be modified by the system when promotions are no longer available.
Length: EDAM_ATTRIBUTE_LEN_MIN - EDAM_ATTRIBUTE_LEN_MAX

7.115 qevercloud::UserIdentity Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::UserIdentity:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const UserIdentity &other) const
- bool operator!= (const UserIdentity &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< UserIdentityType > type
- Optional< QString > stringIdentifier
- Optional< qint64 > longIdentifier

7.115.1 Detailed Description

A structure that holds user identifying information such as an email address, Evernote user ID, or an identifier from a 3rd party service. An instance consists of a type and a value, where the value will be stored in one of the value fields depending upon the data type required for the identity type.

When used with shared notebook invitations, a UserIdentity identifies a particular person who may not (yet) have an Evernote UserID UserIdentity but who has (almost) unique access to the service endpoint described by the UserIdentity. For example, an e-mail UserIdentity can identify the person who receives e-mail at the given address, and who can therefore read the share key that has a cryptographic signature from the Evernote service. With the share key, this person can supply their Evernote UserID via an authentication token to join the notebook (authenticateToSharedNotebook), at which time we have associated the e-mail UserIdentity with an Evernote UserID UserIdentity. Note that using shared notebook records, the relationship between Evernote UserIDs and e-mail addresses is many to many.

Note that the identifier may not directly identify a particular Evernote UserID UserIdentity without further verification. For example, an e-mail UserIdentity may be associated with an invitation to join a notebook (via a shared notebook record), but until a user uses a share key, that was sent to that e-mail address, to join the notebook, we do not know an Evernote UserID UserIdentity ID to match the e-mail address.

7.115.2 Member Function Documentation

7.115.2.1 operator"!=()

```
bool qevercloud::UserIdentity::operator!= (
            const UserIdentity & other ) const  [inline]
```

7.115.2.2 operator==()

```
bool qevercloud::UserIdentity::operator== (
            const UserIdentity & other ) const  [inline]
```

7.115.2.3 print()

```
virtual void qevercloud::UserIdentity::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.115.3 Member Data Documentation

7.115.3.1 localData

```
EverCloudLocalData qevercloud::UserIdentity::localData
```

See the declaration of EverCloudLocalData for details

7.115.3.2 longIdentifier

```
Optional< qint64 > qevercloud::UserIdentity::longIdentifier
```

NOT DOCUMENTED

7.115.3.3 stringIdentifier

```
Optional< QString > qevercloud::UserIdentity::stringIdentifier
```

NOT DOCUMENTED

7.115.3.4 type

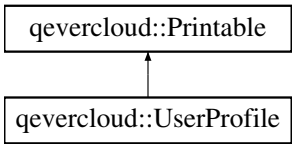
```
Optional< UserIdentityType > qevercloud::UserIdentity::type
```

NOT DOCUMENTED

7.116 qevercloud::UserProfile Struct Reference

```
#include <Types.h>
```

Inheritance diagram for qevercloud::UserProfile:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const UserProfile &other) const
- bool operator!= (const UserProfile &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< UserID > id
- Optional< QString > name
- Optional< QString > email
- Optional< QString > username
- Optional< BusinessUserAttributes > attributes
- Optional< Timestamp > joined
- Optional< Timestamp > photoLastUpdated
- Optional< QString > photoUrl
- Optional< BusinessUserRole > role
- Optional< BusinessUserStatus > status

7.116.1 Detailed Description

This structure represents profile information for a user in a business.

7.116.2 Member Function Documentation

7.116.2.1 operator"!=()

```
bool qevercloud::UserProfile::operator!= (
            const UserProfile & other ) const  [inline]
```

7.116.2.2 operator==()

```
bool qevercloud::UserProfile::operator== (
            const UserProfile & other ) const  [inline]
```

7.116.2.3 print()

```
virtual void qevercloud::UserProfile::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.116.3 Member Data Documentation

7.116.3.1 attributes

```
Optional< BusinessUserAttributes > qevercloud::UserProfile::attributes
```

The user's business specific attributes.

7.116.3.2 email

```
Optional< QString > qevercloud::UserProfile::email
```

The user's business email address. If the user has not registered their business email address, this field will be empty.

7.116.3.3 id

```
Optional< UserID > qevercloud::UserProfile::id
```

The numeric identifier that uniquely identifies a user.

7.116.3.4 joined

```
Optional< Timestamp > qevercloud::UserProfile::joined
```

The time when the user joined the business

7.116.3.5 localData

```
EverCloudLocalData qevercloud::UserProfile::localData
```

See the declaration of EverCloudLocalData for details

7.116.3.6 name

```
Optional< QString > qevercloud::UserProfile::name
```

The full name of the user.

7.116.3.7 photoLastUpdated

```
Optional< Timestamp > qevercloud::UserProfile::photoLastUpdated
```

The time when the user's profile photo was most recently updated

7.116.3.8 photoUrl

```
Optional< QString > qevercloud::UserProfile::photoUrl
```

A URL identifying a copy of the user's current profile photo

7.116.3.9 role

```
Optional< BusinessUserRole > qevercloud::UserProfile::role
```

The BusinessUserRole for the user

7.116.3.10 status

```
Optional< BusinessUserStatus > qevercloud::UserProfile::status
```

The BusinessUserStatus for the user

7.116.3.11 username

```
Optional< QString > qevercloud::UserProfile::username
```

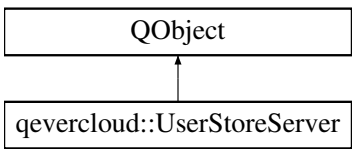
The user's Evernote username.

7.117 qevercloud::UserStoreServer Class Reference

The UserStoreServer class represents customizable server for UserStore requests. It is primarily used for testing of QEverCloud.

```
#include <Servers.h>
```

Inheritance diagram for qevercloud::UserStoreServer:



Public Slots

- void onRequest (QByteArray data)
- void onCheckVersionRequestReady (bool value, EverCloudExceptionDataPtr exceptionData)
- void onGetBootstrapInfoRequestReady (BootstrapInfo value, EverCloudExceptionDataPtr exceptionData)
- void onAuthenticateLongSessionRequestReady (AuthenticationResult value, EverCloudExceptionDataPtr exceptionData)
- void onCompleteTwoFactorAuthenticationRequestReady (AuthenticationResult value, EverCloudExceptionDataPtr exceptionData)
- void onRevokeLongSessionRequestReady (EverCloudExceptionDataPtr exceptionData)
- void onAuthenticateToBusinessRequestReady (AuthenticationResult value, EverCloudExceptionDataPtr exceptionData)
- void onGetUserRequestReady (User value, EverCloudExceptionDataPtr exceptionData)
- void onGetPublicUserInfoRequestReady (PublicUserInfo value, EverCloudExceptionDataPtr exceptionData)
- void onGetUserUrlsRequestReady (UserUrls value, EverCloudExceptionDataPtr exceptionData)
- void onInviteToBusinessRequestReady (EverCloudExceptionDataPtr exceptionData)
- void onRemoveFromBusinessRequestReady (EverCloudExceptionDataPtr exceptionData)
- void onUpdateBusinessUserIdentifierRequestReady (EverCloudExceptionDataPtr exceptionData)
- void onListBusinessUsersRequestReady (QList< UserProfile > value, EverCloudExceptionDataPtr exceptionData)
- void onListBusinessInvitationsRequestReady (QList< BusinessInvitation > value, EverCloudExceptionDataPtr exceptionData)
- void onGetAccountLimitsRequestReady (AccountLimits value, EverCloudExceptionDataPtr exceptionData)

Signals

- void checkVersionRequest (QString clientName, qint16 edamVersionMajor, qint16 edamVersionMinor, IRequestContextPtr ctx)
- void getBootstrapInfoRequest (QString locale, IRequestContextPtr ctx)
- void authenticateLongSessionRequest (QString username, QString password, QString consumerKey, QString consumerSecret, QString deviceIdentifier, QString deviceDescription, bool supportsTwoFactor, IRequestContextPtr ctx)
- void completeTwoFactorAuthenticationRequest (QString oneTimeCode, QString deviceIdentifier, QString deviceDescription, IRequestContextPtr ctx)
- void revokeLongSessionRequest (IRequestContextPtr ctx)
- void authenticateToBusinessRequest (IRequestContextPtr ctx)
- void getUserRequest (IRequestContextPtr ctx)
- void getPublicUserInfoRequest (QString username, IRequestContextPtr ctx)
- void getUserUrlsRequest (IRequestContextPtr ctx)
- void inviteToBusinessRequest (QString emailAddress, IRequestContextPtr ctx)
- void removeFromBusinessRequest (QString emailAddress, IRequestContextPtr ctx)
- void updateBusinessUserIdentifierRequest (QString oldEmailAddress, QString newEmailAddress, IRequestContextPtr ctx)
- void listBusinessUsersRequest (IRequestContextPtr ctx)
- void listBusinessInvitationsRequest (bool includeRequestedInvitations, IRequestContextPtr ctx)
- void getAccountLimitsRequest (ServiceLevel serviceLevel, IRequestContextPtr ctx)
- void checkVersionRequestReady (QByteArray data)
- void getBootstrapInfoRequestReady (QByteArray data)
- void authenticateLongSessionRequestReady (QByteArray data)
- void completeTwoFactorAuthenticationRequestReady (QByteArray data)
- void revokeLongSessionRequestReady (QByteArray data)
- void authenticateToBusinessRequestReady (QByteArray data)
- void getUserRequestReady (QByteArray data)
- void getPublicUserInfoRequestReady (QByteArray data)

- void getUserUrlsRequestReady (QByteArray data)
- void inviteToBusinessRequestReady (QByteArray data)
- void removeFromBusinessRequestReady (QByteArray data)
- void updateBusinessUserIdentifierRequestReady (QByteArray data)
- void listBusinessUsersRequestReady (QByteArray data)
- void listBusinessInvitationsRequestReady (QByteArray data)
- void getAccountLimitsRequestReady (QByteArray data)

Public Member Functions

- UserStoreServer (QObject *parent=nullptr)

7.117.1 Detailed Description

The UserStoreServer class represents customizable server for UserStore requests. It is primarily used for testing of QEverCloud.

7.117.2 Constructor & Destructor Documentation

7.117.2.1 UserStoreServer()

```
qevercloud::UserStoreServer::UserStoreServer (
            QObject * parent = nullptr )  [explicit]
```

7.117.3 Member Function Documentation

7.117.3.1 authenticateLongSessionRequest

```
void qevercloud::UserStoreServer::authenticateLongSessionRequest (
            QString username,
            QString password,
            QString consumerKey,
            QString consumerSecret,
            QString deviceIdentifier,
            QString deviceDescription,
            bool supportsTwoFactor,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.2 authenticateLongSessionRequestReady

```
void qevercloud::UserStoreServer::authenticateLongSessionRequestReady (
            QByteArray data )  [signal]
```

7.117.3.3 authenticateToBusinessRequest

```
void qevercloud::UserStoreServer::authenticateToBusinessRequest (
            IRequestContextPtr ctx )  [signal]
```

7.117.3.4 authenticateToBusinessRequestReady

```
void qevercloud::UserStoreServer::authenticateToBusinessRequestReady (
            QByteArray data )  [signal]
```

7.117.3.5 checkVersionRequest

```
void qevercloud::UserStoreServer::checkVersionRequest (
            QString clientName,
            qint16 edamVersionMajor,
            qint16 edamVersionMinor,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.6 checkVersionRequestReady

```
void qevercloud::UserStoreServer::checkVersionRequestReady (
            QByteArray data )  [signal]
```

7.117.3.7 completeTwoFactorAuthenticationRequest

```
void qevercloud::UserStoreServer::completeTwoFactorAuthenticationRequest (
            QString oneTimeCode,
            QString deviceIdentifier,
            QString deviceDescription,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.8 completeTwoFactorAuthenticationRequestReady

```
void qevercloud::UserStoreServer::completeTwoFactorAuthenticationRequestReady (
            QByteArray data )  [signal]
```

7.117.3.9 getAccountLimitsRequest

```
void qevercloud::UserStoreServer::getAccountLimitsRequest (
            ServiceLevel serviceLevel,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.10 getAccountLimitsRequestReady

```
void qevercloud::UserStoreServer::getAccountLimitsRequestReady (
            QByteArray data )  [signal]
```

7.117.3.11 getBootstrapInfoRequest

```
void qevercloud::UserStoreServer::getBootstrapInfoRequest (
            QString locale,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.12 getBootstrapInfoRequestReady

```
void qevercloud::UserStoreServer::getBootstrapInfoRequestReady (
            QByteArray data )  [signal]
```

7.117.3.13 getPublicUserInfoRequest

```
void qevercloud::UserStoreServer::getPublicUserInfoRequest (
            QString username,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.14 getPublicUserInfoRequestReady

```
void qevercloud::UserStoreServer::getPublicUserInfoRequestReady (
            QByteArray data )  [signal]
```

7.117.3.15 getUserRequest

```
void qevercloud::UserStoreServer::getUserRequest (
            IRequestContextPtr ctx )  [signal]
```

7.117.3.16 getUserRequestReady

```
void qevercloud::UserStoreServer::getUserRequestReady (
            QByteArray data )  [signal]
```

7.117.3.17 getUserUrlsRequest

```
void qevercloud::UserStoreServer::getUserUrlsRequest (
            IRequestContextPtr ctx )  [signal]
```

7.117.3.18 getUserUrlsRequestReady

```
void qevercloud::UserStoreServer::getUserUrlsRequestReady (
            QByteArray data )  [signal]
```

7.117.3.19 inviteToBusinessRequest

```
void qevercloud::UserStoreServer::inviteToBusinessRequest (
            QString emailAddress,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.20 inviteToBusinessRequestReady

```
void qevercloud::UserStoreServer::inviteToBusinessRequestReady (
            QByteArray data )  [signal]
```

7.117.3.21 listBusinessInvitationsRequest

```
void qevercloud::UserStoreServer::listBusinessInvitationsRequest (
            bool includeRequestedInvitations,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.22 listBusinessInvitationsRequestReady

```
void qevercloud::UserStoreServer::listBusinessInvitationsRequestReady (
            QByteArray data )  [signal]
```

7.117.3.23 listBusinessUsersRequest

```
void qevercloud::UserStoreServer::listBusinessUsersRequest (
            IRequestContextPtr ctx )  [signal]
```

7.117.3.24 listBusinessUsersRequestReady

```
void qevercloud::UserStoreServer::listBusinessUsersRequestReady (
            QByteArray data )  [signal]
```

7.117.3.25 onAuthenticateLongSessionRequestReady

```
void qevercloud::UserStoreServer::onAuthenticateLongSessionRequestReady (
            AuthenticationResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.26 onAuthenticateToBusinessRequestReady

```
void qevercloud::UserStoreServer::onAuthenticateToBusinessRequestReady (
            AuthenticationResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.27 onCheckVersionRequestReady

```
void qevercloud::UserStoreServer::onCheckVersionRequestReady (
            bool value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.28 onCompleteTwoFactorAuthenticationRequestReady

```
void qevercloud::UserStoreServer::onCompleteTwoFactorAuthenticationRequestReady (
            AuthenticationResult value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.29 onGetAccountLimitsRequestReady

```
void qevercloud::UserStoreServer::onGetAccountLimitsRequestReady (
            AccountLimits value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.30 onGetBootstrapInfoRequestReady

```
void qevercloud::UserStoreServer::onGetBootstrapInfoRequestReady (
            BootstrapInfo value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.31 onGetPublicUserInfoRequestReady

```
void qevercloud::UserStoreServer::onGetPublicUserInfoRequestReady (
            PublicUserInfo value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.32 onGetUserRequestReady

```
void qevercloud::UserStoreServer::onGetUserRequestReady (
            User value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.33 onGetUserUrlsRequestReady

```
void qevercloud::UserStoreServer::onGetUserUrlsRequestReady (
            UserUrls value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.34 onInviteToBusinessRequestReady

```
void qevercloud::UserStoreServer::onInviteToBusinessRequestReady (
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.35 onListBusinessInvitationsRequestReady

```
void qevercloud::UserStoreServer::onListBusinessInvitationsRequestReady (
            QList< BusinessInvitation > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.36 onListBusinessUsersRequestReady

```
void qevercloud::UserStoreServer::onListBusinessUsersRequestReady (
            QList< UserProfile > value,
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.37 onRemoveFromBusinessRequestReady

```
void qevercloud::UserStoreServer::onRemoveFromBusinessRequestReady (
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.38 onRequest

```
void qevercloud::UserStoreServer::onRequest (
            QByteArray data )  [slot]
```

7.117.3.39 onRevokeLongSessionRequestReady

```
void qevercloud::UserStoreServer::onRevokeLongSessionRequestReady (
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.40 onUpdateBusinessUserIdentifierRequestReady

```
void qevercloud::UserStoreServer::onUpdateBusinessUserIdentifierRequestReady (
            EverCloudExceptionDataPtr exceptionData )  [slot]
```

7.117.3.41 removeFromBusinessRequest

```
void qevercloud::UserStoreServer::removeFromBusinessRequest (
            QString emailAddress,
            IRequestContextPtr ctx )  [signal]
```

7.117.3.42 removeFromBusinessRequestReady

```
void qevercloud::UserStoreServer::removeFromBusinessRequestReady (
            QByteArray data )  [signal]
```

7.117.3.43 revokeLongSessionRequest

```
void qevercloud::UserStoreServer::revokeLongSessionRequest (
            IRequestContextPtr ctx )  [signal]
```

7.117.3.44 revokeLongSessionRequestReady

```
void qevercloud::UserStoreServer::revokeLongSessionRequestReady (
            QByteArray data )  [signal]
```

7.117.3.45 updateBusinessUserIdentifierRequest

```
void qevercloud::UserStoreServer::updateBusinessUserIdentifierRequest (
            QString oldEmailAddress,
            QString newEmailAddress,
            IRequestContextPtr ctx )  [signal]
```

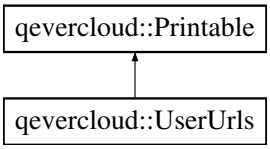
7.117.3.46 updateBusinessUserIdentifierRequestReady

```
void qevercloud::UserStoreServer::updateBusinessUserIdentifierRequestReady (
            QByteArray data )  [signal]
```

7.118 qevercloud::UserUrls Struct Reference

`#include <Types.h>`

Inheritance diagram for qevercloud::UserUrls:



Public Member Functions

- virtual void print (QTextStream &strm) const override
- bool operator== (const UserUrls &other) const
- bool operator!= (const UserUrls &other) const

Public Attributes

- EverCloudLocalData localData
- Optional< QString > noteStoreUrl
- Optional< QString > webApiUrlPrefix
- Optional< QString > userStoreUrl
- Optional< QString > utilityUrl
- Optional< QString > messageStoreUrl
- Optional< QString > userWebSocketUrl

7.118.1 Member Function Documentation

7.118.1.1 operator"!=()

```
bool qevercloud::UserUrls::operator!= (
            const UserUrls & other ) const  [inline]
```

7.118.1.2 operator==()

```
bool qevercloud::UserUrls::operator== (
            const UserUrls & other ) const  [inline]
```

7.118.1.3 print()

```
virtual void qevercloud::UserUrls::print (
            QTextStream & strm ) const  [override], [virtual]
```

Implements qevercloud::Printable.

7.118.2 Member Data Documentation

7.118.2.1 localData

```
EverCloudLocalData qevercloud::UserUrls::localData
```

See the declaration of EverCloudLocalData for details

7.118.2.2 messageStoreUrl

```
Optional< QString > qevercloud::UserUrls::messageStoreUrl
```

This field will contain the full URL that clients should use to make MessageStore requests to the server. I.e. this is the URL that should be used to create the Thrift HTTP client transport to send messages to the MessageStore service for the account.

7.118.2.3 noteStoreUrl

```
Optional< QString > qevercloud::UserUrls::noteStoreUrl
```

This field will contain the full URL that clients should use to make NoteStore requests to the server shard that contains that user's data. I.e. this is the URL that should be used to create the Thrift HTTP client transport to send messages to the NoteStore service for the account.

7.118.2.4 userStoreUrl

```
Optional< QString > qevercloud::UserUrls::userStoreUrl
```

This field will contain the full URL that clients should use to make UserStore requests after successfully authenticating. I.e. this is the URL that should be used to create the Thrift HTTP client transport to send messages to the UserStore service for this account.

7.118.2.5 userWebSocketUrl

```
Optional< QString > qevercloud::UserUrls::userWebSocketUrl
```

This field will contain the full URL that clients should use when opening a persistent web socket to receive notification of events for the authenticated user.

7.118.2.6 utilityUrl

```
Optional< QString > qevercloud::UserUrls::utilityUrl
```

This field will contain the full URL that clients should use to make Utility requests to the server shard that contains that user's data. I.e. this is the URL that should be used to create the Thrift HTTP client transport to send messages to the Utility service for the account.

7.118.2.7 webApiUrlPrefix

```
Optional< QString > qevercloud::UserUrls::webApiUrlPrefix
```

This field will contain the initial part of the URLs that should be used to make requests to Evernote's thin client "web API", which provide optimized operations for clients that aren't capable of manipulating the full contents of accounts via the full Thrift data model. Clients should concatenate the relative path for the various servlets onto the end of this string to construct the full URL, as documented on our developer web site.

Chapter 8

File Documentation

8.1 AsyncResult.h File Reference

```
#include "EverCloudException.h"
#include "Export.h"
#include "Helpers.h"
#include "RequestContext.h"
#include <QNetworkRequest>
#include <QObject>
#include <QUuid>
```

Classes

- class qevercloud::AsyncResult

  Returned by asynchonous versions of functions.

Namespaces

- namespace qevercloud

8.2 AsyncResult.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_ASYNC_RESULT_H
10 #define QEVERCLOUD_ASYNC_RESULT_H
11
12 #include "EverCloudException.h"
13 #include "Export.h"
14 #include "Helpers.h"
15 #include "RequestContext.h"
16
17 #include <QNetworkRequest>
18 #include <QObject>
19 #include <QUuid>
20
21 namespace qevercloud {
22
23 QT_FORWARD_DECLARE_CLASS(AsyncResultPrivate)
```

```
24 QT_FORWARD_DECLARE_CLASS(DurableService)
25
26
53 class QEVERCLOUD_EXPORT AsyncResult:  public QObject
54 {
55     Q_OBJECT
56     Q_DISABLE_COPY(AsyncResult)
57 public:
58     static QVariant asIs(QByteArray replyData);
59
60     typedef QVariant (*ReadFunctionType)(QByteArray replyData);
61
62     AsyncResult(QString url, QByteArray postData,
63                 IRequestContextPtr ctx,
64                 ReadFunctionType readFunction = AsyncResult::asIs,
65                 bool autoDelete = true, QObject * parent = nullptr);
66
67     AsyncResult(QNetworkRequest request, QByteArray postData,
68                 IRequestContextPtr ctx,
69                 ReadFunctionType readFunction = AsyncResult::asIs,
70                 bool autoDelete = true, QObject * parent = nullptr);
71
76     AsyncResult(QVariant result, EverCloudExceptionDataPtr error,
77                 IRequestContextPtr ctx, bool autoDelete = true,
78                 QObject * parent = nullptr);
79
80     ~AsyncResult();
81
88     bool waitForFinished(int timeout = -1);
89
90 Q_SIGNALS:
102     void finished(
103         QVariant result,
104         EverCloudExceptionDataPtr error,
105         IRequestContextPtr ctx);
106
107 private:
108     friend class DurableService;
109
110 private:
111     AsyncResultPrivate * const d_ptr;
112     Q_DECLARE_PRIVATE(AsyncResult)
113 };
114
115 } // namespace qevercloud
116
117 #endif // QEVERCLOUD_ASYNC_RESULT_H
```

8.3 DurableService.h File Reference

```
#include "AsyncResult.h"
#include "Export.h"
#include "RequestContext.h"
#include <QDateTime>
#include <QVariant>
#include <functional>
#include <memory>
#include <utility>
```

Classes

- struct qevercloud::IRetryPolicy
- class qevercloud::IDurableService
- struct qevercloud::IDurableService::SyncRequest
- struct qevercloud::IDurableService::AsyncRequest

Namespaces

- namespace qevercloud

Typedefs

- using qevercloud::IRetryPolicyPtr = std::shared_ptr< IRetryPolicy >
- using qevercloud::IDurableServicePtr = std::shared_ptr< IDurableService >

Functions

- QEVERCLOUD_EXPORT IRetryPolicyPtr qevercloud::newRetryPolicy ()
- QEVERCLOUD_EXPORT IRetryPolicyPtr qevercloud::nullRetryPolicy ()
- QEVERCLOUD_EXPORT IDurableServicePtr qevercloud::newDurableService (IRetryPolicyPtr={}, IRequest↩ ContextPtr={})

8.4 DurableService.h

Go to the documentation of this file.

```
1
8 #ifndef QEVERCLOUD_DURABLE_SERVICE_H
9 #define QEVERCLOUD_DURABLE_SERVICE_H
10
11 #include "AsyncResult.h"
12 #include "Export.h"
13 #include "RequestContext.h"
14
15 #include <QDateTime>
16 #include <QVariant>
17
18 #include <functional>
19 #include <memory>
20 #include <utility>
21
22 namespace qevercloud {
23
25
26 struct QEVERCLOUD_EXPORT IRetryPolicy
27 {
28     virtual bool shouldRetry(
29         const EverCloudExceptionDataPtr & exceptionData) = 0;
30 };
31
32 using IRetryPolicyPtr = std::shared_ptr<IRetryPolicy>;
33
35
36 QT_FORWARD_DECLARE_CLASS(DurableServicePrivate)
37
38 class QEVERCLOUD_EXPORT IDurableService
39 {
40 public:
41     using SyncResult = std::pair<QVariant,EverCloudExceptionDataPtr>;
42     using SyncServiceCall = std::function<SyncResult(IRequestContextPtr)>;
43     using AsyncServiceCall = std::function<AsyncResult*(IRequestContextPtr)>;
44
45     struct QEVERCLOUD_EXPORT SyncRequest
46     {
47         const char *    m_name;
48         QString         m_description;
49         SyncServiceCall m_call;
50
51         SyncRequest(const char * name, QString description,
52                     SyncServiceCall && call) :
53             m_name(name),
54             m_description(std::move(description)),
55             m_call(std::move(call))
56         {}
57     };
58
59     struct QEVERCLOUD_EXPORT AsyncRequest
60     {
61         const char *    m_name;
62         QString         m_description;
63         AsyncServiceCall    m_call;
64
65         AsyncRequest(const char * name, QString description,
66                      AsyncServiceCall && call) :
67             m_name(name),
```

```
68              m_description(std::move(description)),
69              m_call(std::move(call))
70          {}
71      };
72
73  public:
74      virtual SyncResult executeSyncRequest(
75          SyncRequest && syncRequest, IRequestContextPtr ctx) = 0;
76
77      virtual AsyncResult * executeAsyncRequest(
78          AsyncRequest && asyncRequest, IRequestContextPtr ctx) = 0;
79  };
80
81  using IDurableServicePtr = std::shared_ptr<IDurableService>;
82
83
84  QEVERCLOUD_EXPORT IRetryPolicyPtr newRetryPolicy();
85
86  QEVERCLOUD_EXPORT IRetryPolicyPtr nullRetryPolicy();
87
88  QEVERCLOUD_EXPORT IDurableServicePtr newDurableService(
89      IRetryPolicyPtr = {},
90      IRequestContextPtr = {});
91
92  } // namespace qevercloud
93
94  #endif // QEVERCLOUD_DURABLE_SERVICE_H
```

8.5 EventLoopFinisher.h File Reference

```
#include "Export.h"
#include "Helpers.h"
#include <QEventLoop>
#include <QObject>
```

Classes

- class qevercloud::EventLoopFinisher

Namespaces

- namespace qevercloud

8.6 EventLoopFinisher.h

Go to the documentation of this file.

```
1
9  #ifndef QEVERCLOUD_EVENT_LOOP_FINISHER_H
10 #define QEVERCLOUD_EVENT_LOOP_FINISHER_H
11
12 #include "Export.h"
13 #include "Helpers.h"
14
15 #include <QEventLoop>
16 #include <QObject>
17
18 namespace qevercloud {
19
20 QT_FORWARD_DECLARE_CLASS(EventLoopFinisherPrivate)
21
22 class QEVERCLOUD_EXPORT EventLoopFinisher:  public QObject
23 {
24     Q_OBJECT
25 public:
```

```
26     explicit EventLoopFinisher(
27         QEventLoop * loop, int exitCode, QObject * parent = Q_NULLPTR);
28
29     ~EventLoopFinisher();
30
31 public Q_SLOTS:
32     void stopEventLoop();
33
34 private:
35     EventLoopFinisherPrivate * const d_ptr;
36     Q_DECLARE_PRIVATE(EventLoopFinisher)
37 };
38
39 } // namespace qevercloud
40
41 #endif // QEVERCLOUD_EVENT_LOOP_FINISHER_H
```

8.7 EverCloudException.h File Reference

```
#include "Export.h"
#include "Helpers.h"
#include <QObject>
#include <QString>
#include <exception>
#include <memory>
```

Classes

- class qevercloud::EverCloudException
- class qevercloud::EverCloudExceptionData

  EverCloudException counterpart for asynchronous API.
- class qevercloud::EvernoteException
- class qevercloud::EvernoteExceptionData

Namespaces

- namespace qevercloud

Typedefs

- using qevercloud::EverCloudExceptionDataPtr = std::shared_ptr< EverCloudExceptionData >

Variables

- class QEVERCLOUD_EXPORT qevercloud::EverCloudExceptionData

8.8 EverCloudException.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_EVER_CLOUD_EXCEPTION_H
10 #define QEVERCLOUD_EVER_CLOUD_EXCEPTION_H
11
12 #include "Export.h"
13 #include "Helpers.h"
14
15 #include <QObject>
16 #include <QString>
17
18 #include <exception>
19 #include <memory>
20
21 namespace qevercloud {
22
24
25 class QEVERCLOUD_EXPORT EverCloudExceptionData;
26
28
32 class QEVERCLOUD_EXPORT EverCloudException:  public std::exception
33 {
34 protected:
35     mutable QByteArray m_error;
36
37 public:
38     explicit EverCloudException();
39     explicit EverCloudException(QString error);
40     explicit EverCloudException(const std::string & error);
41     explicit EverCloudException(const char * error);
42
43     virtual ~EverCloudException() noexcept override;
44
45     virtual const char * what() const noexcept override;
46
47     virtual std::shared_ptr<EverCloudExceptionData> exceptionData() const;
48 };
49
51
129 class QEVERCLOUD_EXPORT EverCloudExceptionData:  public QObject
130 {
131     Q_OBJECT
132     Q_DISABLE_COPY(EverCloudExceptionData)
133 public:
137     QString errorMessage;
138
139     explicit EverCloudExceptionData(QString error);
140
146     virtual void throwException() const;
147 };
148
149 using EverCloudExceptionDataPtr = std::shared_ptr<EverCloudExceptionData>;
150
152
157 class QEVERCLOUD_EXPORT EvernoteException:  public EverCloudException
158 {
159 public:
160     explicit EvernoteException();
161     explicit EvernoteException(QString error);
162     explicit EvernoteException(const std::string & error);
163     explicit EvernoteException(const char * error);
164
165     virtual EverCloudExceptionDataPtr exceptionData() const override;
166 };
167
169
174 class QEVERCLOUD_EXPORT EvernoteExceptionData:  public EverCloudExceptionData
175 {
176     Q_OBJECT
177     Q_DISABLE_COPY(EvernoteExceptionData)
178 public:
179     explicit EvernoteExceptionData(QString error);
180     virtual void throwException() const override;
181 };
182
183 } // namespace qevercloud
184
185 #endif // QEVERCLOUD_EVER_CLOUD_EXCEPTION_H
```

8.9 Exceptions.h File Reference

```
#include "EverCloudException.h"
#include "Export.h"
#include "Optional.h"
#include "generated/EDAMErrorCode.h"
#include "generated/Types.h"
#include <QNetworkReply>
#include <QObject>
#include <QString>
```

Classes

- class qevercloud::NetworkException

  The NetworkException class represents QNetworkReply level errors.
- class qevercloud::NetworkExceptionData
- class qevercloud::ThriftException
- class qevercloud::ThriftExceptionData
- class qevercloud::EDAMUserExceptionData
- class qevercloud::EDAMSystemExceptionData
- class qevercloud::EDAMNotFoundExceptionData
- class qevercloud::EDAMInvalidContactsExceptionData
- class qevercloud::EDAMSystemExceptionRateLimitReached
- class qevercloud::EDAMSystemExceptionRateLimitReachedData
- class qevercloud::EDAMSystemExceptionAuthExpired
- class qevercloud::EDAMSystemExceptionAuthExpiredData

Namespaces

- namespace qevercloud

8.10 Exceptions.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_EXCEPTIONS_H
10 #define QEVERCLOUD_EXCEPTIONS_H
11
12 #include "EverCloudException.h"
13 #include "Export.h"
14 #include "Optional.h"
15 #include "generated/EDAMErrorCode.h"
16 #include "generated/Types.h"
17
18 #include <QNetworkReply>
19 #include <QObject>
20 #include <QString>
21
22 namespace qevercloud {
23
25
29 class QEVERCLOUD_EXPORT NetworkException:  public EverCloudException
30 {
31 public:
32     NetworkException();
33     NetworkException(QNetworkReply::NetworkError error);
34     NetworkException(QNetworkReply::NetworkError error, QString message);
35     virtual ~NetworkException() noexcept override;
```

```
36
37      bool operator==(const NetworkException & other) const;
38      bool operator!=(const NetworkException & other) const;
39
40      QNetworkReply::NetworkError type() const;
41
42      const char * what() const noexcept override;
43
44      virtual EverCloudExceptionDataPtr exceptionData() const override;
45
46  protected:
47      QNetworkReply::NetworkError m_type;
48  };
49
54  class QEVERCLOUD_EXPORT NetworkExceptionData:  public EverCloudExceptionData
55  {
56      Q_OBJECT
57      Q_DISABLE_COPY(NetworkExceptionData)
58  public:
59      explicit NetworkExceptionData(QString error, QNetworkReply::NetworkError type);
60      virtual void throwException() const override;
61
62  protected:
63      QNetworkReply::NetworkError m_type;
64  };
65
67
72  class QEVERCLOUD_EXPORT ThriftException:  public EverCloudException
73  {
74  public:
75      enum class Type {
76          UNKNOWN = 0,
77          UNKNOWN_METHOD = 1,
78          INVALID_MESSAGE_TYPE = 2,
79          WRONG_METHOD_NAME = 3,
80          BAD_SEQUENCE_ID = 4,
81          MISSING_RESULT = 5,
82          INTERNAL_ERROR = 6,
83          PROTOCOL_ERROR = 7,
84          INVALID_DATA = 8
85      };
86
87      friend QEVERCLOUD_EXPORT QTextStream & operator<<(
88          QTextStream & strm, const Type type);
89
90      ThriftException();
91      ThriftException(Type type);
92      ThriftException(Type type, QString message);
93      virtual ~ThriftException() noexcept override;
94
95      bool operator==(const ThriftException & other) const;
96      bool operator!=(const ThriftException & other) const;
97
98      Type type() const;
99
100      const char * what() const noexcept override;
101
102      virtual EverCloudExceptionDataPtr exceptionData() const override;
103
104 protected:
105      Type m_type;
106 };
107
112 class QEVERCLOUD_EXPORT ThriftExceptionData:  public EverCloudExceptionData
113 {
114      Q_OBJECT
115      Q_DISABLE_COPY(ThriftExceptionData)
116 public:
117      explicit ThriftExceptionData(QString error, ThriftException::Type type);
118      virtual void throwException() const override;
119
120 protected:
121      ThriftException::Type m_type;
122 };
123
125
130 class QEVERCLOUD_EXPORT EDAMUserExceptionData:  public EvernoteExceptionData
131 {
132      Q_OBJECT
133      Q_DISABLE_COPY(EDAMUserExceptionData)
134 public:
135      explicit EDAMUserExceptionData(
136          QString error, EDAMErrorCode errorCode, Optional<QString> parameter);
137
138      virtual void throwException() const override;
139
140 protected:
```

```
141     EDAMErrorCode       m_errorCode;
142     Optional<QString>   m_parameter;
143 };
144 
146 
151 class QEVERCLOUD_EXPORT EDAMSystemExceptionData:  public EvernoteExceptionData
152 {
153     Q_OBJECT
154     Q_DISABLE_COPY(EDAMSystemExceptionData)
155 public:
156     explicit EDAMSystemExceptionData(
157         QString err, EDAMErrorCode errorCode, Optional<QString> message,
158         Optional<qint32> rateLimitDuration);
159 
160     virtual void throwException() const override;
161 
162 protected:
163     EDAMErrorCode       m_errorCode;
164     Optional<QString>   m_message;
165     Optional<qint32>    m_rateLimitDuration;
166 };
167 
169 
174 class QEVERCLOUD_EXPORT EDAMNotFoundExceptionData:  public EvernoteExceptionData
175 {
176     Q_OBJECT
177     Q_DISABLE_COPY(EDAMNotFoundExceptionData)
178 public:
179     explicit EDAMNotFoundExceptionData(
180         QString error, Optional<QString> identifier, Optional<QString> key);
181 
182     virtual void throwException() const override;
183 
184 protected:
185     Optional<QString> m_identifier;
186     Optional<QString> m_key;
187 };
188 
190 
195 class QEVERCLOUD_EXPORT EDAMInvalidContactsExceptionData:
196     public EvernoteExceptionData
197 {
198     Q_OBJECT
199     Q_DISABLE_COPY(EDAMInvalidContactsExceptionData)
200 public:
201     explicit EDAMInvalidContactsExceptionData(
202         QList<Contact> contacts, Optional<QString> parameter,
203         Optional<QList<EDAMInvalidContactReason> > reasons);
204 
205     virtual void throwException() const override;
206 
207 protected:
208     QList<Contact>      m_contacts;
209     Optional<QString>   m_parameter;
210     Optional<QList<EDAMInvalidContactReason>> m_reasons;
211 };
212 
214 
218 class QEVERCLOUD_EXPORT EDAMSystemExceptionRateLimitReached:
219     public EDAMSystemException
220 {
221 public:
222     virtual EverCloudExceptionDataPtr exceptionData() const override;
223 };
224 
226 
231 class QEVERCLOUD_EXPORT EDAMSystemExceptionRateLimitReachedData:
232     public EDAMSystemExceptionData
233 {
234     Q_OBJECT
235     Q_DISABLE_COPY(EDAMSystemExceptionRateLimitReachedData)
236 public:
237     explicit EDAMSystemExceptionRateLimitReachedData(
238         QString error, EDAMErrorCode errorCode, Optional<QString> message,
239         Optional<qint32> rateLimitDuration);
240 
241     virtual void throwException() const override;
242 };
243 
245 
249 class QEVERCLOUD_EXPORT EDAMSystemExceptionAuthExpired:  public EDAMSystemException
250 {
251 public:
252     virtual EverCloudExceptionDataPtr exceptionData() const override;
253 };
254 
256 
```

```
261 class QEVERCLOUD_EXPORT EDAMSystemExceptionAuthExpiredData:
262     public EDAMSystemExceptionData
263 {
264     Q_OBJECT
265     Q_DISABLE_COPY(EDAMSystemExceptionAuthExpiredData)
266 public:
267     explicit EDAMSystemExceptionAuthExpiredData(
268         QString error, EDAMErrorCode errorCode, Optional<QString> message,
269         Optional<qint32> rateLimitDuration);
270
271     virtual void throwException() const override;
272 };
273
274 } // namespace qevercloud
275
276 #endif // QEVERCLOUD_EXCEPTIONS_H
```

8.11 Export.h File Reference

`#include <QtCore/QtGlobal>`

Macros

- #define QEVERCLOUD_EXPORT Q_DECL_IMPORT

8.11.1 Macro Definition Documentation

8.11.1.1 QEVERCLOUD_EXPORT

`#define QEVERCLOUD_EXPORT Q_DECL_IMPORT`

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8.12 Export.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_EXPORT_H
10 #define QEVERCLOUD_EXPORT_H
11
12 #include <QtCore/QtGlobal>
13
14 #if defined(QEVERCLOUD_SHARED_LIBRARY)
15 #  define QEVERCLOUD_EXPORT Q_DECL_EXPORT
16 #elif defined(QEVERCLOUD_STATIC_LIBRARY)
17 #  define QEVERCLOUD_EXPORT Q_DECL_EXPORT
18 #else
19 #  define QEVERCLOUD_EXPORT Q_DECL_IMPORT
20 #endif
21
22 #endif // QEVERCLOUD_EXPORT_H
```

8.13 Constants.h File Reference

```
#include "../Export.h"
```

Namespaces

- namespace qevercloud

Variables

- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_ATTRIBUTE_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_LIST_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_ATTRIBUTE_MAP_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_GUID_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_GUID_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_GUID_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_EMAIL_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_EMAIL_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_EMAIL_LOCAL_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_EMAIL_DOMAIN_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_EMAIL_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_VAT_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TIMEZONE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TIMEZONE_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_TIMEZONE_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MIME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MIME_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_GIF
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_JPEG
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_PNG
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_TIFF
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_BMP
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_WAV
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_MP3
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_AMR
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_AAC
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_M4A
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_MP4_VIDEO
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_INK
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_PDF
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MIME_TYPE_DEFAULT
- QEVERCLOUD_EXPORT const QSet< QString > qevercloud::EDAM_MIME_TYPES
- QEVERCLOUD_EXPORT const QSet< QString > qevercloud::EDAM_INDEXABLE_RESOURCE_MIME_TYPES
- QEVERCLOUD_EXPORT const QSet< QString > qevercloud::EDAM_INDEXABLE_PLAINTEXT_MIME_TYPES
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_QUERY_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_QUERY_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SEARCH_QUERY_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_HASH_LEN

- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_USERNAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_USERNAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_USER_USERNAME_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_USER_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TAG_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_TAG_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_TAG_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_TITLE_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_VALUE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_VALUE_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_APPLICATIONDATA_ENTRY_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_APPLICATIONDATA_NAME_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_APPLICATIONDATA_VALUE_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTEBOOK_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_STACK_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_STACK_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTEBOOK_STACK_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_WORKSPACE_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_WORKSPACE_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_WORKSPACE_DESCRIPTION_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_WORKSPACE_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_URI_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_URI_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PUBLISHING_URI_REGEX
- QEVERCLOUD_EXPORT const QSet< QString > qevercloud::EDAM_PUBLISHING_URI_PROHIBITED
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_DESCRIPTION_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PUBLISHING_DESCRIPTION_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PUBLISHING_DESCRIPTION_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SAVED_SEARCH_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SAVED_SEARCH_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SAVED_SEARCH_NAME_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_PASSWORD_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_PASSWORD_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_USER_PASSWORD_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_URI_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_BUSINESS_MARKETING_CODE_REGEX_PATTERN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TAGS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_RESOURCES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_TAGS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_TAGS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_SAVED_SEARCHES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_NOTEBOOKS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_WORKSPACES_MAX

- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTEBOOKS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_WORKSPACES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_RECENT_MAILED_ADDRESSES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_MAIL_LIMIT_DAILY_FREE
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_MAIL_LIMIT_DAILY_PREMIUM
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_FREE
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_PREMIUM
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS_FIRST_MONTH
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS_NEXT_MONTH
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_PLUS
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_SURVEY_THRESHOLD
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS
- QEVERCLOUD_EXPORT const qint64 qevercloud::EDAM_USER_UPLOAD_LIMIT_BUSINESS_PER_USER
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_SIZE_MAX_FREE
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_SIZE_MAX_PREMIUM
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RESOURCE_SIZE_MAX_FREE
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RESOURCE_SIZE_MAX_PREMIUM
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_LINKED_NOTEBOOK_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_LINKED_NOTEBOOK_MAX_PREMIUM
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_BUSINESS_SHARED_NOTEBOOK_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTEBOOK_PERSONAL_SHARED_NOTEBOOK_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_BUSINESS_SHARED_NOTE_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_PERSONAL_SHARED_NOTE_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_CLASS_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_CONTENT_CLASS_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_CONTENT_CLASS_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_HELLO_APP_CONTENT_CLASS_PREFIX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_FOOD_APP_CONTENT_CLASS_PREFIX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_HELLO_ENCOUNTER
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_HELLO_PROFILE
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_FOOD_MEAL
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_SKITCH_PREFIX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_SKITCH
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_SKITCH_PDF
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_PENULTIMATE_PREFIX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_CONTENT_CLASS_PENULTIMATE_NOTEBOOK
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_POSTIT
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_MOLESKINE
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_EN_SCANSNAP
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_EWC
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_ANDROID_SHARE_EXTENSION
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_IOS_SHARE_EXTENSION
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_APPLICATION_WEB_CLIPPER
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_SOURCE_OUTLOOK_CLIPPER
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_UNTITLED
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_LOW
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_MEDIUM
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_TITLE_QUALITY_HIGH
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_PLAINTEXT_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_PLAINTEXT_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_NOTES
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_NOTEBOOKS
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_TAGS
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_EXPERTS
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_RELATED_MAX_RELATED_CONTENT

- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_BUSINESS_PHONE_NUMBER_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_NAME_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_NAME_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_VALUE_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_VALUE_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MAX_PREFERENCES
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MAX_VALUES_PER_PREFERENCE
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_ONLY_ONE_VALUE_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_NAME_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_VALUE_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_ONLY_ONE_VALUE_REGEX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_SHORTCUTS
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_BUSINESS_DEFAULT_NOTEBOOK
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PREFERENCE_BUSINESS_QUICKNOTE
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PREFERENCE_SHORTCUTS_MAX_VALUES
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_DEVICE_ID_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_DEVICE_ID_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_DEVICE_DESCRIPTION_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_DEVICE_DESCRIPTION_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_SUGGESTIONS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MIN
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_FIND_CONTACT_DEFAULT_MAX_RESULTS
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_FIND_CONTACT_MAX_RESULTS
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_NOTE_LOCK_VIEWERS_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_GET_ORDERS_MAX_RESULTS
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_BODY_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MESSAGE_BODY_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_RECIPIENTS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_ATTACHMENTS_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_ATTACHMENT_TITLE_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MESSAGE_ATTACHMENT_TITLE_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_MESSAGE_ATTACHMENT_SNIPPET_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_MESSAGE_ATTACHMENT_SNIPPET_REGEX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_USER_PROFILE_PHOTO_MAX_BYTES
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_PROMOTION_ID_LEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_PROMOTION_ID_REGEX
- QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_APP_RATING_MIN
- QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_APP_RATING_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_SNIPPETS_NOTES_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_CONNECTED_IDENTITY_REQUEST_MAX
- QEVERCLOUD_EXPORT const qint32 qevercloud::EDAM_OPEN_ID_ACCESS_TOKEN_MAX
- QEVERCLOUD_EXPORT const QString qevercloud::CLASSIFICATION_RECIPE_USER_NON_RECIPE
- QEVERCLOUD_EXPORT const QString qevercloud::CLASSIFICATION_RECIPE_USER_RECIPE
- QEVERCLOUD_EXPORT const QString qevercloud::CLASSIFICATION_RECIPE_SERVICE_RECIPE
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_WEB_CLIP
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_WEB_CLIP_SIMPLIFIED
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_MAIL_CLIP
- QEVERCLOUD_EXPORT const QString qevercloud::EDAM_NOTE_SOURCE_MAIL_SMTP_GATEWAY
- QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_VERSION_MAJOR
- QEVERCLOUD_EXPORT const qint16 qevercloud::EDAM_VERSION_MINOR

8.14 Constants.h

Go to the documentation of this file.

```
1
12 #ifndef QEVERCLOUD_GENERATED_CONSTANTS_H
13 #define QEVERCLOUD_GENERATED_CONSTANTS_H
14
15 #include "../Export.h"
16
17 namespace qevercloud {
18
20
21 // Limits.thrift
25 QEVERCLOUD_EXPORT extern const qint32 EDAM_ATTRIBUTE_LEN_MIN;
26
27 // Limits.thrift
31 QEVERCLOUD_EXPORT extern const qint32 EDAM_ATTRIBUTE_LEN_MAX;
32
33 // Limits.thrift
38 QEVERCLOUD_EXPORT extern const QString EDAM_ATTRIBUTE_REGEX;
39
40 // Limits.thrift
45 QEVERCLOUD_EXPORT extern const qint32 EDAM_ATTRIBUTE_LIST_MAX;
46
47 // Limits.thrift
52 QEVERCLOUD_EXPORT extern const qint32 EDAM_ATTRIBUTE_MAP_MAX;
53
54 // Limits.thrift
58 QEVERCLOUD_EXPORT extern const qint32 EDAM_GUID_LEN_MIN;
59
60 // Limits.thrift
64 QEVERCLOUD_EXPORT extern const qint32 EDAM_GUID_LEN_MAX;
65
66 // Limits.thrift
70 QEVERCLOUD_EXPORT extern const QString EDAM_GUID_REGEX;
71
72 // Limits.thrift
76 QEVERCLOUD_EXPORT extern const qint32 EDAM_EMAIL_LEN_MIN;
77
78 // Limits.thrift
82 QEVERCLOUD_EXPORT extern const qint32 EDAM_EMAIL_LEN_MAX;
83
84 // Limits.thrift
89 QEVERCLOUD_EXPORT extern const QString EDAM_EMAIL_LOCAL_REGEX;
90
91 // Limits.thrift
96 QEVERCLOUD_EXPORT extern const QString EDAM_EMAIL_DOMAIN_REGEX;
97
98 // Limits.thrift
103 QEVERCLOUD_EXPORT extern const QString EDAM_EMAIL_REGEX;
104
105 // Limits.thrift
111 QEVERCLOUD_EXPORT extern const QString EDAM_VAT_REGEX;
112
113 // Limits.thrift
117 QEVERCLOUD_EXPORT extern const qint32 EDAM_TIMEZONE_LEN_MIN;
118
119 // Limits.thrift
123 QEVERCLOUD_EXPORT extern const qint32 EDAM_TIMEZONE_LEN_MAX;
124
125 // Limits.thrift
134 QEVERCLOUD_EXPORT extern const QString EDAM_TIMEZONE_REGEX;
135
136 // Limits.thrift
140 QEVERCLOUD_EXPORT extern const qint32 EDAM_MIME_LEN_MIN;
141
142 // Limits.thrift
146 QEVERCLOUD_EXPORT extern const qint32 EDAM_MIME_LEN_MAX;
147
148 // Limits.thrift
153 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_REGEX;
154
155 // Limits.thrift
157 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_GIF;
158
159 // Limits.thrift
161 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_JPEG;
162
163 // Limits.thrift
165 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_PNG;
166
167 // Limits.thrift
169 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_TIFF;
170
171 // Limits.thrift
```

```
173 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_BMP;
174
175 // Limits.thrift
177 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_WAV;
178
179 // Limits.thrift
181 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_MP3;
182
183 // Limits.thrift
185 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_AMR;
186
187 // Limits.thrift
189 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_AAC;
190
191 // Limits.thrift
193 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_M4A;
194
195 // Limits.thrift
197 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_MP4_VIDEO;
198
199 // Limits.thrift
201 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_INK;
202
203 // Limits.thrift
205 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_PDF;
206
207 // Limits.thrift
209 QEVERCLOUD_EXPORT extern const QString EDAM_MIME_TYPE_DEFAULT;
210
211 // Limits.thrift
216 QEVERCLOUD_EXPORT extern const QSet<QString> EDAM_MIME_TYPES;
217
218 // Limits.thrift
224 QEVERCLOUD_EXPORT extern const QSet<QString> EDAM_INDEXABLE_RESOURCE_MIME_TYPES;
225
226 // Limits.thrift
232 QEVERCLOUD_EXPORT extern const QSet<QString> EDAM_INDEXABLE_PLAINTEXT_MIME_TYPES;
233
234 // Limits.thrift
238 QEVERCLOUD_EXPORT extern const qint32 EDAM_SEARCH_QUERY_LEN_MIN;
239
240 // Limits.thrift
244 QEVERCLOUD_EXPORT extern const qint32 EDAM_SEARCH_QUERY_LEN_MAX;
245
246 // Limits.thrift
252 QEVERCLOUD_EXPORT extern const QString EDAM_SEARCH_QUERY_REGEX;
253
254 // Limits.thrift
260 QEVERCLOUD_EXPORT extern const qint32 EDAM_HASH_LEN;
261
262 // Limits.thrift
266 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_USERNAME_LEN_MIN;
267
268 // Limits.thrift
272 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_USERNAME_LEN_MAX;
273
274 // Limits.thrift
280 QEVERCLOUD_EXPORT extern const QString EDAM_USER_USERNAME_REGEX;
281
282 // Limits.thrift
286 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_NAME_LEN_MIN;
287
288 // Limits.thrift
292 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_NAME_LEN_MAX;
293
294 // Limits.thrift
299 QEVERCLOUD_EXPORT extern const QString EDAM_USER_NAME_REGEX;
300
301 // Limits.thrift
305 QEVERCLOUD_EXPORT extern const qint32 EDAM_TAG_NAME_LEN_MIN;
306
307 // Limits.thrift
311 QEVERCLOUD_EXPORT extern const qint32 EDAM_TAG_NAME_LEN_MAX;
312
313 // Limits.thrift
319 QEVERCLOUD_EXPORT extern const QString EDAM_TAG_NAME_REGEX;
320
321 // Limits.thrift
325 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_TITLE_LEN_MIN;
326
327 // Limits.thrift
331 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_TITLE_LEN_MAX;
332
333 // Limits.thrift
339 QEVERCLOUD_EXPORT extern const QString EDAM_NOTE_TITLE_REGEX;
340
341 // Limits.thrift
```

```
346 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_CONTENT_LEN_MIN;
347
348 // Limits.thrift
353 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_CONTENT_LEN_MAX;
354
355 // Limits.thrift
361 QEVERCLOUD_EXPORT extern const qint32 EDAM_APPLICATIONDATA_NAME_LEN_MIN;
362
363 // Limits.thrift
369 QEVERCLOUD_EXPORT extern const qint32 EDAM_APPLICATIONDATA_NAME_LEN_MAX;
370
371 // Limits.thrift
376 QEVERCLOUD_EXPORT extern const qint32 EDAM_APPLICATIONDATA_VALUE_LEN_MIN;
377
378 // Limits.thrift
386 QEVERCLOUD_EXPORT extern const qint32 EDAM_APPLICATIONDATA_VALUE_LEN_MAX;
387
388 // Limits.thrift
393 QEVERCLOUD_EXPORT extern const qint32 EDAM_APPLICATIONDATA_ENTRY_LEN_MAX;
394
395 // Limits.thrift
404 QEVERCLOUD_EXPORT extern const QString EDAM_APPLICATIONDATA_NAME_REGEX;
405
406 // Limits.thrift
413 QEVERCLOUD_EXPORT extern const QString EDAM_APPLICATIONDATA_VALUE_REGEX;
414
415 // Limits.thrift
419 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTEBOOK_NAME_LEN_MIN;
420
421 // Limits.thrift
425 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTEBOOK_NAME_LEN_MAX;
426
427 // Limits.thrift
433 QEVERCLOUD_EXPORT extern const QString EDAM_NOTEBOOK_NAME_REGEX;
434
435 // Limits.thrift
439 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTEBOOK_STACK_LEN_MIN;
440
441 // Limits.thrift
445 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTEBOOK_STACK_LEN_MAX;
446
447 // Limits.thrift
453 QEVERCLOUD_EXPORT extern const QString EDAM_NOTEBOOK_STACK_REGEX;
454
455 // Limits.thrift
459 QEVERCLOUD_EXPORT extern const qint32 EDAM_WORKSPACE_NAME_LEN_MIN;
460
461 // Limits.thrift
465 QEVERCLOUD_EXPORT extern const qint32 EDAM_WORKSPACE_NAME_LEN_MAX;
466
467 // Limits.thrift
471 QEVERCLOUD_EXPORT extern const qint32 EDAM_WORKSPACE_DESCRIPTION_LEN_MAX;
472
473 // Limits.thrift
479 QEVERCLOUD_EXPORT extern const QString EDAM_WORKSPACE_NAME_REGEX;
480
481 // Limits.thrift
485 QEVERCLOUD_EXPORT extern const qint32 EDAM_PUBLISHING_URI_LEN_MIN;
486
487 // Limits.thrift
491 QEVERCLOUD_EXPORT extern const qint32 EDAM_PUBLISHING_URI_LEN_MAX;
492
493 // Limits.thrift
497 QEVERCLOUD_EXPORT extern const QString EDAM_PUBLISHING_URI_REGEX;
498
499 // Limits.thrift
503 QEVERCLOUD_EXPORT extern const QSet<QString> EDAM_PUBLISHING_URI_PROHIBITED;
504
505 // Limits.thrift
509 QEVERCLOUD_EXPORT extern const qint32 EDAM_PUBLISHING_DESCRIPTION_LEN_MIN;
510
511 // Limits.thrift
515 QEVERCLOUD_EXPORT extern const qint32 EDAM_PUBLISHING_DESCRIPTION_LEN_MAX;
516
517 // Limits.thrift
524 QEVERCLOUD_EXPORT extern const QString EDAM_PUBLISHING_DESCRIPTION_REGEX;
525
526 // Limits.thrift
530 QEVERCLOUD_EXPORT extern const qint32 EDAM_SAVED_SEARCH_NAME_LEN_MIN;
531
532 // Limits.thrift
536 QEVERCLOUD_EXPORT extern const qint32 EDAM_SAVED_SEARCH_NAME_LEN_MAX;
537
538 // Limits.thrift
544 QEVERCLOUD_EXPORT extern const QString EDAM_SAVED_SEARCH_NAME_REGEX;
545
546 // Limits.thrift
```

```
550 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_PASSWORD_LEN_MIN;
551
552 // Limits.thrift
556 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_PASSWORD_LEN_MAX;
557
558 // Limits.thrift
562 QEVERCLOUD_EXPORT extern const QString EDAM_USER_PASSWORD_REGEX;
563
564 // Limits.thrift
568 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_URI_LEN_MAX;
569
570 // Limits.thrift
574 QEVERCLOUD_EXPORT extern const QString EDAM_BUSINESS_MARKETING_CODE_REGEX_PATTERN;
575
576 // Limits.thrift
580 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_TAGS_MAX;
581
582 // Limits.thrift
586 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_RESOURCES_MAX;
587
588 // Limits.thrift
592 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_TAGS_MAX;
593
594 // Limits.thrift
598 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_TAGS_MAX;
599
600 // Limits.thrift
604 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_SAVED_SEARCHES_MAX;
605
606 // Limits.thrift
610 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_NOTES_MAX;
611
612 // Limits.thrift
616 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_NOTES_MAX;
617
618 // Limits.thrift
622 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_NOTEBOOKS_MAX;
623
624 // Limits.thrift
628 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_WORKSPACES_MAX;
629
630 // Limits.thrift
634 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_NOTEBOOKS_MAX;
635
636 // Limits.thrift
640 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_WORKSPACES_MAX;
641
642 // Limits.thrift
647 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_RECENT_MAILED_ADDRESSES_MAX;
648
649 // Limits.thrift
655 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_MAIL_LIMIT_DAILY_FREE;
656
657 // Limits.thrift
663 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_MAIL_LIMIT_DAILY_PREMIUM;
664
665 // Limits.thrift
670 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_LIMIT_FREE;
671
672 // Limits.thrift
677 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_LIMIT_PREMIUM;
678
679 // Limits.thrift
684 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS_FIRST_MONTH;
685
686 // Limits.thrift
691 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS_NEXT_MONTH;
692
693 // Limits.thrift
698 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_LIMIT_PLUS;
699
700 // Limits.thrift
706 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_SURVEY_THRESHOLD;
707
708 // Limits.thrift
714 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS;
715
716 // Limits.thrift
722 QEVERCLOUD_EXPORT extern const qint64 EDAM_USER_UPLOAD_LIMIT_BUSINESS_PER_USER;
723
724 // Limits.thrift
731 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_SIZE_MAX_FREE;
732
733 // Limits.thrift
740 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_SIZE_MAX_PREMIUM;
741
742 // Limits.thrift
```

```
746 QEVERCLOUD_EXPORT extern const qint32 EDAM_RESOURCE_SIZE_MAX_FREE;
747
748 // Limits.thrift
752 QEVERCLOUD_EXPORT extern const qint32 EDAM_RESOURCE_SIZE_MAX_PREMIUM;
753
754 // Limits.thrift
759 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_LINKED_NOTEBOOK_MAX;
760
761 // Limits.thrift
767 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_LINKED_NOTEBOOK_MAX_PREMIUM;
768
769 // Limits.thrift
773 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTEBOOK_BUSINESS_SHARED_NOTEBOOK_MAX;
774
775 // Limits.thrift
779 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTEBOOK_PERSONAL_SHARED_NOTEBOOK_MAX;
780
781 // Limits.thrift
785 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_BUSINESS_SHARED_NOTE_MAX;
786
787 // Limits.thrift
791 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_PERSONAL_SHARED_NOTE_MAX;
792
793 // Limits.thrift
797 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_CONTENT_CLASS_LEN_MIN;
798
799 // Limits.thrift
803 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_CONTENT_CLASS_LEN_MAX;
804
805 // Limits.thrift
810 QEVERCLOUD_EXPORT extern const QString EDAM_NOTE_CONTENT_CLASS_REGEX;
811
812 // Limits.thrift
820 QEVERCLOUD_EXPORT extern const QString EDAM_HELLO_APP_CONTENT_CLASS_PREFIX;
821
822 // Limits.thrift
830 QEVERCLOUD_EXPORT extern const QString EDAM_FOOD_APP_CONTENT_CLASS_PREFIX;
831
832 // Limits.thrift
839 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_HELLO_ENCOUNTER;
840
841 // Limits.thrift
848 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_HELLO_PROFILE;
849
850 // Limits.thrift
857 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_FOOD_MEAL;
858
859 // Limits.thrift
865 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_SKITCH_PREFIX;
866
867 // Limits.thrift
872 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_SKITCH;
873
874 // Limits.thrift
879 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_SKITCH_PDF;
880
881 // Limits.thrift
887 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_PENULTIMATE_PREFIX;
888
889 // Limits.thrift
894 QEVERCLOUD_EXPORT extern const QString EDAM_CONTENT_CLASS_PENULTIMATE_NOTEBOOK;
895
896 // Limits.thrift
901 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_APPLICATION_POSTIT;
902
903 // Limits.thrift
908 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_APPLICATION_MOLESKINE;
909
910 // Limits.thrift
915 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_APPLICATION_EN_SCANSNAP;
916
917 // Limits.thrift
922 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_APPLICATION_EWC;
923
924 // Limits.thrift
929 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_APPLICATION_ANDROID_SHARE_EXTENSION;
930
931 // Limits.thrift
936 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_APPLICATION_IOS_SHARE_EXTENSION;
937
938 // Limits.thrift
943 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_APPLICATION_WEB_CLIPPER;
944
945 // Limits.thrift
949 QEVERCLOUD_EXPORT extern const QString EDAM_SOURCE_OUTLOOK_CLIPPER;
950
951 // Limits.thrift
```

```
956 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_TITLE_QUALITY_UNTITLED;
957
958 // Limits.thrift
964 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_TITLE_QUALITY_LOW;
965
966 // Limits.thrift
972 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_TITLE_QUALITY_MEDIUM;
973
974 // Limits.thrift
980 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_TITLE_QUALITY_HIGH;
981
982 // Limits.thrift
987 QEVERCLOUD_EXPORT extern const qint32 EDAM_RELATED_PLAINTEXT_LEN_MIN;
988
989 // Limits.thrift
994 QEVERCLOUD_EXPORT extern const qint32 EDAM_RELATED_PLAINTEXT_LEN_MAX;
995
996 // Limits.thrift
1001 QEVERCLOUD_EXPORT extern const qint32 EDAM_RELATED_MAX_NOTES;
1002
1003 // Limits.thrift
1008 QEVERCLOUD_EXPORT extern const qint32 EDAM_RELATED_MAX_NOTEBOOKS;
1009
1010 // Limits.thrift
1014 QEVERCLOUD_EXPORT extern const qint32 EDAM_RELATED_MAX_TAGS;
1015
1016 // Limits.thrift
1020 QEVERCLOUD_EXPORT extern const qint32 EDAM_RELATED_MAX_EXPERTS;
1021
1022 // Limits.thrift
1027 QEVERCLOUD_EXPORT extern const qint32 EDAM_RELATED_MAX_RELATED_CONTENT;
1028
1029 // Limits.thrift
1034 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MIN;
1035
1036 // Limits.thrift
1041 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_LEN_MAX;
1042
1043 // Limits.thrift
1049 QEVERCLOUD_EXPORT extern const QString EDAM_BUSINESS_NOTEBOOK_DESCRIPTION_REGEX;
1050
1051 // Limits.thrift
1055 QEVERCLOUD_EXPORT extern const qint32 EDAM_BUSINESS_PHONE_NUMBER_LEN_MAX;
1056
1057 // Limits.thrift
1061 QEVERCLOUD_EXPORT extern const qint32 EDAM_PREFERENCE_NAME_LEN_MIN;
1062
1063 // Limits.thrift
1067 QEVERCLOUD_EXPORT extern const qint32 EDAM_PREFERENCE_NAME_LEN_MAX;
1068
1069 // Limits.thrift
1073 QEVERCLOUD_EXPORT extern const qint32 EDAM_PREFERENCE_VALUE_LEN_MIN;
1074
1075 // Limits.thrift
1079 QEVERCLOUD_EXPORT extern const qint32 EDAM_PREFERENCE_VALUE_LEN_MAX;
1080
1081 // Limits.thrift
1085 QEVERCLOUD_EXPORT extern const qint32 EDAM_MAX_PREFERENCES;
1086
1087 // Limits.thrift
1092 QEVERCLOUD_EXPORT extern const qint32 EDAM_MAX_VALUES_PER_PREFERENCE;
1093
1094 // Limits.thrift
1102 QEVERCLOUD_EXPORT extern const qint32 EDAM_PREFERENCE_ONLY_ONE_VALUE_LEN_MAX;
1103
1104 // Limits.thrift
1108 QEVERCLOUD_EXPORT extern const QString EDAM_PREFERENCE_NAME_REGEX;
1109
1110 // Limits.thrift
1115 QEVERCLOUD_EXPORT extern const QString EDAM_PREFERENCE_VALUE_REGEX;
1116
1117 // Limits.thrift
1122 QEVERCLOUD_EXPORT extern const QString EDAM_PREFERENCE_ONLY_ONE_VALUE_REGEX;
1123
1124 // Limits.thrift
1128 QEVERCLOUD_EXPORT extern const QString EDAM_PREFERENCE_SHORTCUTS;
1129
1130 // Limits.thrift
1141 QEVERCLOUD_EXPORT extern const QString EDAM_PREFERENCE_BUSINESS_DEFAULT_NOTEBOOK;
1142
1143 // Limits.thrift
1158 QEVERCLOUD_EXPORT extern const QString EDAM_PREFERENCE_BUSINESS_QUICKNOTE;
1159
1160 // Limits.thrift
1164 QEVERCLOUD_EXPORT extern const qint32 EDAM_PREFERENCE_SHORTCUTS_MAX_VALUES;
1165
1166 // Limits.thrift
```

```
1170 QEVERCLOUD_EXPORT extern const qint32 EDAM_DEVICE_ID_LEN_MAX;
1171
1172 // Limits.thrift
1176 QEVERCLOUD_EXPORT extern const QString EDAM_DEVICE_ID_REGEX;
1177
1178 // Limits.thrift
1182 QEVERCLOUD_EXPORT extern const qint32 EDAM_DEVICE_DESCRIPTION_LEN_MAX;
1183
1184 // Limits.thrift
1188 QEVERCLOUD_EXPORT extern const QString EDAM_DEVICE_DESCRIPTION_REGEX;
1189
1190 // Limits.thrift
1194 QEVERCLOUD_EXPORT extern const qint32 EDAM_SEARCH_SUGGESTIONS_MAX;
1195
1196 // Limits.thrift
1200 QEVERCLOUD_EXPORT extern const qint32 EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MAX;
1201
1202 // Limits.thrift
1206 QEVERCLOUD_EXPORT extern const qint32 EDAM_SEARCH_SUGGESTIONS_PREFIX_LEN_MIN;
1207
1208 // Limits.thrift
1212 QEVERCLOUD_EXPORT extern const qint32 EDAM_FIND_CONTACT_DEFAULT_MAX_RESULTS;
1213
1214 // Limits.thrift
1218 QEVERCLOUD_EXPORT extern const qint32 EDAM_FIND_CONTACT_MAX_RESULTS;
1219
1220 // Limits.thrift
1225 QEVERCLOUD_EXPORT extern const qint32 EDAM_NOTE_LOCK_VIEWERS_NOTES_MAX;
1226
1227 // Limits.thrift
1231 QEVERCLOUD_EXPORT extern const qint32 EDAM_GET_ORDERS_MAX_RESULTS;
1232
1233 // Limits.thrift
1237 QEVERCLOUD_EXPORT extern const qint32 EDAM_MESSAGE_BODY_LEN_MAX;
1238
1239 // Limits.thrift
1243 QEVERCLOUD_EXPORT extern const QString EDAM_MESSAGE_BODY_REGEX;
1244
1245 // Limits.thrift
1249 QEVERCLOUD_EXPORT extern const qint32 EDAM_MESSAGE_RECIPIENTS_MAX;
1250
1251 // Limits.thrift
1255 QEVERCLOUD_EXPORT extern const qint32 EDAM_MESSAGE_ATTACHMENTS_MAX;
1256
1257 // Limits.thrift
1261 QEVERCLOUD_EXPORT extern const qint32 EDAM_MESSAGE_ATTACHMENT_TITLE_LEN_MAX;
1262
1263 // Limits.thrift
1267 QEVERCLOUD_EXPORT extern const QString EDAM_MESSAGE_ATTACHMENT_TITLE_REGEX;
1268
1269 // Limits.thrift
1273 QEVERCLOUD_EXPORT extern const qint32 EDAM_MESSAGE_ATTACHMENT_SNIPPET_LEN_MAX;
1274
1275 // Limits.thrift
1279 QEVERCLOUD_EXPORT extern const QString EDAM_MESSAGE_ATTACHMENT_SNIPPET_REGEX;
1280
1281 // Limits.thrift
1286 QEVERCLOUD_EXPORT extern const qint32 EDAM_USER_PROFILE_PHOTO_MAX_BYTES;
1287
1288 // Limits.thrift
1292 QEVERCLOUD_EXPORT extern const qint32 EDAM_PROMOTION_ID_LEN_MAX;
1293
1294 // Limits.thrift
1298 QEVERCLOUD_EXPORT extern const QString EDAM_PROMOTION_ID_REGEX;
1299
1300 // Limits.thrift
1302 QEVERCLOUD_EXPORT extern const qint16 EDAM_APP_RATING_MIN;
1303
1304 // Limits.thrift
1305 QEVERCLOUD_EXPORT extern const qint16 EDAM_APP_RATING_MAX;
1306
1307 // Limits.thrift
1311 QEVERCLOUD_EXPORT extern const qint32 EDAM_SNIPPETS_NOTES_MAX;
1312
1313 // Limits.thrift
1317 QEVERCLOUD_EXPORT extern const qint32 EDAM_CONNECTED_IDENTITY_REQUEST_MAX;
1318
1319 // Limits.thrift
1324 QEVERCLOUD_EXPORT extern const qint32 EDAM_OPEN_ID_ACCESS_TOKEN_MAX;
1325
1326 // Types.thrift
1331 QEVERCLOUD_EXPORT extern const QString CLASSIFICATION_RECIPE_USER_NON_RECIPE;
1332
1333 // Types.thrift
1338 QEVERCLOUD_EXPORT extern const QString CLASSIFICATION_RECIPE_USER_RECIPE;
1339
1340 // Types.thrift
```

```
1345 QEVERCLOUD_EXPORT extern const QString CLASSIFICATION_RECIPE_SERVICE_RECIPE;
1346
1347 // Types.thrift
1352 QEVERCLOUD_EXPORT extern const QString EDAM_NOTE_SOURCE_WEB_CLIP;
1353
1354 // Types.thrift
1359 QEVERCLOUD_EXPORT extern const QString EDAM_NOTE_SOURCE_WEB_CLIP_SIMPLIFIED;
1360
1361 // Types.thrift
1366 QEVERCLOUD_EXPORT extern const QString EDAM_NOTE_SOURCE_MAIL_CLIP;
1367
1368 // Types.thrift
1373 QEVERCLOUD_EXPORT extern const QString EDAM_NOTE_SOURCE_MAIL_SMTP_GATEWAY;
1374
1375 // UserStore.thrift
1381 QEVERCLOUD_EXPORT extern const qint16 EDAM_VERSION_MAJOR;
1382
1383 // UserStore.thrift
1389 QEVERCLOUD_EXPORT extern const qint16 EDAM_VERSION_MINOR;
1390
1391 } // namespace qevercloud
1392
1393 #endif // QEVERCLOUD_GENERATED_CONSTANTS_H
```

8.15 EDAMErrorCode.h File Reference

```
#include "../Export.h"
#include "../Helpers.h"
#include <QDebug>
#include <QMetaType>
#include <QTextStream>
```

Namespaces

- namespace qevercloud

Enumerations

- enum class qevercloud::EDAMErrorCode {
  qevercloud::UNKNOWN = 1 , qevercloud::BAD_DATA_FORMAT = 2 , qevercloud::PERMISSION_DENIED = 3 , qevercloud::INTERNAL_ERROR = 4 ,
  qevercloud::DATA_REQUIRED = 5 , qevercloud::LIMIT_REACHED = 6 , qevercloud::QUOTA_REACHED = 7 , qevercloud::INVALID_AUTH = 8 ,
  qevercloud::AUTH_EXPIRED = 9 , qevercloud::DATA_CONFLICT = 10 , qevercloud::ENML_VALIDATION = 11 , qevercloud::SHARD_UNAVAILABLE = 12 ,
  qevercloud::LEN_TOO_SHORT = 13 , qevercloud::LEN_TOO_LONG = 14 , qevercloud::TOO_FEW = 15 , qevercloud::TOO_MANY = 16 ,
  qevercloud::UNSUPPORTED_OPERATION = 17 , qevercloud::TAKEN_DOWN = 18 , qevercloud::RATE_LIMIT_REACHED = 19 , qevercloud::BUSINESS_SECURITY_LOGIN_REQUIRED = 20 ,
  qevercloud::DEVICE_LIMIT_REACHED = 21 , qevercloud::OPENID_ALREADY_TAKEN = 22 , qevercloud::INVALID_OPENID_ = 23 , qevercloud::USER_NOT_ASSOCIATED = 24 ,
  qevercloud::USER_NOT_REGISTERED = 25 , qevercloud::USER_ALREADY_ASSOCIATED = 26 ,
  qevercloud::ACCOUNT_CLEAR = 27 , qevercloud::SSO_AUTHENTICATION_REQUIRED = 28 }
- enum class qevercloud::EDAMInvalidContactReason { qevercloud::BAD_ADDRESS , qevercloud::DUPLICATE_CONTACT , qevercloud::NO_CONNECTION }
- enum class qevercloud::ShareRelationshipPrivilegeLevel { qevercloud::READ_NOTEBOOK = 0 , qevercloud::READ_NOTEBOOK_PLUS_ACTIVITY = 10 , qevercloud::MODIFY_NOTEBOOK_PLUS_ACTIVITY = 20 , qevercloud::FULL_ACCESS = 30 }

- enum class qevercloud::PrivilegeLevel { qevercloud::NORMAL = 1 , qevercloud::PREMIUM = 3 , qevercloud::VIP = 5 , qevercloud::MANAGER = 7 , qevercloud::SUPPORT = 8 , qevercloud::ADMIN = 9 }
- enum class qevercloud::ServiceLevel { qevercloud::BASIC = 1 , qevercloud::PLUS = 2 , qevercloud::PREMIUM = 3 , qevercloud::BUSINESS = 4 }
- enum class qevercloud::QueryFormat { qevercloud::USER = 1 , qevercloud::SEXP = 2 }
- enum class qevercloud::NoteSortOrder { qevercloud::CREATED = 1 , qevercloud::UPDATED = 2 , qevercloud::RELEVANCE = 3 , qevercloud::UPDATE_SEQUENCE_NU = 4 , qevercloud::TITLE = 5 }
- enum class qevercloud::PremiumOrderStatus { qevercloud::NONE = 0 , qevercloud::PENDING = 1 , qevercloud::ACTIVE = 2 , qevercloud::FAILED = 3 , qevercloud::CANCELLATION_PENDING = 4 , qevercloud::CANCELED = 5 }
- enum class qevercloud::SharedNotebookPrivilegeLevel { qevercloud::READ_NOTEBOOK = 0 , qevercloud::MODIFY_NOTEBOOK_PLUS_ACTIVITY = 1 , qevercloud::READ_NOTEBOOK_PLUS_ACTIVITY = 2 , qevercloud::GROUP = 3 , qevercloud::FULL_ACCESS = 4 , qevercloud::BUSINESS_FULL_ACCESS = 5 }
- enum class qevercloud::SharedNotePrivilegeLevel { qevercloud::READ_NOTE = 0 , qevercloud::MODIFY_NOTE = 1 , qevercloud::FULL_ACCESS = 2 }
- enum class qevercloud::SponsoredGroupRole { qevercloud::GROUP_MEMBER = 1 , qevercloud::GROUP_ADMIN = 2 , qevercloud::GROUP_OWNER = 3 }
- enum class qevercloud::BusinessUserRole { qevercloud::ADMIN = 1 , qevercloud::NORMAL = 2 }
- enum class qevercloud::BusinessUserStatus { qevercloud::ACTIVE = 1 , qevercloud::DEACTIVATED = 2 }
- enum class qevercloud::SharedNotebookInstanceRestrictions { qevercloud::ASSIGNED = 1 , qevercloud::NO_SHARED_NOTE = 2 }
- enum class qevercloud::ReminderEmailConfig { qevercloud::DO_NOT_SEND = 1 , qevercloud::SEND_DAILY_EMAIL = 2 }
- enum class qevercloud::BusinessInvitationStatus { qevercloud::APPROVED = 0 , qevercloud::REQUESTED = 1 , qevercloud::REDEEMED = 2 }
- enum class qevercloud::ContactType { qevercloud::EVERNOTE = 1 , qevercloud::SMS = 2 , qevercloud::FACEBOOK = 3 , qevercloud::EMAIL = 4 , qevercloud::TWITTER = 5 , qevercloud::LINKEDIN = 6 }
- enum class qevercloud::EntityType { qevercloud::NOTE = 1 , qevercloud::NOTEBOOK = 2 , qevercloud::WORKSPACE = 3 }
- enum class qevercloud::RecipientStatus { qevercloud::NOT_IN_MY_LIST = 1 , qevercloud::IN_MY_LIST = 2 , qevercloud::IN_MY_LIST_AND_DEFAULT_NOTEBOOK = 3 }
- enum class qevercloud::CanMoveToContainerStatus { qevercloud::CAN_BE_MOVED = 1 , qevercloud::INSUFFICIENT_ENTITY = 2 , qevercloud::INSUFFICIENT_CONTAINER_PRIVILEGE = 3 }
- enum class qevercloud::RelatedContentType { qevercloud::NEWS_ARTICLE = 1 , qevercloud::PROFILE_PERSON = 2 , qevercloud::PROFILE_ORGANIZATION = 3 , qevercloud::REFERENCE_MATERIAL = 4 }
- enum class qevercloud::RelatedContentAccess { qevercloud::NOT_ACCESSIBLE = 0 , qevercloud::DIRECT_LINK_ACCESS_C = 1 , qevercloud::DIRECT_LINK_LOGIN_REQUIRED = 2 , qevercloud::DIRECT_LINK_EMBEDDED_VIEW = 3 }
- enum class qevercloud::UserIdentityType { qevercloud::EVERNOTE_USERID = 1 , qevercloud::EMAIL = 2 , qevercloud::IDENTITYID = 3 }

Functions

- uint qevercloud::qHash (EDAMErrorCode value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const EDAMError↩ Code value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const EDAMErrorCode value)
- uint qevercloud::qHash (EDAMInvalidContactReason value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const EDAMInvalid↩ ContactReason value)

- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const EDAMInvalidContact↩ Reason value)
- uint qevercloud::qHash (ShareRelationshipPrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Share↩ RelationshipPrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const ShareRelationship↩ PrivilegeLevel value)
- uint qevercloud::qHash (PrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const PrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const PrivilegeLevel value)
- uint qevercloud::qHash (ServiceLevel value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const ServiceLevel value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const ServiceLevel value)
- uint qevercloud::qHash (QueryFormat value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const QueryFormat value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const QueryFormat value)
- uint qevercloud::qHash (NoteSortOrder value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const NoteSort↩ Order value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const NoteSortOrder value)
- uint qevercloud::qHash (PremiumOrderStatus value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Premium↩ OrderStatus value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const PremiumOrderStatus value)
- uint qevercloud::qHash (SharedNotebookPrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Shared↩ NotebookPrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const SharedNotebook↩ PrivilegeLevel value)
- uint qevercloud::qHash (SharedNotePrivilegeLevel value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const SharedNote↩ PrivilegeLevel value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const SharedNotePrivilege↩ Level value)
- uint qevercloud::qHash (SponsoredGroupRole value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Sponsored↩ GroupRole value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const SponsoredGroupRole value)
- uint qevercloud::qHash (BusinessUserRole value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Business↩ UserRole value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const BusinessUserRole value)
- uint qevercloud::qHash (BusinessUserStatus value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Business↩ UserStatus value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const BusinessUserStatus value)
- uint qevercloud::qHash (SharedNotebookInstanceRestrictions value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Shared↩ NotebookInstanceRestrictions value)

- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const SharedNotebook↩ InstanceRestrictions value)
- uint qevercloud::qHash (ReminderEmailConfig value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Reminder↩ EmailConfig value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const ReminderEmailConfig value)
- uint qevercloud::qHash (BusinessInvitationStatus value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Business↩ InvitationStatus value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const BusinessInvitation↩ Status value)
- uint qevercloud::qHash (ContactType value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const ContactType value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const ContactType value)
- uint qevercloud::qHash (EntityType value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const EntityType value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const EntityType value)
- uint qevercloud::qHash (RecipientStatus value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Recipient↩ Status value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const RecipientStatus value)
- uint qevercloud::qHash (CanMoveToContainerStatus value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const CanMoveTo↩ ContainerStatus value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const CanMoveToContainer↩ Status value)
- uint qevercloud::qHash (RelatedContentType value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Related↩ ContentType value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const RelatedContentType value)
- uint qevercloud::qHash (RelatedContentAccess value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const Related↩ ContentAccess value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const RelatedContentAccess value)
- uint qevercloud::qHash (UserIdentityType value)
- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const UserIdentity↩ Type value)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const UserIdentityType value)

8.16 EDAMErrorCode.h

Go to the documentation of this file.

```
1
12 #ifndef QEVERCLOUD_GENERATED_EDAMERRORCODE_H
13 #define QEVERCLOUD_GENERATED_EDAMERRORCODE_H
14
15 #include "../Export.h"
16
17 #include "../Helpers.h"
18 #include <QDebug>
19 #include <QMetaType>
20 #include <QTextStream>
```

```
21
22 namespace qevercloud {
23
25
26 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
27 #if QEVERCLOUD_USES_Q_NAMESPACE
28 Q_NAMESPACE
29 #endif
30 #endif
31
33
112 enum class EDAMErrorCode
113 {
114     UNKNOWN = 1,
115     BAD_DATA_FORMAT = 2,
116     PERMISSION_DENIED = 3,
117     INTERNAL_ERROR = 4,
118     DATA_REQUIRED = 5,
119     LIMIT_REACHED = 6,
120     QUOTA_REACHED = 7,
121     INVALID_AUTH = 8,
122     AUTH_EXPIRED = 9,
123     DATA_CONFLICT = 10,
124     ENML_VALIDATION = 11,
125     SHARD_UNAVAILABLE = 12,
126     LEN_TOO_SHORT = 13,
127     LEN_TOO_LONG = 14,
128     TOO_FEW = 15,
129     TOO_MANY = 16,
130     UNSUPPORTED_OPERATION = 17,
131     TAKEN_DOWN = 18,
132     RATE_LIMIT_REACHED = 19,
133     BUSINESS_SECURITY_LOGIN_REQUIRED = 20,
134     DEVICE_LIMIT_REACHED = 21,
135     OPENID_ALREADY_TAKEN = 22,
136     INVALID_OPENID_TOKEN = 23,
137     USER_NOT_ASSOCIATED = 24,
138     USER_NOT_REGISTERED = 25,
139     USER_ALREADY_ASSOCIATED = 26,
140     ACCOUNT_CLEAR = 27,
141     SSO_AUTHENTICATION_REQUIRED = 28
142 };
143
144 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
145 #if QEVERCLOUD_USES_Q_NAMESPACE
146 Q_ENUM_NS(EDAMErrorCode)
147 #endif
148 #endif
149
150 inline uint qHash(EDAMErrorCode value)
151 {
152     return static_cast<uint>(value);
153 }
154
156
157 QEVERCLOUD_EXPORT QTextStream & operator<<(
158     QTextStream & out, const EDAMErrorCode value);
159
161
162 QEVERCLOUD_EXPORT QDebug & operator<<(
163     QDebug & out, const EDAMErrorCode value);
164
166
200 enum class EDAMInvalidContactReason
201 {
202     BAD_ADDRESS,
203     DUPLICATE_CONTACT,
204     NO_CONNECTION
205 };
206
207 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
208 #if QEVERCLOUD_USES_Q_NAMESPACE
209 Q_ENUM_NS(EDAMInvalidContactReason)
210 #endif
211 #endif
212
213 inline uint qHash(EDAMInvalidContactReason value)
214 {
215     return static_cast<uint>(value);
216 }
217
219
220 QEVERCLOUD_EXPORT QTextStream & operator<<(
221     QTextStream & out, const EDAMInvalidContactReason value);
222
224
225 QEVERCLOUD_EXPORT QDebug & operator<<(
```

```
226     QDebug & out, const EDAMInvalidContactReason value);
227
229
251 enum class ShareRelationshipPrivilegeLevel
252 {
253     READ_NOTEBOOK = 0,
254     READ_NOTEBOOK_PLUS_ACTIVITY = 10,
255     MODIFY_NOTEBOOK_PLUS_ACTIVITY = 20,
256     FULL_ACCESS = 30
257 };
258
259 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
260 #if QEVERCLOUD_USES_Q_NAMESPACE
261 Q_ENUM_NS(ShareRelationshipPrivilegeLevel)
262 #endif
263 #endif
264
265 inline uint qHash(ShareRelationshipPrivilegeLevel value)
266 {
267     return static_cast<uint>(value);
268 }
269
271
272 QEVERCLOUD_EXPORT QTextStream & operator<<(
273     QTextStream & out, const ShareRelationshipPrivilegeLevel value);
274
276
277 QEVERCLOUD_EXPORT QDebug & operator<<(
278     QDebug & out, const ShareRelationshipPrivilegeLevel value);
279
281
287 enum class PrivilegeLevel
288 {
289     NORMAL = 1,
290     PREMIUM = 3,
291     VIP = 5,
292     MANAGER = 7,
293     SUPPORT = 8,
294     ADMIN = 9
295 };
296
297 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
298 #if QEVERCLOUD_USES_Q_NAMESPACE
299 Q_ENUM_NS(PrivilegeLevel)
300 #endif
301 #endif
302
303 inline uint qHash(PrivilegeLevel value)
304 {
305     return static_cast<uint>(value);
306 }
307
309
310 QEVERCLOUD_EXPORT QTextStream & operator<<(
311     QTextStream & out, const PrivilegeLevel value);
312
314
315 QEVERCLOUD_EXPORT QDebug & operator<<(
316     QDebug & out, const PrivilegeLevel value);
317
319
325 enum class ServiceLevel
326 {
327     BASIC = 1,
328     PLUS = 2,
329     PREMIUM = 3,
330     BUSINESS = 4
331 };
332
333 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
334 #if QEVERCLOUD_USES_Q_NAMESPACE
335 Q_ENUM_NS(ServiceLevel)
336 #endif
337 #endif
338
339 inline uint qHash(ServiceLevel value)
340 {
341     return static_cast<uint>(value);
342 }
343
345
346 QEVERCLOUD_EXPORT QTextStream & operator<<(
347     QTextStream & out, const ServiceLevel value);
348
350
351 QEVERCLOUD_EXPORT QDebug & operator<<(
352     QDebug & out, const ServiceLevel value);
```

```
353
355
360 enum class QueryFormat
361 {
362     USER = 1,
363     SEXP = 2
364 };
365
366 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
367 #if QEVERCLOUD_USES_Q_NAMESPACE
368 Q_ENUM_NS(QueryFormat)
369 #endif
370 #endif
371
372 inline uint qHash(QueryFormat value)
373 {
374     return static_cast<uint>(value);
375 }
376
378
379 QEVERCLOUD_EXPORT QTextStream & operator<<(
380     QTextStream & out, const QueryFormat value);
381
383
384 QEVERCLOUD_EXPORT QDebug & operator<<(
385     QDebug & out, const QueryFormat value);
386
388
393 enum class NoteSortOrder
394 {
395     CREATED = 1,
396     UPDATED = 2,
397     RELEVANCE = 3,
398     UPDATE_SEQUENCE_NUMBER = 4,
399     TITLE = 5
400 };
401
402 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
403 #if QEVERCLOUD_USES_Q_NAMESPACE
404 Q_ENUM_NS(NoteSortOrder)
405 #endif
406 #endif
407
408 inline uint qHash(NoteSortOrder value)
409 {
410     return static_cast<uint>(value);
411 }
412
414
415 QEVERCLOUD_EXPORT QTextStream & operator<<(
416     QTextStream & out, const NoteSortOrder value);
417
419
420 QEVERCLOUD_EXPORT QDebug & operator<<(
421     QDebug & out, const NoteSortOrder value);
422
424
445 enum class PremiumOrderStatus
446 {
447     NONE = 0,
448     PENDING = 1,
449     ACTIVE = 2,
450     FAILED = 3,
451     CANCELLATION_PENDING = 4,
452     CANCELED = 5
453 };
454
455 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
456 #if QEVERCLOUD_USES_Q_NAMESPACE
457 Q_ENUM_NS(PremiumOrderStatus)
458 #endif
459 #endif
460
461 inline uint qHash(PremiumOrderStatus value)
462 {
463     return static_cast<uint>(value);
464 }
465
467
468 QEVERCLOUD_EXPORT QTextStream & operator<<(
469     QTextStream & out, const PremiumOrderStatus value);
470
472
473 QEVERCLOUD_EXPORT QDebug & operator<<(
474     QDebug & out, const PremiumOrderStatus value);
475
477
```

```
513 enum class SharedNotebookPrivilegeLevel
514 {
515     READ_NOTEBOOK = 0,
516     MODIFY_NOTEBOOK_PLUS_ACTIVITY = 1,
517     READ_NOTEBOOK_PLUS_ACTIVITY = 2,
518     GROUP = 3,
519     FULL_ACCESS = 4,
520     BUSINESS_FULL_ACCESS = 5
521 };
522
523 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
524 #if QEVERCLOUD_USES_Q_NAMESPACE
525 Q_ENUM_NS(SharedNotebookPrivilegeLevel)
526 #endif
527 #endif
528
529 inline uint qHash(SharedNotebookPrivilegeLevel value)
530 {
531     return static_cast<uint>(value);
532 }
533
535
536 QEVERCLOUD_EXPORT QTextStream & operator<<(
537     QTextStream & out, const SharedNotebookPrivilegeLevel value);
538
540
541 QEVERCLOUD_EXPORT QDebug & operator<<(
542     QDebug & out, const SharedNotebookPrivilegeLevel value);
543
545
560 enum class SharedNotePrivilegeLevel
561 {
562     READ_NOTE = 0,
563     MODIFY_NOTE = 1,
564     FULL_ACCESS = 2
565 };
566
567 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
568 #if QEVERCLOUD_USES_Q_NAMESPACE
569 Q_ENUM_NS(SharedNotePrivilegeLevel)
570 #endif
571 #endif
572
573 inline uint qHash(SharedNotePrivilegeLevel value)
574 {
575     return static_cast<uint>(value);
576 }
577
579
580 QEVERCLOUD_EXPORT QTextStream & operator<<(
581     QTextStream & out, const SharedNotePrivilegeLevel value);
582
584
585 QEVERCLOUD_EXPORT QDebug & operator<<(
586     QDebug & out, const SharedNotePrivilegeLevel value);
587
589
599 enum class SponsoredGroupRole
600 {
601     GROUP_MEMBER = 1,
602     GROUP_ADMIN = 2,
603     GROUP_OWNER = 3
604 };
605
606 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
607 #if QEVERCLOUD_USES_Q_NAMESPACE
608 Q_ENUM_NS(SponsoredGroupRole)
609 #endif
610 #endif
611
612 inline uint qHash(SponsoredGroupRole value)
613 {
614     return static_cast<uint>(value);
615 }
616
618
619 QEVERCLOUD_EXPORT QTextStream & operator<<(
620     QTextStream & out, const SponsoredGroupRole value);
621
623
624 QEVERCLOUD_EXPORT QDebug & operator<<(
625     QDebug & out, const SponsoredGroupRole value);
626
628
636 enum class BusinessUserRole
637 {
638     ADMIN = 1,
```

```
639     NORMAL = 2
640 };
641
642 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
643 #if QEVERCLOUD_USES_Q_NAMESPACE
644 Q_ENUM_NS(BusinessUserRole)
645 #endif
646 #endif
647
648 inline uint qHash(BusinessUserRole value)
649 {
650     return static_cast<uint>(value);
651 }
652
654
655 QEVERCLOUD_EXPORT QTextStream & operator<<(
656     QTextStream & out, const BusinessUserRole value);
657
659
660 QEVERCLOUD_EXPORT QDebug & operator<<(
661     QDebug & out, const BusinessUserRole value);
662
664
678 enum class BusinessUserStatus
679 {
680     ACTIVE = 1,
681     DEACTIVATED = 2
682 };
683
684 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
685 #if QEVERCLOUD_USES_Q_NAMESPACE
686 Q_ENUM_NS(BusinessUserStatus)
687 #endif
688 #endif
689
690 inline uint qHash(BusinessUserStatus value)
691 {
692     return static_cast<uint>(value);
693 }
694
696
697 QEVERCLOUD_EXPORT QTextStream & operator<<(
698     QTextStream & out, const BusinessUserStatus value);
699
701
702 QEVERCLOUD_EXPORT QDebug & operator<<(
703     QDebug & out, const BusinessUserStatus value);
704
706
717 enum class SharedNotebookInstanceRestrictions
718 {
719     ASSIGNED = 1,
720     NO_SHARED_NOTEBOOKS = 2
721 };
722
723 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
724 #if QEVERCLOUD_USES_Q_NAMESPACE
725 Q_ENUM_NS(SharedNotebookInstanceRestrictions)
726 #endif
727 #endif
728
729 inline uint qHash(SharedNotebookInstanceRestrictions value)
730 {
731     return static_cast<uint>(value);
732 }
733
735
736 QEVERCLOUD_EXPORT QTextStream & operator<<(
737     QTextStream & out, const SharedNotebookInstanceRestrictions value);
738
740
741 QEVERCLOUD_EXPORT QDebug & operator<<(
742     QDebug & out, const SharedNotebookInstanceRestrictions value);
743
745
756 enum class ReminderEmailConfig
757 {
758     DO_NOT_SEND = 1,
759     SEND_DAILY_EMAIL = 2
760 };
761
762 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
763 #if QEVERCLOUD_USES_Q_NAMESPACE
764 Q_ENUM_NS(ReminderEmailConfig)
765 #endif
766 #endif
767
```

```
768 inline uint qHash(ReminderEmailConfig value)
769 {
770     return static_cast<uint>(value);
771 }
772 
774 
775 QEVERCLOUD_EXPORT QTextStream & operator<<(
776     QTextStream & out, const ReminderEmailConfig value);
777 
779 
780 QEVERCLOUD_EXPORT QDebug & operator<<(
781     QDebug & out, const ReminderEmailConfig value);
782 
784 
798 enum class BusinessInvitationStatus
799 {
800     APPROVED = 0,
801     REQUESTED = 1,
802     REDEEMED = 2
803 };
804 
805 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
806 #if QEVERCLOUD_USES_Q_NAMESPACE
807 Q_ENUM_NS(BusinessInvitationStatus)
808 #endif
809 #endif
810 
811 inline uint qHash(BusinessInvitationStatus value)
812 {
813     return static_cast<uint>(value);
814 }
815 
817 
818 QEVERCLOUD_EXPORT QTextStream & operator<<(
819     QTextStream & out, const BusinessInvitationStatus value);
820 
822 
823 QEVERCLOUD_EXPORT QDebug & operator<<(
824     QDebug & out, const BusinessInvitationStatus value);
825 
827 
831 enum class ContactType
832 {
833     EVERNOTE = 1,
834     SMS = 2,
835     FACEBOOK = 3,
836     EMAIL = 4,
837     TWITTER = 5,
838     LINKEDIN = 6
839 };
840 
841 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
842 #if QEVERCLOUD_USES_Q_NAMESPACE
843 Q_ENUM_NS(ContactType)
844 #endif
845 #endif
846 
847 inline uint qHash(ContactType value)
848 {
849     return static_cast<uint>(value);
850 }
851 
853 
854 QEVERCLOUD_EXPORT QTextStream & operator<<(
855     QTextStream & out, const ContactType value);
856 
858 
859 QEVERCLOUD_EXPORT QDebug & operator<<(
860     QDebug & out, const ContactType value);
861 
863 
867 enum class EntityType
868 {
869     NOTE = 1,
870     NOTEBOOK = 2,
871     WORKSPACE = 3
872 };
873 
874 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
875 #if QEVERCLOUD_USES_Q_NAMESPACE
876 Q_ENUM_NS(EntityType)
877 #endif
878 #endif
879 
880 inline uint qHash(EntityType value)
881 {
882     return static_cast<uint>(value);
```

```
883 }
884
886
887 QEVERCLOUD_EXPORT QTextStream & operator<<(
888     QTextStream & out, const EntityType value);
889
891
892 QEVERCLOUD_EXPORT QDebug & operator<<(
893     QDebug & out, const EntityType value);
894
896
911 enum class RecipientStatus
912 {
913     NOT_IN_MY_LIST = 1,
914     IN_MY_LIST = 2,
915     IN_MY_LIST_AND_DEFAULT_NOTEBOOK = 3
916 };
917
918 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
919 #if QEVERCLOUD_USES_Q_NAMESPACE
920 Q_ENUM_NS(RecipientStatus)
921 #endif
922 #endif
923
924 inline uint qHash(RecipientStatus value)
925 {
926     return static_cast<uint>(value);
927 }
928
930
931 QEVERCLOUD_EXPORT QTextStream & operator<<(
932     QTextStream & out, const RecipientStatus value);
933
935
936 QEVERCLOUD_EXPORT QDebug & operator<<(
937     QDebug & out, const RecipientStatus value);
938
940
959 enum class CanMoveToContainerStatus
960 {
961     CAN_BE_MOVED = 1,
962     INSUFFICIENT_ENTITY_PRIVILEGE = 2,
963     INSUFFICIENT_CONTAINER_PRIVILEGE = 3
964 };
965
966 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
967 #if QEVERCLOUD_USES_Q_NAMESPACE
968 Q_ENUM_NS(CanMoveToContainerStatus)
969 #endif
970 #endif
971
972 inline uint qHash(CanMoveToContainerStatus value)
973 {
974     return static_cast<uint>(value);
975 }
976
978
979 QEVERCLOUD_EXPORT QTextStream & operator<<(
980     QTextStream & out, const CanMoveToContainerStatus value);
981
983
984 QEVERCLOUD_EXPORT QDebug & operator<<(
985     QDebug & out, const CanMoveToContainerStatus value);
986
988
997 enum class RelatedContentType
998 {
999     NEWS_ARTICLE = 1,
1000     PROFILE_PERSON = 2,
1001     PROFILE_ORGANIZATION = 3,
1002     REFERENCE_MATERIAL = 4
1003 };
1004
1005 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
1006 #if QEVERCLOUD_USES_Q_NAMESPACE
1007 Q_ENUM_NS(RelatedContentType)
1008 #endif
1009 #endif
1010
1011 inline uint qHash(RelatedContentType value)
1012 {
1013     return static_cast<uint>(value);
1014 }
1015
1017
1018 QEVERCLOUD_EXPORT QTextStream & operator<<(
1019     QTextStream & out, const RelatedContentType value);
```

```
1020
1022
1023 QEVERCLOUD_EXPORT QDebug & operator<<(
1024     QDebug & out, const RelatedContentType value);
1025
1027
1047 enum class RelatedContentAccess
1048 {
1049     NOT_ACCESSIBLE = 0,
1050     DIRECT_LINK_ACCESS_OK = 1,
1051     DIRECT_LINK_LOGIN_REQUIRED = 2,
1052     DIRECT_LINK_EMBEDDED_VIEW = 3
1053 };
1054
1055 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
1056 #if QEVERCLOUD_USES_Q_NAMESPACE
1057 Q_ENUM_NS(RelatedContentAccess)
1058 #endif
1059 #endif
1060
1061 inline uint qHash(RelatedContentAccess value)
1062 {
1063     return static_cast<uint>(value);
1064 }
1065
1067
1068 QEVERCLOUD_EXPORT QTextStream & operator<<(
1069     QTextStream & out, const RelatedContentAccess value);
1070
1072
1073 QEVERCLOUD_EXPORT QDebug & operator<<(
1074     QDebug & out, const RelatedContentAccess value);
1075
1077
1081 enum class UserIdentityType
1082 {
1083     EVERNOTE_USERID = 1,
1084     EMAIL = 2,
1085     IDENTITYID = 3
1086 };
1087
1088 #if QT_VERSION >= QT_VERSION_CHECK(5, 8, 0)
1089 #if QEVERCLOUD_USES_Q_NAMESPACE
1090 Q_ENUM_NS(UserIdentityType)
1091 #endif
1092 #endif
1093
1094 inline uint qHash(UserIdentityType value)
1095 {
1096     return static_cast<uint>(value);
1097 }
1098
1100
1101 QEVERCLOUD_EXPORT QTextStream & operator<<(
1102     QTextStream & out, const UserIdentityType value);
1103
1105
1106 QEVERCLOUD_EXPORT QDebug & operator<<(
1107     QDebug & out, const UserIdentityType value);
1108
1109 } // namespace qevercloud
1110
1111 Q_DECLARE_METATYPE(qevercloud::EDAMErrorCode)
1112 Q_DECLARE_METATYPE(qevercloud::EDAMInvalidContactReason)
1113 Q_DECLARE_METATYPE(qevercloud::ShareRelationshipPrivilegeLevel)
1114 Q_DECLARE_METATYPE(qevercloud::PrivilegeLevel)
1115 Q_DECLARE_METATYPE(qevercloud::ServiceLevel)
1116 Q_DECLARE_METATYPE(qevercloud::QueryFormat)
1117 Q_DECLARE_METATYPE(qevercloud::NoteSortOrder)
1118 Q_DECLARE_METATYPE(qevercloud::PremiumOrderStatus)
1119 Q_DECLARE_METATYPE(qevercloud::SharedNotebookPrivilegeLevel)
1120 Q_DECLARE_METATYPE(qevercloud::SharedNotePrivilegeLevel)
1121 Q_DECLARE_METATYPE(qevercloud::SponsoredGroupRole)
1122 Q_DECLARE_METATYPE(qevercloud::BusinessUserRole)
1123 Q_DECLARE_METATYPE(qevercloud::BusinessUserStatus)
1124 Q_DECLARE_METATYPE(qevercloud::SharedNotebookInstanceRestrictions)
1125 Q_DECLARE_METATYPE(qevercloud::ReminderEmailConfig)
1126 Q_DECLARE_METATYPE(qevercloud::BusinessInvitationStatus)
1127 Q_DECLARE_METATYPE(qevercloud::ContactType)
1128 Q_DECLARE_METATYPE(qevercloud::EntityType)
1129 Q_DECLARE_METATYPE(qevercloud::RecipientStatus)
1130 Q_DECLARE_METATYPE(qevercloud::CanMoveToContainerStatus)
1131 Q_DECLARE_METATYPE(qevercloud::RelatedContentType)
1132 Q_DECLARE_METATYPE(qevercloud::RelatedContentAccess)
1133 Q_DECLARE_METATYPE(qevercloud::UserIdentityType)
1134
1135 #endif // QEVERCLOUD_GENERATED_EDAMERRORCODE_H
```

8.17 Servers.h File Reference

```
#include "../Export.h"
#include "../Optional.h"
#include "../RequestContext.h"
#include "Constants.h"
#include "Types.h"
#include <QObject>
#include <functional>
```

Classes

- class qevercloud::NoteStoreServer

  The NoteStoreServer class represents customizable server for NoteStore requests. It is primarily used for testing of QEverCloud.

- class qevercloud::UserStoreServer

  The UserStoreServer class represents customizable server for UserStore requests. It is primarily used for testing of QEverCloud.

Namespaces

- namespace qevercloud

8.18 Servers.h

Go to the documentation of this file.

```
1
12 #ifndef QEVERCLOUD_GENERATED_SERVERS_H
13 #define QEVERCLOUD_GENERATED_SERVERS_H
14
15 #include "../Export.h"
16
17 #include "../Optional.h"
18 #include "../RequestContext.h"
19 #include "Constants.h"
20 #include "Types.h"
21 #include <QObject>
22 #include <functional>
23
24 namespace qevercloud {
25
27
33 class QEVERCLOUD_EXPORT NoteStoreServer:  public QObject
34 {
35     Q_OBJECT
36     Q_DISABLE_COPY(NoteStoreServer)
37 public:
38     explicit NoteStoreServer(QObject * parent = nullptr);
39
40 Q_SIGNALS:
41     // Signals notifying listeners about incoming requests
42     void getSyncStateRequest(
43         IRequestContextPtr ctx);
44
45     void getFilteredSyncChunkRequest(
46         qint32 afterUSN,
47         qint32 maxEntries,
48         SyncChunkFilter filter,
49         IRequestContextPtr ctx);
50
51     void getLinkedNotebookSyncStateRequest(
52         LinkedNotebook linkedNotebook,
53         IRequestContextPtr ctx);
```

```
54
55      void getLinkedNotebookSyncChunkRequest(
56          LinkedNotebook linkedNotebook,
57          qint32 afterUSN,
58          qint32 maxEntries,
59          bool fullSyncOnly,
60          IRequestContextPtr ctx);
61
62      void listNotebooksRequest(
63          IRequestContextPtr ctx);
64
65      void listAccessibleBusinessNotebooksRequest(
66          IRequestContextPtr ctx);
67
68      void getNotebookRequest(
69          Guid guid,
70          IRequestContextPtr ctx);
71
72      void getDefaultNotebookRequest(
73          IRequestContextPtr ctx);
74
75      void createNotebookRequest(
76          Notebook notebook,
77          IRequestContextPtr ctx);
78
79      void updateNotebookRequest(
80          Notebook notebook,
81          IRequestContextPtr ctx);
82
83      void expungeNotebookRequest(
84          Guid guid,
85          IRequestContextPtr ctx);
86
87      void listTagsRequest(
88          IRequestContextPtr ctx);
89
90      void listTagsByNotebookRequest(
91          Guid notebookGuid,
92          IRequestContextPtr ctx);
93
94      void getTagRequest(
95          Guid guid,
96          IRequestContextPtr ctx);
97
98      void createTagRequest(
99          Tag tag,
100         IRequestContextPtr ctx);
101
102     void updateTagRequest(
103         Tag tag,
104         IRequestContextPtr ctx);
105
106     void untagAllRequest(
107         Guid guid,
108         IRequestContextPtr ctx);
109
110     void expungeTagRequest(
111         Guid guid,
112         IRequestContextPtr ctx);
113
114     void listSearchesRequest(
115         IRequestContextPtr ctx);
116
117     void getSearchRequest(
118         Guid guid,
119         IRequestContextPtr ctx);
120
121     void createSearchRequest(
122         SavedSearch search,
123         IRequestContextPtr ctx);
124
125     void updateSearchRequest(
126         SavedSearch search,
127         IRequestContextPtr ctx);
128
129     void expungeSearchRequest(
130         Guid guid,
131         IRequestContextPtr ctx);
132
133     void findNoteOffsetRequest(
134         NoteFilter filter,
135         Guid guid,
136         IRequestContextPtr ctx);
137
138     void findNotesMetadataRequest(
139         NoteFilter filter,
140         qint32 offset,
```

```
141         qint32 maxNotes,
142         NotesMetadataResultSpec resultSpec,
143         IRequestContextPtr ctx);
144 
145     void findNoteCountsRequest(
146         NoteFilter filter,
147         bool withTrash,
148         IRequestContextPtr ctx);
149 
150     void getNoteWithResultSpecRequest(
151         Guid guid,
152         NoteResultSpec resultSpec,
153         IRequestContextPtr ctx);
154 
155     void getNoteRequest(
156         Guid guid,
157         bool withContent,
158         bool withResourcesData,
159         bool withResourcesRecognition,
160         bool withResourcesAlternateData,
161         IRequestContextPtr ctx);
162 
163     void getNoteApplicationDataRequest(
164         Guid guid,
165         IRequestContextPtr ctx);
166 
167     void getNoteApplicationDataEntryRequest(
168         Guid guid,
169         QString key,
170         IRequestContextPtr ctx);
171 
172     void setNoteApplicationDataEntryRequest(
173         Guid guid,
174         QString key,
175         QString value,
176         IRequestContextPtr ctx);
177 
178     void unsetNoteApplicationDataEntryRequest(
179         Guid guid,
180         QString key,
181         IRequestContextPtr ctx);
182 
183     void getNoteContentRequest(
184         Guid guid,
185         IRequestContextPtr ctx);
186 
187     void getNoteSearchTextRequest(
188         Guid guid,
189         bool noteOnly,
190         bool tokenizeForIndexing,
191         IRequestContextPtr ctx);
192 
193     void getResourceSearchTextRequest(
194         Guid guid,
195         IRequestContextPtr ctx);
196 
197     void getNoteTagNamesRequest(
198         Guid guid,
199         IRequestContextPtr ctx);
200 
201     void createNoteRequest(
202         Note note,
203         IRequestContextPtr ctx);
204 
205     void updateNoteRequest(
206         Note note,
207         IRequestContextPtr ctx);
208 
209     void deleteNoteRequest(
210         Guid guid,
211         IRequestContextPtr ctx);
212 
213     void expungeNoteRequest(
214         Guid guid,
215         IRequestContextPtr ctx);
216 
217     void copyNoteRequest(
218         Guid noteGuid,
219         Guid toNotebookGuid,
220         IRequestContextPtr ctx);
221 
222     void listNoteVersionsRequest(
223         Guid noteGuid,
224         IRequestContextPtr ctx);
225 
226     void getNoteVersionRequest(
227         Guid noteGuid,
```

```
228         qint32 updateSequenceNum,
229         bool withResourcesData,
230         bool withResourcesRecognition,
231         bool withResourcesAlternateData,
232         IRequestContextPtr ctx);
233 
234     void getResourceRequest(
235         Guid guid,
236         bool withData,
237         bool withRecognition,
238         bool withAttributes,
239         bool withAlternateData,
240         IRequestContextPtr ctx);
241 
242     void getResourceApplicationDataRequest(
243         Guid guid,
244         IRequestContextPtr ctx);
245 
246     void getResourceApplicationDataEntryRequest(
247         Guid guid,
248         QString key,
249         IRequestContextPtr ctx);
250 
251     void setResourceApplicationDataEntryRequest(
252         Guid guid,
253         QString key,
254         QString value,
255         IRequestContextPtr ctx);
256 
257     void unsetResourceApplicationDataEntryRequest(
258         Guid guid,
259         QString key,
260         IRequestContextPtr ctx);
261 
262     void updateResourceRequest(
263         Resource resource,
264         IRequestContextPtr ctx);
265 
266     void getResourceDataRequest(
267         Guid guid,
268         IRequestContextPtr ctx);
269 
270     void getResourceByHashRequest(
271         Guid noteGuid,
272         QByteArray contentHash,
273         bool withData,
274         bool withRecognition,
275         bool withAlternateData,
276         IRequestContextPtr ctx);
277 
278     void getResourceRecognitionRequest(
279         Guid guid,
280         IRequestContextPtr ctx);
281 
282     void getResourceAlternateDataRequest(
283         Guid guid,
284         IRequestContextPtr ctx);
285 
286     void getResourceAttributesRequest(
287         Guid guid,
288         IRequestContextPtr ctx);
289 
290     void getPublicNotebookRequest(
291         UserID userId,
292         QString publicUri,
293         IRequestContextPtr ctx);
294 
295     void shareNotebookRequest(
296         SharedNotebook sharedNotebook,
297         QString message,
298         IRequestContextPtr ctx);
299 
300     void createOrUpdateNotebookSharesRequest(
301         NotebookShareTemplate shareTemplate,
302         IRequestContextPtr ctx);
303 
304     void updateSharedNotebookRequest(
305         SharedNotebook sharedNotebook,
306         IRequestContextPtr ctx);
307 
308     void setNotebookRecipientSettingsRequest(
309         QString notebookGuid,
310         NotebookRecipientSettings recipientSettings,
311         IRequestContextPtr ctx);
312 
313     void listSharedNotebooksRequest(
314         IRequestContextPtr ctx);
```

```
315
316     void createLinkedNotebookRequest(
317         LinkedNotebook linkedNotebook,
318         IRequestContextPtr ctx);
319
320     void updateLinkedNotebookRequest(
321         LinkedNotebook linkedNotebook,
322         IRequestContextPtr ctx);
323
324     void listLinkedNotebooksRequest(
325         IRequestContextPtr ctx);
326
327     void expungeLinkedNotebookRequest(
328         Guid guid,
329         IRequestContextPtr ctx);
330
331     void authenticateToSharedNotebookRequest(
332         QString shareKeyOrGlobalId,
333         IRequestContextPtr ctx);
334
335     void getSharedNotebookByAuthRequest(
336         IRequestContextPtr ctx);
337
338     void emailNoteRequest(
339         NoteEmailParameters parameters,
340         IRequestContextPtr ctx);
341
342     void shareNoteRequest(
343         Guid guid,
344         IRequestContextPtr ctx);
345
346     void stopSharingNoteRequest(
347         Guid guid,
348         IRequestContextPtr ctx);
349
350     void authenticateToSharedNoteRequest(
351         QString guid,
352         QString noteKey,
353         IRequestContextPtr ctx);
354
355     void findRelatedRequest(
356         RelatedQuery query,
357         RelatedResultSpec resultSpec,
358         IRequestContextPtr ctx);
359
360     void updateNoteIfUsnMatchesRequest(
361         Note note,
362         IRequestContextPtr ctx);
363
364     void manageNotebookSharesRequest(
365         ManageNotebookSharesParameters parameters,
366         IRequestContextPtr ctx);
367
368     void getNotebookSharesRequest(
369         QString notebookGuid,
370         IRequestContextPtr ctx);
371
372     // Signals used to send encoded response data
373     void getSyncStateRequestReady(
374         QByteArray data);
375
376     void getFilteredSyncChunkRequestReady(
377         QByteArray data);
378
379     void getLinkedNotebookSyncStateRequestReady(
380         QByteArray data);
381
382     void getLinkedNotebookSyncChunkRequestReady(
383         QByteArray data);
384
385     void listNotebooksRequestReady(
386         QByteArray data);
387
388     void listAccessibleBusinessNotebooksRequestReady(
389         QByteArray data);
390
391     void getNotebookRequestReady(
392         QByteArray data);
393
394     void getDefaultNotebookRequestReady(
395         QByteArray data);
396
397     void createNotebookRequestReady(
398         QByteArray data);
399
400     void updateNotebookRequestReady(
401         QByteArray data);
```

```
402
403     void expungeNotebookRequestReady(
404         QByteArray data);
405
406     void listTagsRequestReady(
407         QByteArray data);
408
409     void listTagsByNotebookRequestReady(
410         QByteArray data);
411
412     void getTagRequestReady(
413         QByteArray data);
414
415     void createTagRequestReady(
416         QByteArray data);
417
418     void updateTagRequestReady(
419         QByteArray data);
420
421     void untagAllRequestReady(
422         QByteArray data);
423
424     void expungeTagRequestReady(
425         QByteArray data);
426
427     void listSearchesRequestReady(
428         QByteArray data);
429
430     void getSearchRequestReady(
431         QByteArray data);
432
433     void createSearchRequestReady(
434         QByteArray data);
435
436     void updateSearchRequestReady(
437         QByteArray data);
438
439     void expungeSearchRequestReady(
440         QByteArray data);
441
442     void findNoteOffsetRequestReady(
443         QByteArray data);
444
445     void findNotesMetadataRequestReady(
446         QByteArray data);
447
448     void findNoteCountsRequestReady(
449         QByteArray data);
450
451     void getNoteWithResultSpecRequestReady(
452         QByteArray data);
453
454     void getNoteRequestReady(
455         QByteArray data);
456
457     void getNoteApplicationDataRequestReady(
458         QByteArray data);
459
460     void getNoteApplicationDataEntryRequestReady(
461         QByteArray data);
462
463     void setNoteApplicationDataEntryRequestReady(
464         QByteArray data);
465
466     void unsetNoteApplicationDataEntryRequestReady(
467         QByteArray data);
468
469     void getNoteContentRequestReady(
470         QByteArray data);
471
472     void getNoteSearchTextRequestReady(
473         QByteArray data);
474
475     void getResourceSearchTextRequestReady(
476         QByteArray data);
477
478     void getNoteTagNamesRequestReady(
479         QByteArray data);
480
481     void createNoteRequestReady(
482         QByteArray data);
483
484     void updateNoteRequestReady(
485         QByteArray data);
486
487     void deleteNoteRequestReady(
488         QByteArray data);
```

```
489
490     void expungeNoteRequestReady(
491         QByteArray data);
492
493     void copyNoteRequestReady(
494         QByteArray data);
495
496     void listNoteVersionsRequestReady(
497         QByteArray data);
498
499     void getNoteVersionRequestReady(
500         QByteArray data);
501
502     void getResourceRequestReady(
503         QByteArray data);
504
505     void getResourceApplicationDataRequestReady(
506         QByteArray data);
507
508     void getResourceApplicationDataEntryRequestReady(
509         QByteArray data);
510
511     void setResourceApplicationDataEntryRequestReady(
512         QByteArray data);
513
514     void unsetResourceApplicationDataEntryRequestReady(
515         QByteArray data);
516
517     void updateResourceRequestReady(
518         QByteArray data);
519
520     void getResourceDataRequestReady(
521         QByteArray data);
522
523     void getResourceByHashRequestReady(
524         QByteArray data);
525
526     void getResourceRecognitionRequestReady(
527         QByteArray data);
528
529     void getResourceAlternateDataRequestReady(
530         QByteArray data);
531
532     void getResourceAttributesRequestReady(
533         QByteArray data);
534
535     void getPublicNotebookRequestReady(
536         QByteArray data);
537
538     void shareNotebookRequestReady(
539         QByteArray data);
540
541     void createOrUpdateNotebookSharesRequestReady(
542         QByteArray data);
543
544     void updateSharedNotebookRequestReady(
545         QByteArray data);
546
547     void setNotebookRecipientSettingsRequestReady(
548         QByteArray data);
549
550     void listSharedNotebooksRequestReady(
551         QByteArray data);
552
553     void createLinkedNotebookRequestReady(
554         QByteArray data);
555
556     void updateLinkedNotebookRequestReady(
557         QByteArray data);
558
559     void listLinkedNotebooksRequestReady(
560         QByteArray data);
561
562     void expungeLinkedNotebookRequestReady(
563         QByteArray data);
564
565     void authenticateToSharedNotebookRequestReady(
566         QByteArray data);
567
568     void getSharedNotebookByAuthRequestReady(
569         QByteArray data);
570
571     void emailNoteRequestReady(
572         QByteArray data);
573
574     void shareNoteRequestReady(
575         QByteArray data);
```

```
576
577     void stopSharingNoteRequestReady(
578         QByteArray data);
579
580     void authenticateToSharedNoteRequestReady(
581         QByteArray data);
582
583     void findRelatedRequestReady(
584         QByteArray data);
585
586     void updateNoteIfUsnMatchesRequestReady(
587         QByteArray data);
588
589     void manageNotebookSharesRequestReady(
590         QByteArray data);
591
592     void getNotebookSharesRequestReady(
593         QByteArray data);
594
595 public Q_SLOTS:
596     // Slot used to deliver requests to the server
597     void onRequest(QByteArray data);
598
599     // Slots for replies to requests
600     void onGetSyncStateRequestReady(
601         SyncState value,
602         EverCloudExceptionDataPtr exceptionData);
603
604     void onGetFilteredSyncChunkRequestReady(
605         SyncChunk value,
606         EverCloudExceptionDataPtr exceptionData);
607
608     void onGetLinkedNotebookSyncStateRequestReady(
609         SyncState value,
610         EverCloudExceptionDataPtr exceptionData);
611
612     void onGetLinkedNotebookSyncChunkRequestReady(
613         SyncChunk value,
614         EverCloudExceptionDataPtr exceptionData);
615
616     void onListNotebooksRequestReady(
617         QList<Notebook> value,
618         EverCloudExceptionDataPtr exceptionData);
619
620     void onListAccessibleBusinessNotebooksRequestReady(
621         QList<Notebook> value,
622         EverCloudExceptionDataPtr exceptionData);
623
624     void onGetNotebookRequestReady(
625         Notebook value,
626         EverCloudExceptionDataPtr exceptionData);
627
628     void onGetDefaultNotebookRequestReady(
629         Notebook value,
630         EverCloudExceptionDataPtr exceptionData);
631
632     void onCreateNotebookRequestReady(
633         Notebook value,
634         EverCloudExceptionDataPtr exceptionData);
635
636     void onUpdateNotebookRequestReady(
637         qint32 value,
638         EverCloudExceptionDataPtr exceptionData);
639
640     void onExpungeNotebookRequestReady(
641         qint32 value,
642         EverCloudExceptionDataPtr exceptionData);
643
644     void onListTagsRequestReady(
645         QList<Tag> value,
646         EverCloudExceptionDataPtr exceptionData);
647
648     void onListTagsByNotebookRequestReady(
649         QList<Tag> value,
650         EverCloudExceptionDataPtr exceptionData);
651
652     void onGetTagRequestReady(
653         Tag value,
654         EverCloudExceptionDataPtr exceptionData);
655
656     void onCreateTagRequestReady(
657         Tag value,
658         EverCloudExceptionDataPtr exceptionData);
659
660     void onUpdateTagRequestReady(
661         qint32 value,
662         EverCloudExceptionDataPtr exceptionData);
```

```
663
664     void onUntagAllRequestReady(
665         EverCloudExceptionDataPtr exceptionData);
666
667     void onExpungeTagRequestReady(
668         qint32 value,
669         EverCloudExceptionDataPtr exceptionData);
670
671     void onListSearchesRequestReady(
672         QList<SavedSearch> value,
673         EverCloudExceptionDataPtr exceptionData);
674
675     void onGetSearchRequestReady(
676         SavedSearch value,
677         EverCloudExceptionDataPtr exceptionData);
678
679     void onCreateSearchRequestReady(
680         SavedSearch value,
681         EverCloudExceptionDataPtr exceptionData);
682
683     void onUpdateSearchRequestReady(
684         qint32 value,
685         EverCloudExceptionDataPtr exceptionData);
686
687     void onExpungeSearchRequestReady(
688         qint32 value,
689         EverCloudExceptionDataPtr exceptionData);
690
691     void onFindNoteOffsetRequestReady(
692         qint32 value,
693         EverCloudExceptionDataPtr exceptionData);
694
695     void onFindNotesMetadataRequestReady(
696         NotesMetadataList value,
697         EverCloudExceptionDataPtr exceptionData);
698
699     void onFindNoteCountsRequestReady(
700         NoteCollectionCounts value,
701         EverCloudExceptionDataPtr exceptionData);
702
703     void onGetNoteWithResultSpecRequestReady(
704         Note value,
705         EverCloudExceptionDataPtr exceptionData);
706
707     void onGetNoteRequestReady(
708         Note value,
709         EverCloudExceptionDataPtr exceptionData);
710
711     void onGetNoteApplicationDataRequestReady(
712         LazyMap value,
713         EverCloudExceptionDataPtr exceptionData);
714
715     void onGetNoteApplicationDataEntryRequestReady(
716         QString value,
717         EverCloudExceptionDataPtr exceptionData);
718
719     void onSetNoteApplicationDataEntryRequestReady(
720         qint32 value,
721         EverCloudExceptionDataPtr exceptionData);
722
723     void onUnsetNoteApplicationDataEntryRequestReady(
724         qint32 value,
725         EverCloudExceptionDataPtr exceptionData);
726
727     void onGetNoteContentRequestReady(
728         QString value,
729         EverCloudExceptionDataPtr exceptionData);
730
731     void onGetNoteSearchTextRequestReady(
732         QString value,
733         EverCloudExceptionDataPtr exceptionData);
734
735     void onGetResourceSearchTextRequestReady(
736         QString value,
737         EverCloudExceptionDataPtr exceptionData);
738
739     void onGetNoteTagNamesRequestReady(
740         QStringList value,
741         EverCloudExceptionDataPtr exceptionData);
742
743     void onCreateNoteRequestReady(
744         Note value,
745         EverCloudExceptionDataPtr exceptionData);
746
747     void onUpdateNoteRequestReady(
748         Note value,
749         EverCloudExceptionDataPtr exceptionData);
```

```
750
751     void onDeleteNoteRequestReady(
752         qint32 value,
753         EverCloudExceptionDataPtr exceptionData);
754
755     void onExpungeNoteRequestReady(
756         qint32 value,
757         EverCloudExceptionDataPtr exceptionData);
758
759     void onCopyNoteRequestReady(
760         Note value,
761         EverCloudExceptionDataPtr exceptionData);
762
763     void onListNoteVersionsRequestReady(
764         QList<NoteVersionId> value,
765         EverCloudExceptionDataPtr exceptionData);
766
767     void onGetNoteVersionRequestReady(
768         Note value,
769         EverCloudExceptionDataPtr exceptionData);
770
771     void onGetResourceRequestReady(
772         Resource value,
773         EverCloudExceptionDataPtr exceptionData);
774
775     void onGetResourceApplicationDataRequestReady(
776         LazyMap value,
777         EverCloudExceptionDataPtr exceptionData);
778
779     void onGetResourceApplicationDataEntryRequestReady(
780         QString value,
781         EverCloudExceptionDataPtr exceptionData);
782
783     void onSetResourceApplicationDataEntryRequestReady(
784         qint32 value,
785         EverCloudExceptionDataPtr exceptionData);
786
787     void onUnsetResourceApplicationDataEntryRequestReady(
788         qint32 value,
789         EverCloudExceptionDataPtr exceptionData);
790
791     void onUpdateResourceRequestReady(
792         qint32 value,
793         EverCloudExceptionDataPtr exceptionData);
794
795     void onGetResourceDataRequestReady(
796         QByteArray value,
797         EverCloudExceptionDataPtr exceptionData);
798
799     void onGetResourceByHashRequestReady(
800         Resource value,
801         EverCloudExceptionDataPtr exceptionData);
802
803     void onGetResourceRecognitionRequestReady(
804         QByteArray value,
805         EverCloudExceptionDataPtr exceptionData);
806
807     void onGetResourceAlternateDataRequestReady(
808         QByteArray value,
809         EverCloudExceptionDataPtr exceptionData);
810
811     void onGetResourceAttributesRequestReady(
812         ResourceAttributes value,
813         EverCloudExceptionDataPtr exceptionData);
814
815     void onGetPublicNotebookRequestReady(
816         Notebook value,
817         EverCloudExceptionDataPtr exceptionData);
818
819     void onShareNotebookRequestReady(
820         SharedNotebook value,
821         EverCloudExceptionDataPtr exceptionData);
822
823     void onCreateOrUpdateNotebookSharesRequestReady(
824         CreateOrUpdateNotebookSharesResult value,
825         EverCloudExceptionDataPtr exceptionData);
826
827     void onUpdateSharedNotebookRequestReady(
828         qint32 value,
829         EverCloudExceptionDataPtr exceptionData);
830
831     void onSetNotebookRecipientSettingsRequestReady(
832         Notebook value,
833         EverCloudExceptionDataPtr exceptionData);
834
835     void onListSharedNotebooksRequestReady(
836         QList<SharedNotebook> value,
```

```
837         EverCloudExceptionDataPtr exceptionData);
838
839     void onCreateLinkedNotebookRequestReady(
840         LinkedNotebook value,
841         EverCloudExceptionDataPtr exceptionData);
842
843     void onUpdateLinkedNotebookRequestReady(
844         qint32 value,
845         EverCloudExceptionDataPtr exceptionData);
846
847     void onListLinkedNotebooksRequestReady(
848         QList<LinkedNotebook> value,
849         EverCloudExceptionDataPtr exceptionData);
850
851     void onExpungeLinkedNotebookRequestReady(
852         qint32 value,
853         EverCloudExceptionDataPtr exceptionData);
854
855     void onAuthenticateToSharedNotebookRequestReady(
856         AuthenticationResult value,
857         EverCloudExceptionDataPtr exceptionData);
858
859     void onGetSharedNotebookByAuthRequestReady(
860         SharedNotebook value,
861         EverCloudExceptionDataPtr exceptionData);
862
863     void onEmailNoteRequestReady(
864         EverCloudExceptionDataPtr exceptionData);
865
866     void onShareNoteRequestReady(
867         QString value,
868         EverCloudExceptionDataPtr exceptionData);
869
870     void onStopSharingNoteRequestReady(
871         EverCloudExceptionDataPtr exceptionData);
872
873     void onAuthenticateToSharedNoteRequestReady(
874         AuthenticationResult value,
875         EverCloudExceptionDataPtr exceptionData);
876
877     void onFindRelatedRequestReady(
878         RelatedResult value,
879         EverCloudExceptionDataPtr exceptionData);
880
881     void onUpdateNoteIfUsnMatchesRequestReady(
882         UpdateNoteIfUsnMatchesResult value,
883         EverCloudExceptionDataPtr exceptionData);
884
885     void onManageNotebookSharesRequestReady(
886         ManageNotebookSharesResult value,
887         EverCloudExceptionDataPtr exceptionData);
888
889     void onGetNotebookSharesRequestReady(
890         ShareRelationships value,
891         EverCloudExceptionDataPtr exceptionData);
892
893 };
894
896
902 class QEVERCLOUD_EXPORT UserStoreServer:  public QObject
903 {
904     Q_OBJECT
905     Q_DISABLE_COPY(UserStoreServer)
906 public:
907     explicit UserStoreServer(QObject * parent = nullptr);
908
909 Q_SIGNALS:
910     // Signals notifying listeners about incoming requests
911     void checkVersionRequest(
912         QString clientName,
913         qint16 edamVersionMajor,
914         qint16 edamVersionMinor,
915         IRequestContextPtr ctx);
916
917     void getBootstrapInfoRequest(
918         QString locale,
919         IRequestContextPtr ctx);
920
921     void authenticateLongSessionRequest(
922         QString username,
923         QString password,
924         QString consumerKey,
925         QString consumerSecret,
926         QString deviceIdentifier,
927         QString deviceDescription,
928         bool supportsTwoFactor,
929         IRequestContextPtr ctx);
```

```
930
931     void completeTwoFactorAuthenticationRequest(
932         QString oneTimeCode,
933         QString deviceIdentifier,
934         QString deviceDescription,
935         IRequestContextPtr ctx);
936
937     void revokeLongSessionRequest(
938         IRequestContextPtr ctx);
939
940     void authenticateToBusinessRequest(
941         IRequestContextPtr ctx);
942
943     void getUserRequest(
944         IRequestContextPtr ctx);
945
946     void getPublicUserInfoRequest(
947         QString username,
948         IRequestContextPtr ctx);
949
950     void getUserUrlsRequest(
951         IRequestContextPtr ctx);
952
953     void inviteToBusinessRequest(
954         QString emailAddress,
955         IRequestContextPtr ctx);
956
957     void removeFromBusinessRequest(
958         QString emailAddress,
959         IRequestContextPtr ctx);
960
961     void updateBusinessUserIdentifierRequest(
962         QString oldEmailAddress,
963         QString newEmailAddress,
964         IRequestContextPtr ctx);
965
966     void listBusinessUsersRequest(
967         IRequestContextPtr ctx);
968
969     void listBusinessInvitationsRequest(
970         bool includeRequestedInvitations,
971         IRequestContextPtr ctx);
972
973     void getAccountLimitsRequest(
974         ServiceLevel serviceLevel,
975         IRequestContextPtr ctx);
976
977     // Signals used to send encoded response data
978     void checkVersionRequestReady(
979         QByteArray data);
980
981     void getBootstrapInfoRequestReady(
982         QByteArray data);
983
984     void authenticateLongSessionRequestReady(
985         QByteArray data);
986
987     void completeTwoFactorAuthenticationRequestReady(
988         QByteArray data);
989
990     void revokeLongSessionRequestReady(
991         QByteArray data);
992
993     void authenticateToBusinessRequestReady(
994         QByteArray data);
995
996     void getUserRequestReady(
997         QByteArray data);
998
999     void getPublicUserInfoRequestReady(
1000         QByteArray data);
1001
1002     void getUserUrlsRequestReady(
1003         QByteArray data);
1004
1005     void inviteToBusinessRequestReady(
1006         QByteArray data);
1007
1008     void removeFromBusinessRequestReady(
1009         QByteArray data);
1010
1011     void updateBusinessUserIdentifierRequestReady(
1012         QByteArray data);
1013
1014     void listBusinessUsersRequestReady(
1015         QByteArray data);
1016
```

```
1017     void listBusinessInvitationsRequestReady(
1018         QByteArray data);
1019
1020     void getAccountLimitsRequestReady(
1021         QByteArray data);
1022
1023 public Q_SLOTS:
1024     // Slot used to deliver requests to the server
1025     void onRequest(QByteArray data);
1026
1027     // Slots for replies to requests
1028     void onCheckVersionRequestReady(
1029         bool value,
1030         EverCloudExceptionDataPtr exceptionData);
1031
1032     void onGetBootstrapInfoRequestReady(
1033         BootstrapInfo value,
1034         EverCloudExceptionDataPtr exceptionData);
1035
1036     void onAuthenticateLongSessionRequestReady(
1037         AuthenticationResult value,
1038         EverCloudExceptionDataPtr exceptionData);
1039
1040     void onCompleteTwoFactorAuthenticationRequestReady(
1041         AuthenticationResult value,
1042         EverCloudExceptionDataPtr exceptionData);
1043
1044     void onRevokeLongSessionRequestReady(
1045         EverCloudExceptionDataPtr exceptionData);
1046
1047     void onAuthenticateToBusinessRequestReady(
1048         AuthenticationResult value,
1049         EverCloudExceptionDataPtr exceptionData);
1050
1051     void onGetUserRequestReady(
1052         User value,
1053         EverCloudExceptionDataPtr exceptionData);
1054
1055     void onGetPublicUserInfoRequestReady(
1056         PublicUserInfo value,
1057         EverCloudExceptionDataPtr exceptionData);
1058
1059     void onGetUserUrlsRequestReady(
1060         UserUrls value,
1061         EverCloudExceptionDataPtr exceptionData);
1062
1063     void onInviteToBusinessRequestReady(
1064         EverCloudExceptionDataPtr exceptionData);
1065
1066     void onRemoveFromBusinessRequestReady(
1067         EverCloudExceptionDataPtr exceptionData);
1068
1069     void onUpdateBusinessUserIdentifierRequestReady(
1070         EverCloudExceptionDataPtr exceptionData);
1071
1072     void onListBusinessUsersRequestReady(
1073         QList<UserProfile> value,
1074         EverCloudExceptionDataPtr exceptionData);
1075
1076     void onListBusinessInvitationsRequestReady(
1077         QList<BusinessInvitation> value,
1078         EverCloudExceptionDataPtr exceptionData);
1079
1080     void onGetAccountLimitsRequestReady(
1081         AccountLimits value,
1082         EverCloudExceptionDataPtr exceptionData);
1083
1084 };
1085
1086 } // namespace qevercloud
1087
1088 #endif // QEVERCLOUD_GENERATED_SERVERS_H
```

8.19 Services.h File Reference

```
#include "../Export.h"
#include "../AsyncResult.h"
#include "../DurableService.h"
#include "../Optional.h"
```

```
#include "../RequestContext.h"
#include "Constants.h"
#include "Types.h"
#include <QObject>
```

Classes

- class qevercloud::INoteStore
- class qevercloud::IUserStore

Namespaces

- namespace qevercloud

Typedefs

- using qevercloud::INoteStorePtr = std::shared_ptr< INoteStore >
- using qevercloud::IUserStorePtr = std::shared_ptr< IUserStore >

Functions

- QEVERCLOUD_EXPORT INoteStore * qevercloud::newNoteStore (QString noteStoreUrl={}, IRequest↩ ContextPtr ctx={}, QObject *parent=nullptr, IRetryPolicyPtr retryPolicy={})
- QEVERCLOUD_EXPORT IUserStore * qevercloud::newUserStore (QString userStoreUrl={}, IRequest↩ ContextPtr ctx={}, QObject *parent=nullptr, IRetryPolicyPtr retryPolicy={})

8.20 Services.h

Go to the documentation of this file.

```
1
12 #ifndef QEVERCLOUD_GENERATED_SERVICES_H
13 #define QEVERCLOUD_GENERATED_SERVICES_H
14
15 #include "../Export.h"
16
17 #include "../AsyncResult.h"
18 #include "../DurableService.h"
19 #include "../Optional.h"
20 #include "../RequestContext.h"
21 #include "Constants.h"
22 #include "Types.h"
23 #include <QObject>
24
25 namespace qevercloud {
26
28
55 class QEVERCLOUD_EXPORT INoteStore:  public QObject
56 {
57     Q_OBJECT
58     Q_DISABLE_COPY(INoteStore)
59 protected:
60     INoteStore(QObject * parent) :
61         QObject(parent)
62     {}
63
64 public:
65     virtual QString noteStoreUrl() const = 0;
66     virtual void setNoteStoreUrl(QString url) = 0;
67
```

```
72      virtual SyncState getSyncState(
73          IRequestContextPtr ctx = {}) = 0;
74
76      virtual AsyncResult * getSyncStateAsync(
77          IRequestContextPtr ctx = {}) = 0;
78
112     virtual SyncChunk getFilteredSyncChunk(
113         qint32 afterUSN,
114         qint32 maxEntries,
115         const SyncChunkFilter & filter,
116         IRequestContextPtr ctx = {}) = 0;
117
119     virtual AsyncResult * getFilteredSyncChunkAsync(
120         qint32 afterUSN,
121         qint32 maxEntries,
122         const SyncChunkFilter & filter,
123         IRequestContextPtr ctx = {}) = 0;
124
166     virtual SyncState getLinkedNotebookSyncState(
167         const LinkedNotebook & linkedNotebook,
168         IRequestContextPtr ctx = {}) = 0;
169
171     virtual AsyncResult * getLinkedNotebookSyncStateAsync(
172         const LinkedNotebook & linkedNotebook,
173         IRequestContextPtr ctx = {}) = 0;
174
239     virtual SyncChunk getLinkedNotebookSyncChunk(
240         const LinkedNotebook & linkedNotebook,
241         qint32 afterUSN,
242         qint32 maxEntries,
243         bool fullSyncOnly,
244         IRequestContextPtr ctx = {}) = 0;
245
247     virtual AsyncResult * getLinkedNotebookSyncChunkAsync(
248         const LinkedNotebook & linkedNotebook,
249         qint32 afterUSN,
250         qint32 maxEntries,
251         bool fullSyncOnly,
252         IRequestContextPtr ctx = {}) = 0;
253
257     virtual QList<Notebook> listNotebooks(
258         IRequestContextPtr ctx = {}) = 0;
259
261     virtual AsyncResult * listNotebooksAsync(
262         IRequestContextPtr ctx = {}) = 0;
263
277     virtual QList<Notebook> listAccessibleBusinessNotebooks(
278         IRequestContextPtr ctx = {}) = 0;
279
281     virtual AsyncResult * listAccessibleBusinessNotebooksAsync(
282         IRequestContextPtr ctx = {}) = 0;
283
303     virtual Notebook getNotebook(
304         Guid guid,
305         IRequestContextPtr ctx = {}) = 0;
306
308     virtual AsyncResult * getNotebookAsync(
309         Guid guid,
310         IRequestContextPtr ctx = {}) = 0;
311
316     virtual Notebook getDefaultNotebook(
317         IRequestContextPtr ctx = {}) = 0;
318
320     virtual AsyncResult * getDefaultNotebookAsync(
321         IRequestContextPtr ctx = {}) = 0;
322
357     virtual Notebook createNotebook(
358         const Notebook & notebook,
359         IRequestContextPtr ctx = {}) = 0;
360
362     virtual AsyncResult * createNotebookAsync(
363         const Notebook & notebook,
364         IRequestContextPtr ctx = {}) = 0;
365
405     virtual qint32 updateNotebook(
406         const Notebook & notebook,
407         IRequestContextPtr ctx = {}) = 0;
408
410     virtual AsyncResult * updateNotebookAsync(
411         const Notebook & notebook,
412         IRequestContextPtr ctx = {}) = 0;
413
439     virtual qint32 expungeNotebook(
440         Guid guid,
441         IRequestContextPtr ctx = {}) = 0;
442
444     virtual AsyncResult * expungeNotebookAsync(
```

```
445         Guid guid,
446         IRequestContextPtr ctx = {}) = 0;
447
452     virtual QList<Tag> listTags(
453         IRequestContextPtr ctx = {}) = 0;
454
456     virtual AsyncResult * listTagsAsync(
457         IRequestContextPtr ctx = {}) = 0;
458
472     virtual QList<Tag> listTagsByNotebook(
473         Guid notebookGuid,
474         IRequestContextPtr ctx = {}) = 0;
475
477     virtual AsyncResult * listTagsByNotebookAsync(
478         Guid notebookGuid,
479         IRequestContextPtr ctx = {}) = 0;
480
499     virtual Tag getTag(
500         Guid guid,
501         IRequestContextPtr ctx = {}) = 0;
502
504     virtual AsyncResult * getTagAsync(
505         Guid guid,
506         IRequestContextPtr ctx = {}) = 0;
507
536     virtual Tag createTag(
537         const Tag & tag,
538         IRequestContextPtr ctx = {}) = 0;
539
541     virtual AsyncResult * createTagAsync(
542         const Tag & tag,
543         IRequestContextPtr ctx = {}) = 0;
544
576     virtual qint32 updateTag(
577         const Tag & tag,
578         IRequestContextPtr ctx = {}) = 0;
579
581     virtual AsyncResult * updateTagAsync(
582         const Tag & tag,
583         IRequestContextPtr ctx = {}) = 0;
584
611     virtual void untagAll(
612         Guid guid,
613         IRequestContextPtr ctx = {}) = 0;
614
616     virtual AsyncResult * untagAllAsync(
617         Guid guid,
618         IRequestContextPtr ctx = {}) = 0;
619
645     virtual qint32 expungeTag(
646         Guid guid,
647         IRequestContextPtr ctx = {}) = 0;
648
650     virtual AsyncResult * expungeTagAsync(
651         Guid guid,
652         IRequestContextPtr ctx = {}) = 0;
653
658     virtual QList<SavedSearch> listSearches(
659         IRequestContextPtr ctx = {}) = 0;
660
662     virtual AsyncResult * listSearchesAsync(
663         IRequestContextPtr ctx = {}) = 0;
664
682     virtual SavedSearch getSearch(
683         Guid guid,
684         IRequestContextPtr ctx = {}) = 0;
685
687     virtual AsyncResult * getSearchAsync(
688         Guid guid,
689         IRequestContextPtr ctx = {}) = 0;
690
715     virtual SavedSearch createSearch(
716         const SavedSearch & search,
717         IRequestContextPtr ctx = {}) = 0;
718
720     virtual AsyncResult * createSearchAsync(
721         const SavedSearch & search,
722         IRequestContextPtr ctx = {}) = 0;
723
751     virtual qint32 updateSearch(
752         const SavedSearch & search,
753         IRequestContextPtr ctx = {}) = 0;
754
756     virtual AsyncResult * updateSearchAsync(
757         const SavedSearch & search,
758         IRequestContextPtr ctx = {}) = 0;
759
```

```
785     virtual qint32 expungeSearch(
786         Guid guid,
787         IRequestContextPtr ctx = {}) = 0;
788 
790     virtual AsyncResult * expungeSearchAsync(
791         Guid guid,
792         IRequestContextPtr ctx = {}) = 0;
793 
835     virtual qint32 findNoteOffset(
836         const NoteFilter & filter,
837         Guid guid,
838         IRequestContextPtr ctx = {}) = 0;
839 
841     virtual AsyncResult * findNoteOffsetAsync(
842         const NoteFilter & filter,
843         Guid guid,
844         IRequestContextPtr ctx = {}) = 0;
845 
903     virtual NotesMetadataList findNotesMetadata(
904         const NoteFilter & filter,
905         qint32 offset,
906         qint32 maxNotes,
907         const NotesMetadataResultSpec & resultSpec,
908         IRequestContextPtr ctx = {}) = 0;
909 
911     virtual AsyncResult * findNotesMetadataAsync(
912         const NoteFilter & filter,
913         qint32 offset,
914         qint32 maxNotes,
915         const NotesMetadataResultSpec & resultSpec,
916         IRequestContextPtr ctx = {}) = 0;
917 
949     virtual NoteCollectionCounts findNoteCounts(
950         const NoteFilter & filter,
951         bool withTrash,
952         IRequestContextPtr ctx = {}) = 0;
953 
955     virtual AsyncResult * findNoteCountsAsync(
956         const NoteFilter & filter,
957         bool withTrash,
958         IRequestContextPtr ctx = {}) = 0;
959 
991     virtual Note getNoteWithResultSpec(
992         Guid guid,
993         const NoteResultSpec & resultSpec,
994         IRequestContextPtr ctx = {}) = 0;
995 
997     virtual AsyncResult * getNoteWithResultSpecAsync(
998         Guid guid,
999         const NoteResultSpec & resultSpec,
1000         IRequestContextPtr ctx = {}) = 0;
1001 
1009     virtual Note getNote(
1010         Guid guid,
1011         bool withContent,
1012         bool withResourcesData,
1013         bool withResourcesRecognition,
1014         bool withResourcesAlternateData,
1015         IRequestContextPtr ctx = {}) = 0;
1016 
1018     virtual AsyncResult * getNoteAsync(
1019         Guid guid,
1020         bool withContent,
1021         bool withResourcesData,
1022         bool withResourcesRecognition,
1023         bool withResourcesAlternateData,
1024         IRequestContextPtr ctx = {}) = 0;
1025 
1034     virtual LazyMap getNoteApplicationData(
1035         Guid guid,
1036         IRequestContextPtr ctx = {}) = 0;
1037 
1039     virtual AsyncResult * getNoteApplicationDataAsync(
1040         Guid guid,
1041         IRequestContextPtr ctx = {}) = 0;
1042 
1052     virtual QString getNoteApplicationDataEntry(
1053         Guid guid,
1054         QString key,
1055         IRequestContextPtr ctx = {}) = 0;
1056 
1058     virtual AsyncResult * getNoteApplicationDataEntryAsync(
1059         Guid guid,
1060         QString key,
1061         IRequestContextPtr ctx = {}) = 0;
1062 
1067     virtual qint32 setNoteApplicationDataEntry(
```

```
1068         Guid guid,
1069         QString key,
1070         QString value,
1071         IRequestContextPtr ctx = {}) = 0;
1072 
1074     virtual AsyncResult * setNoteApplicationDataEntryAsync(
1075         Guid guid,
1076         QString key,
1077         QString value,
1078         IRequestContextPtr ctx = {}) = 0;
1079 
1085     virtual qint32 unsetNoteApplicationDataEntry(
1086         Guid guid,
1087         QString key,
1088         IRequestContextPtr ctx = {}) = 0;
1089 
1091     virtual AsyncResult * unsetNoteApplicationDataEntryAsync(
1092         Guid guid,
1093         QString key,
1094         IRequestContextPtr ctx = {}) = 0;
1095 
1116     virtual QString getNoteContent(
1117         Guid guid,
1118         IRequestContextPtr ctx = {}) = 0;
1119 
1121     virtual AsyncResult * getNoteContentAsync(
1122         Guid guid,
1123         IRequestContextPtr ctx = {}) = 0;
1124 
1159     virtual QString getNoteSearchText(
1160         Guid guid,
1161         bool noteOnly,
1162         bool tokenizeForIndexing,
1163         IRequestContextPtr ctx = {}) = 0;
1164 
1166     virtual AsyncResult * getNoteSearchTextAsync(
1167         Guid guid,
1168         bool noteOnly,
1169         bool tokenizeForIndexing,
1170         IRequestContextPtr ctx = {}) = 0;
1171 
1196     virtual QString getResourceSearchText(
1197         Guid guid,
1198         IRequestContextPtr ctx = {}) = 0;
1199 
1201     virtual AsyncResult * getResourceSearchTextAsync(
1202         Guid guid,
1203         IRequestContextPtr ctx = {}) = 0;
1204 
1223     virtual QStringList getNoteTagNames(
1224         Guid guid,
1225         IRequestContextPtr ctx = {}) = 0;
1226 
1228     virtual AsyncResult * getNoteTagNamesAsync(
1229         Guid guid,
1230         IRequestContextPtr ctx = {}) = 0;
1231 
1295     virtual Note createNote(
1296         const Note & note,
1297         IRequestContextPtr ctx = {}) = 0;
1298 
1300     virtual AsyncResult * createNoteAsync(
1301         const Note & note,
1302         IRequestContextPtr ctx = {}) = 0;
1303 
1375     virtual Note updateNote(
1376         const Note & note,
1377         IRequestContextPtr ctx = {}) = 0;
1378 
1380     virtual AsyncResult * updateNoteAsync(
1381         const Note & note,
1382         IRequestContextPtr ctx = {}) = 0;
1383 
1410     virtual qint32 deleteNote(
1411         Guid guid,
1412         IRequestContextPtr ctx = {}) = 0;
1413 
1415     virtual AsyncResult * deleteNoteAsync(
1416         Guid guid,
1417         IRequestContextPtr ctx = {}) = 0;
1418 
1443     virtual qint32 expungeNote(
1444         Guid guid,
1445         IRequestContextPtr ctx = {}) = 0;
1446 
1448     virtual AsyncResult * expungeNoteAsync(
1449         Guid guid,
```

```
1450         IRequestContextPtr ctx = {}) = 0;
1451
1494     virtual Note copyNote(
1495         Guid noteGuid,
1496         Guid toNotebookGuid,
1497         IRequestContextPtr ctx = {}) = 0;
1498
1500     virtual AsyncResult * copyNoteAsync(
1501         Guid noteGuid,
1502         Guid toNotebookGuid,
1503         IRequestContextPtr ctx = {}) = 0;
1504
1527     virtual QList<NoteVersionId> listNoteVersions(
1528         Guid noteGuid,
1529         IRequestContextPtr ctx = {}) = 0;
1530
1532     virtual AsyncResult * listNoteVersionsAsync(
1533         Guid noteGuid,
1534         IRequestContextPtr ctx = {}) = 0;
1535
1579     virtual Note getNoteVersion(
1580         Guid noteGuid,
1581         qint32 updateSequenceNum,
1582         bool withResourcesData,
1583         bool withResourcesRecognition,
1584         bool withResourcesAlternateData,
1585         IRequestContextPtr ctx = {}) = 0;
1586
1588     virtual AsyncResult * getNoteVersionAsync(
1589         Guid noteGuid,
1590         qint32 updateSequenceNum,
1591         bool withResourcesData,
1592         bool withResourcesRecognition,
1593         bool withResourcesAlternateData,
1594         IRequestContextPtr ctx = {}) = 0;
1595
1633     virtual Resource getResource(
1634         Guid guid,
1635         bool withData,
1636         bool withRecognition,
1637         bool withAttributes,
1638         bool withAlternateData,
1639         IRequestContextPtr ctx = {}) = 0;
1640
1642     virtual AsyncResult * getResourceAsync(
1643         Guid guid,
1644         bool withData,
1645         bool withRecognition,
1646         bool withAttributes,
1647         bool withAlternateData,
1648         IRequestContextPtr ctx = {}) = 0;
1649
1658     virtual LazyMap getResourceApplicationData(
1659         Guid guid,
1660         IRequestContextPtr ctx = {}) = 0;
1661
1663     virtual AsyncResult * getResourceApplicationDataAsync(
1664         Guid guid,
1665         IRequestContextPtr ctx = {}) = 0;
1666
1676     virtual QString getResourceApplicationDataEntry(
1677         Guid guid,
1678         QString key,
1679         IRequestContextPtr ctx = {}) = 0;
1680
1682     virtual AsyncResult * getResourceApplicationDataEntryAsync(
1683         Guid guid,
1684         QString key,
1685         IRequestContextPtr ctx = {}) = 0;
1686
1691     virtual qint32 setResourceApplicationDataEntry(
1692         Guid guid,
1693         QString key,
1694         QString value,
1695         IRequestContextPtr ctx = {}) = 0;
1696
1698     virtual AsyncResult * setResourceApplicationDataEntryAsync(
1699         Guid guid,
1700         QString key,
1701         QString value,
1702         IRequestContextPtr ctx = {}) = 0;
1703
1708     virtual qint32 unsetResourceApplicationDataEntry(
1709         Guid guid,
1710         QString key,
1711         IRequestContextPtr ctx = {}) = 0;
1712
```

```
1714     virtual AsyncResult * unsetResourceApplicationDataEntryAsync(
1715         Guid guid,
1716         QString key,
1717         IRequestContextPtr ctx = {}) = 0;
1718 
1768     virtual qint32 updateResource(
1769         const Resource & resource,
1770         IRequestContextPtr ctx = {}) = 0;
1771 
1773     virtual AsyncResult * updateResourceAsync(
1774         const Resource & resource,
1775         IRequestContextPtr ctx = {}) = 0;
1776 
1799     virtual QByteArray getResourceData(
1800         Guid guid,
1801         IRequestContextPtr ctx = {}) = 0;
1802 
1804     virtual AsyncResult * getResourceDataAsync(
1805         Guid guid,
1806         IRequestContextPtr ctx = {}) = 0;
1807 
1849     virtual Resource getResourceByHash(
1850         Guid noteGuid,
1851         QByteArray contentHash,
1852         bool withData,
1853         bool withRecognition,
1854         bool withAlternateData,
1855         IRequestContextPtr ctx = {}) = 0;
1856 
1858     virtual AsyncResult * getResourceByHashAsync(
1859         Guid noteGuid,
1860         QByteArray contentHash,
1861         bool withData,
1862         bool withRecognition,
1863         bool withAlternateData,
1864         IRequestContextPtr ctx = {}) = 0;
1865 
1890     virtual QByteArray getResourceRecognition(
1891         Guid guid,
1892         IRequestContextPtr ctx = {}) = 0;
1893 
1895     virtual AsyncResult * getResourceRecognitionAsync(
1896         Guid guid,
1897         IRequestContextPtr ctx = {}) = 0;
1898 
1923     virtual QByteArray getResourceAlternateData(
1924         Guid guid,
1925         IRequestContextPtr ctx = {}) = 0;
1926 
1928     virtual AsyncResult * getResourceAlternateDataAsync(
1929         Guid guid,
1930         IRequestContextPtr ctx = {}) = 0;
1931 
1952     virtual ResourceAttributes getResourceAttributes(
1953         Guid guid,
1954         IRequestContextPtr ctx = {}) = 0;
1955 
1957     virtual AsyncResult * getResourceAttributesAsync(
1958         Guid guid,
1959         IRequestContextPtr ctx = {}) = 0;
1960 
1995     virtual Notebook getPublicNotebook(
1996         UserID userId,
1997         QString publicUri,
1998         IRequestContextPtr ctx = {}) = 0;
1999 
2001     virtual AsyncResult * getPublicNotebookAsync(
2002         UserID userId,
2003         QString publicUri,
2004         IRequestContextPtr ctx = {}) = 0;
2005 
2083     virtual SharedNotebook shareNotebook(
2084         const SharedNotebook & sharedNotebook,
2085         QString message,
2086         IRequestContextPtr ctx = {}) = 0;
2087 
2089     virtual AsyncResult * shareNotebookAsync(
2090         const SharedNotebook & sharedNotebook,
2091         QString message,
2092         IRequestContextPtr ctx = {}) = 0;
2093 
2148     virtual CreateOrUpdateNotebookSharesResult createOrUpdateNotebookShares(
2149         const NotebookShareTemplate & shareTemplate,
2150         IRequestContextPtr ctx = {}) = 0;
2151 
2153     virtual AsyncResult * createOrUpdateNotebookSharesAsync(
2154         const NotebookShareTemplate & shareTemplate,
```

```
2155         IRequestContextPtr ctx = {}) = 0;
2156
2160     virtual qint32 updateSharedNotebook(
2161         const SharedNotebook & sharedNotebook,
2162         IRequestContextPtr ctx = {}) = 0;
2163
2165     virtual AsyncResult * updateSharedNotebookAsync(
2166         const SharedNotebook & sharedNotebook,
2167         IRequestContextPtr ctx = {}) = 0;
2168
2205     virtual Notebook setNotebookRecipientSettings(
2206         QString notebookGuid,
2207         const NotebookRecipientSettings & recipientSettings,
2208         IRequestContextPtr ctx = {}) = 0;
2209
2211     virtual AsyncResult * setNotebookRecipientSettingsAsync(
2212         QString notebookGuid,
2213         const NotebookRecipientSettings & recipientSettings,
2214         IRequestContextPtr ctx = {}) = 0;
2215
2223     virtual QList<SharedNotebook> listSharedNotebooks(
2224         IRequestContextPtr ctx = {}) = 0;
2225
2227     virtual AsyncResult * listSharedNotebooksAsync(
2228         IRequestContextPtr ctx = {}) = 0;
2229
2267     virtual LinkedNotebook createLinkedNotebook(
2268         const LinkedNotebook & linkedNotebook,
2269         IRequestContextPtr ctx = {}) = 0;
2270
2272     virtual AsyncResult * createLinkedNotebookAsync(
2273         const LinkedNotebook & linkedNotebook,
2274         IRequestContextPtr ctx = {}) = 0;
2275
2292     virtual qint32 updateLinkedNotebook(
2293         const LinkedNotebook & linkedNotebook,
2294         IRequestContextPtr ctx = {}) = 0;
2295
2297     virtual AsyncResult * updateLinkedNotebookAsync(
2298         const LinkedNotebook & linkedNotebook,
2299         IRequestContextPtr ctx = {}) = 0;
2300
2304     virtual QList<LinkedNotebook> listLinkedNotebooks(
2305         IRequestContextPtr ctx = {}) = 0;
2306
2308     virtual AsyncResult * listLinkedNotebooksAsync(
2309         IRequestContextPtr ctx = {}) = 0;
2310
2322     virtual qint32 expungeLinkedNotebook(
2323         Guid guid,
2324         IRequestContextPtr ctx = {}) = 0;
2325
2327     virtual AsyncResult * expungeLinkedNotebookAsync(
2328         Guid guid,
2329         IRequestContextPtr ctx = {}) = 0;
2330
2381     virtual AuthenticationResult authenticateToSharedNotebook(
2382         QString shareKeyOrGlobalId,
2383         IRequestContextPtr ctx = {}) = 0;
2384
2386     virtual AsyncResult * authenticateToSharedNotebookAsync(
2387         QString shareKeyOrGlobalId,
2388         IRequestContextPtr ctx = {}) = 0;
2389
2415     virtual SharedNotebook getSharedNotebookByAuth(
2416         IRequestContextPtr ctx = {}) = 0;
2417
2419     virtual AsyncResult * getSharedNotebookByAuthAsync(
2420         IRequestContextPtr ctx = {}) = 0;
2421
2471     virtual void emailNote(
2472         const NoteEmailParameters & parameters,
2473         IRequestContextPtr ctx = {}) = 0;
2474
2476     virtual AsyncResult * emailNoteAsync(
2477         const NoteEmailParameters & parameters,
2478         IRequestContextPtr ctx = {}) = 0;
2479
2503     virtual QString shareNote(
2504         Guid guid,
2505         IRequestContextPtr ctx = {}) = 0;
2506
2508     virtual AsyncResult * shareNoteAsync(
2509         Guid guid,
2510         IRequestContextPtr ctx = {}) = 0;
2511
2534     virtual void stopSharingNote(
```

```
2535         Guid guid,
2536         IRequestContextPtr ctx = {}) = 0;
2537
2539     virtual AsyncResult * stopSharingNoteAsync(
2540         Guid guid,
2541         IRequestContextPtr ctx = {}) = 0;
2542
2585     virtual AuthenticationResult authenticateToSharedNote(
2586         QString guid,
2587         QString noteKey,
2588         IRequestContextPtr ctx = {}) = 0;
2589
2591     virtual AsyncResult * authenticateToSharedNoteAsync(
2592         QString guid,
2593         QString noteKey,
2594         IRequestContextPtr ctx = {}) = 0;
2595
2645     virtual RelatedResult findRelated(
2646         const RelatedQuery & query,
2647         const RelatedResultSpec & resultSpec,
2648         IRequestContextPtr ctx = {}) = 0;
2649
2651     virtual AsyncResult * findRelatedAsync(
2652         const RelatedQuery & query,
2653         const RelatedResultSpec & resultSpec,
2654         IRequestContextPtr ctx = {}) = 0;
2655
2683     virtual UpdateNoteIfUsnMatchesResult updateNoteIfUsnMatches(
2684         const Note & note,
2685         IRequestContextPtr ctx = {}) = 0;
2686
2688     virtual AsyncResult * updateNoteIfUsnMatchesAsync(
2689         const Note & note,
2690         IRequestContextPtr ctx = {}) = 0;
2691
2708     virtual ManageNotebookSharesResult manageNotebookShares(
2709         const ManageNotebookSharesParameters & parameters,
2710         IRequestContextPtr ctx = {}) = 0;
2711
2713     virtual AsyncResult * manageNotebookSharesAsync(
2714         const ManageNotebookSharesParameters & parameters,
2715         IRequestContextPtr ctx = {}) = 0;
2716
2725     virtual ShareRelationships getNotebookShares(
2726         QString notebookGuid,
2727         IRequestContextPtr ctx = {}) = 0;
2728
2730     virtual AsyncResult * getNotebookSharesAsync(
2731         QString notebookGuid,
2732         IRequestContextPtr ctx = {}) = 0;
2733
2734 };
2735
2736 using INoteStorePtr = std::shared_ptr<INoteStore>;
2737
2739
2759 class QEVERCLOUD_EXPORT IUserStore:  public QObject
2760 {
2761     Q_OBJECT
2762     Q_DISABLE_COPY(IUserStore)
2763 protected:
2764     IUserStore(QObject * parent) :
2765         QObject(parent)
2766     {}
2767
2768 public:
2769     virtual QString userStoreUrl() const = 0;
2770     virtual void setUserStoreUrl(QString url) = 0;
2771
2798     virtual bool checkVersion(
2799         QString clientName,
2800         qint16 edamVersionMajor = EDAM_VERSION_MAJOR,
2801         qint16 edamVersionMinor = EDAM_VERSION_MINOR,
2802         IRequestContextPtr ctx = {}) = 0;
2803
2805     virtual AsyncResult * checkVersionAsync(
2806         QString clientName,
2807         qint16 edamVersionMajor = EDAM_VERSION_MAJOR,
2808         qint16 edamVersionMinor = EDAM_VERSION_MINOR,
2809         IRequestContextPtr ctx = {}) = 0;
2810
2823     virtual BootstrapInfo getBootstrapInfo(
2824         QString locale,
2825         IRequestContextPtr ctx = {}) = 0;
2826
2828     virtual AsyncResult * getBootstrapInfoAsync(
2829         QString locale,
```

```
2830         IRequestContextPtr ctx = {}) = 0;
2831
2918     virtual AuthenticationResult authenticateLongSession(
2919         QString username,
2920         QString password,
2921         QString consumerKey,
2922         QString consumerSecret,
2923         QString deviceIdentifier,
2924         QString deviceDescription,
2925         bool supportsTwoFactor,
2926         IRequestContextPtr ctx = {}) = 0;
2927
2929     virtual AsyncResult * authenticateLongSessionAsync(
2930         QString username,
2931         QString password,
2932         QString consumerKey,
2933         QString consumerSecret,
2934         QString deviceIdentifier,
2935         QString deviceDescription,
2936         bool supportsTwoFactor,
2937         IRequestContextPtr ctx = {}) = 0;
2938
2977     virtual AuthenticationResult completeTwoFactorAuthentication(
2978         QString oneTimeCode,
2979         QString deviceIdentifier,
2980         QString deviceDescription,
2981         IRequestContextPtr ctx = {}) = 0;
2982
2984     virtual AsyncResult * completeTwoFactorAuthenticationAsync(
2985         QString oneTimeCode,
2986         QString deviceIdentifier,
2987         QString deviceDescription,
2988         IRequestContextPtr ctx = {}) = 0;
2989
3008     virtual void revokeLongSession(
3009         IRequestContextPtr ctx = {}) = 0;
3010
3012     virtual AsyncResult * revokeLongSessionAsync(
3013         IRequestContextPtr ctx = {}) = 0;
3014
3048     virtual AuthenticationResult authenticateToBusiness(
3049         IRequestContextPtr ctx = {}) = 0;
3050
3052     virtual AsyncResult * authenticateToBusinessAsync(
3053         IRequestContextPtr ctx = {}) = 0;
3054
3062     virtual User getUser(
3063         IRequestContextPtr ctx = {}) = 0;
3064
3066     virtual AsyncResult * getUserAsync(
3067         IRequestContextPtr ctx = {}) = 0;
3068
3077     virtual PublicUserInfo getPublicUserInfo(
3078         QString username,
3079         IRequestContextPtr ctx = {}) = 0;
3080
3082     virtual AsyncResult * getPublicUserInfoAsync(
3083         QString username,
3084         IRequestContextPtr ctx = {}) = 0;
3085
3095     virtual UserUrls getUserUrls(
3096         IRequestContextPtr ctx = {}) = 0;
3097
3099     virtual AsyncResult * getUserUrlsAsync(
3100         IRequestContextPtr ctx = {}) = 0;
3101
3145     virtual void inviteToBusiness(
3146         QString emailAddress,
3147         IRequestContextPtr ctx = {}) = 0;
3148
3150     virtual AsyncResult * inviteToBusinessAsync(
3151         QString emailAddress,
3152         IRequestContextPtr ctx = {}) = 0;
3153
3178     virtual void removeFromBusiness(
3179         QString emailAddress,
3180         IRequestContextPtr ctx = {}) = 0;
3181
3183     virtual AsyncResult * removeFromBusinessAsync(
3184         QString emailAddress,
3185         IRequestContextPtr ctx = {}) = 0;
3186
3229     virtual void updateBusinessUserIdentifier(
3230         QString oldEmailAddress,
3231         QString newEmailAddress,
3232         IRequestContextPtr ctx = {}) = 0;
3233
```

```
3235     virtual AsyncResult * updateBusinessUserIdentifierAsync(
3236         QString oldEmailAddress,
3237         QString newEmailAddress,
3238         IRequestContextPtr ctx = {}) = 0;
3239
3258     virtual QList<UserProfile> listBusinessUsers(
3259         IRequestContextPtr ctx = {}) = 0;
3260
3262     virtual AsyncResult * listBusinessUsersAsync(
3263         IRequestContextPtr ctx = {}) = 0;
3264
3279     virtual QList<BusinessInvitation> listBusinessInvitations(
3280         bool includeRequestedInvitations,
3281         IRequestContextPtr ctx = {}) = 0;
3282
3284     virtual AsyncResult * listBusinessInvitationsAsync(
3285         bool includeRequestedInvitations,
3286         IRequestContextPtr ctx = {}) = 0;
3287
3298     virtual AccountLimits getAccountLimits(
3299         ServiceLevel serviceLevel,
3300         IRequestContextPtr ctx = {}) = 0;
3301
3303     virtual AsyncResult * getAccountLimitsAsync(
3304         ServiceLevel serviceLevel,
3305         IRequestContextPtr ctx = {}) = 0;
3306
3307 };
3308
3309 using IUserStorePtr = std::shared_ptr<IUserStore>;
3310
3312
3313 QEVERCLOUD_EXPORT INoteStore * newNoteStore(
3314     QString noteStoreUrl = {},
3315     IRequestContextPtr ctx = {},
3316     QObject * parent = nullptr,
3317     IRetryPolicyPtr retryPolicy = {});
3318
3319 QEVERCLOUD_EXPORT IUserStore * newUserStore(
3320     QString userStoreUrl = {},
3321     IRequestContextPtr ctx = {},
3322     QObject * parent = nullptr,
3323     IRetryPolicyPtr retryPolicy = {});
3324
3325 } // namespace qevercloud
3326
3327 Q_DECLARE_METATYPE(QList<qevercloud::Notebook>)
3328 Q_DECLARE_METATYPE(QList<qevercloud::Tag>)
3329 Q_DECLARE_METATYPE(QList<qevercloud::SavedSearch>)
3330 Q_DECLARE_METATYPE(QList<qevercloud::NoteVersionId>)
3331 Q_DECLARE_METATYPE(QList<qevercloud::SharedNotebook>)
3332 Q_DECLARE_METATYPE(QList<qevercloud::LinkedNotebook>)
3333 Q_DECLARE_METATYPE(QList<qevercloud::BusinessInvitation>)
3334 Q_DECLARE_METATYPE(QList<qevercloud::UserProfile>)
3335
3336 #endif // QEVERCLOUD_GENERATED_SERVICES_H
```

8.21 Types.h File Reference

```
#include "../Export.h"
#include "../Optional.h"
#include "../Printable.h"
#include "EDAMErrorCode.h"
#include <QByteArray>
#include <QDateTime>
#include <QHash>
#include <QList>
#include <QMap>
#include <QMetaType>
#include <QSet>
#include <QStringList>
#include <QVariant>
```

Classes

- class qevercloud::EverCloudLocalData

  The EverCloudLocalData class contains several data elements which are not synchronized with Evernote service but which are nevertheless useful in applications using QEverCloud to implement feature rich full sync Evernote clients. Values of this class' types are contained within QEverCloud types corresponding to actual Evernote API types.
- struct qevercloud::SyncState
- struct qevercloud::SyncChunkFilter
- struct qevercloud::NoteFilter
- struct qevercloud::NotesMetadataResultSpec
- struct qevercloud::NoteCollectionCounts
- struct qevercloud::NoteResultSpec
- struct qevercloud::NoteVersionId
- struct qevercloud::RelatedQuery
- struct qevercloud::RelatedResultSpec
- struct qevercloud::ShareRelationshipRestrictions
- struct qevercloud::MemberShareRelationship
- struct qevercloud::NoteShareRelationshipRestrictions
- struct qevercloud::NoteMemberShareRelationship
- struct qevercloud::NoteInvitationShareRelationship
- struct qevercloud::NoteShareRelationships
- struct qevercloud::ManageNoteSharesParameters
- struct qevercloud::Data
- struct qevercloud::UserAttributes
- struct qevercloud::BusinessUserAttributes
- struct qevercloud::Accounting
- struct qevercloud::BusinessUserInfo
- struct qevercloud::AccountLimits
- struct qevercloud::User
- struct qevercloud::Contact
- struct qevercloud::Identity
- struct qevercloud::Tag
- struct qevercloud::LazyMap
- struct qevercloud::ResourceAttributes
- struct qevercloud::Resource
- struct qevercloud::NoteAttributes
- struct qevercloud::SharedNote
- struct qevercloud::NoteRestrictions
- struct qevercloud::NoteLimits
- struct qevercloud::Note
- struct qevercloud::Publishing
- struct qevercloud::BusinessNotebook
- struct qevercloud::SavedSearchScope
- struct qevercloud::SavedSearch
- struct qevercloud::SharedNotebookRecipientSettings
- struct qevercloud::NotebookRecipientSettings
- struct qevercloud::SharedNotebook
- struct qevercloud::CanMoveToContainerRestrictions
- struct qevercloud::NotebookRestrictions
- struct qevercloud::Notebook
- struct qevercloud::LinkedNotebook
- struct qevercloud::NotebookDescriptor
- struct qevercloud::UserProfile
- struct qevercloud::RelatedContentImage
- struct qevercloud::RelatedContent

- struct qevercloud::BusinessInvitation
- struct qevercloud::UserIdentity
- struct qevercloud::PublicUserInfo
- struct qevercloud::UserUrls
- struct qevercloud::AuthenticationResult
- struct qevercloud::BootstrapSettings
- struct qevercloud::BootstrapProfile
- struct qevercloud::BootstrapInfo
- class qevercloud::EDAMUserException
- class qevercloud::EDAMSystemException
- class qevercloud::EDAMNotFoundException
- class qevercloud::EDAMInvalidContactsException
- struct qevercloud::SyncChunk
- struct qevercloud::NoteList
- struct qevercloud::NoteMetadata
- struct qevercloud::NotesMetadataList
- struct qevercloud::NoteEmailParameters
- struct qevercloud::RelatedResult
- struct qevercloud::UpdateNoteIfUsnMatchesResult
- struct qevercloud::InvitationShareRelationship
- struct qevercloud::ShareRelationships
- struct qevercloud::ManageNotebookSharesParameters
- struct qevercloud::ManageNotebookSharesError
- struct qevercloud::ManageNotebookSharesResult
- struct qevercloud::SharedNoteTemplate
- struct qevercloud::NotebookShareTemplate
- struct qevercloud::CreateOrUpdateNotebookSharesResult
- struct qevercloud::ManageNoteSharesError
- struct qevercloud::ManageNoteSharesResult

Namespaces

- namespace qevercloud

Typedefs

- using qevercloud::InvalidationSequenceNumber = qint64
- using qevercloud::IdentityID = qint64
- using qevercloud::UserID = qint32
- using qevercloud::Guid = QString
- using qevercloud::Timestamp = qint64
- using qevercloud::MessageEventID = qint64
- using qevercloud::MessageThreadID = qint64

8.22 Types.h

Go to the documentation of this file.

```
1
12 #ifndef QEVERCLOUD_GENERATED_TYPES_H
13 #define QEVERCLOUD_GENERATED_TYPES_H
14
15 #include "../Export.h"
16
17 #include "../Optional.h"
18 #include "../Printable.h"
19 #include "EDAMErrorCode.h"
20 #include <QByteArray>
21 #include <QDateTime>
22 #include <QHash>
23 #include <QList>
24 #include <QMap>
25 #include <QMetaType>
26 #include <QMetaType>
27 #include <QSet>
28 #include <QStringList>
29 #include <QVariant>
30
31 namespace qevercloud {
32
37 using InvalidationSequenceNumber = qint64;
38
42 using IdentityID = qint64;
43
50 using UserID = qint32;
51
62 using Guid = QString;
63
81 using Timestamp = qint64;
82
86 using MessageEventID = qint64;
87
91 using MessageThreadID = qint64;
92
93
102 class QEVERCLOUD_EXPORT EverCloudLocalData:  public Printable
103 {
104     Q_GADGET
105 public:
106     EverCloudLocalData();
107     virtual ~EverCloudLocalData() noexcept override;
108
109     virtual void print(QTextStream & strm) const override;
110
111     bool operator==(const EverCloudLocalData & other) const;
112     bool operator!=(const EverCloudLocalData & other) const;
121     QString id;
122
128     bool dirty = false;
129
135     bool local = false;
136
143     bool favorited = false;
144
149     QHash<QString, QVariant> dict;
150
151     // Properties declaration for meta-object system
152     Q_PROPERTY(QString id MEMBER id USER true)
153     Q_PROPERTY(bool dirty MEMBER dirty)
154     Q_PROPERTY(bool local MEMBER local)
155     Q_PROPERTY(bool favorited MEMBER favorited)
156
157     using Dict = QHash<QString, QVariant>;
158     Q_PROPERTY(Dict dict MEMBER dict)
159 };
160
165 struct QEVERCLOUD_EXPORT SyncState:  public Printable
166 {
167 private:
168     Q_GADGET
169 public:
173     EverCloudLocalData localData;
174
178     Timestamp currentTime = 0;
186     Timestamp fullSyncBefore = 0;
195     qint32 updateCount = 0;
204     Optional<qint64> uploaded;
224     Optional<Timestamp> userLastUpdated;
232     Optional<MessageEventID> userMaxMessageEventId;
233
```

```
234     virtual void print(QTextStream & strm) const override;
235 
236     bool operator==(const SyncState & other)const
237 {
238         return (currentTime == other.currentTime)
239             && (fullSyncBefore == other.fullSyncBefore)
240             && (updateCount == other.updateCount)
241             && uploaded.isEqual(other.uploaded)
242             && userLastUpdated.isEqual(other.userLastUpdated)
243             && userMaxMessageEventId.isEqual(other.userMaxMessageEventId)
244         ;
245     }
246 
247     bool operator!=(const SyncState & other)const
248 {
249         return !(*this == other);
250     }
251 
252     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
253     Q_PROPERTY(Timestamp currentTime MEMBER currentTime)
254     Q_PROPERTY(Timestamp fullSyncBefore MEMBER fullSyncBefore)
255     Q_PROPERTY(qint32 updateCount MEMBER updateCount)
256     Q_PROPERTY(Optional<qint64> uploaded MEMBER uploaded)
257     Q_PROPERTY(Optional<Timestamp> userLastUpdated MEMBER userLastUpdated)
258     Q_PROPERTY(Optional<MessageEventID> userMaxMessageEventId MEMBER userMaxMessageEventId)
259 };
260 
268 struct QEVERCLOUD_EXPORT SyncChunkFilter:  public Printable
269 {
270 private:
271     Q_GADGET
272 public:
276     EverCloudLocalData localData;
277 
281     Optional<bool> includeNotes;
287     Optional<bool> includeNoteResources;
293     Optional<bool> includeNoteAttributes;
297     Optional<bool> includeNotebooks;
301     Optional<bool> includeTags;
305     Optional<bool> includeSearches;
313     Optional<bool> includeResources;
317     Optional<bool> includeLinkedNotebooks;
324     Optional<bool> includeExpunged;
330     Optional<bool> includeNoteApplicationDataFullMap;
337     Optional<bool> includeResourceApplicationDataFullMap;
344     Optional<bool> includeNoteResourceApplicationDataFullMap;
350     Optional<bool> includeSharedNotes;
352     Optional<bool> omitSharedNotebooks;
358     Optional<QString> requireNoteContentClass;
376     Optional<QSet<QString>> notebookGuids;
377 
378     virtual void print(QTextStream & strm) const override;
379 
380     bool operator==(const SyncChunkFilter & other)const
381 {
382         return includeNotes.isEqual(other.includeNotes)
383             && includeNoteResources.isEqual(other.includeNoteResources)
384             && includeNoteAttributes.isEqual(other.includeNoteAttributes)
385             && includeNotebooks.isEqual(other.includeNotebooks)
386             && includeTags.isEqual(other.includeTags)
387             && includeSearches.isEqual(other.includeSearches)
388             && includeResources.isEqual(other.includeResources)
389             && includeLinkedNotebooks.isEqual(other.includeLinkedNotebooks)
390             && includeExpunged.isEqual(other.includeExpunged)
391             && includeNoteApplicationDataFullMap.isEqual(other.includeNoteApplicationDataFullMap)
392             &&
    includeResourceApplicationDataFullMap.isEqual(other.includeResourceApplicationDataFullMap)
393             &&
    includeNoteResourceApplicationDataFullMap.isEqual(other.includeNoteResourceApplicationDataFullMap)
394             && includeSharedNotes.isEqual(other.includeSharedNotes)
395             && omitSharedNotebooks.isEqual(other.omitSharedNotebooks)
396             && requireNoteContentClass.isEqual(other.requireNoteContentClass)
397             && notebookGuids.isEqual(other.notebookGuids)
398         ;
399     }
400 
401     bool operator!=(const SyncChunkFilter & other)const
402 {
403         return !(*this == other);
404     }
405 
406     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
407     Q_PROPERTY(Optional<bool> includeNotes MEMBER includeNotes)
408     Q_PROPERTY(Optional<bool> includeNoteResources MEMBER includeNoteResources)
409     Q_PROPERTY(Optional<bool> includeNoteAttributes MEMBER includeNoteAttributes)
410     Q_PROPERTY(Optional<bool> includeNotebooks MEMBER includeNotebooks)
411     Q_PROPERTY(Optional<bool> includeTags MEMBER includeTags)
```

```
412     Q_PROPERTY(Optional<bool> includeSearches MEMBER includeSearches)
413     Q_PROPERTY(Optional<bool> includeResources MEMBER includeResources)
414     Q_PROPERTY(Optional<bool> includeLinkedNotebooks MEMBER includeLinkedNotebooks)
415     Q_PROPERTY(Optional<bool> includeExpunged MEMBER includeExpunged)
416     Q_PROPERTY(Optional<bool> includeNoteApplicationDataFullMap MEMBER
    includeNoteApplicationDataFullMap)
417     Q_PROPERTY(Optional<bool> includeResourceApplicationDataFullMap MEMBER
    includeResourceApplicationDataFullMap)
418     Q_PROPERTY(Optional<bool> includeNoteResourceApplicationDataFullMap MEMBER
    includeNoteResourceApplicationDataFullMap)
419     Q_PROPERTY(Optional<bool> includeSharedNotes MEMBER includeSharedNotes)
420     Q_PROPERTY(Optional<bool> omitSharedNotebooks MEMBER omitSharedNotebooks)
421     Q_PROPERTY(Optional<QString> requireNoteContentClass MEMBER requireNoteContentClass)
422     Q_PROPERTY(Optional<QSet<QString» notebookGuids MEMBER notebookGuids)
423 };
424
431 struct QEVERCLOUD_EXPORT NoteFilter:  public Printable
432 {
433 private:
434     Q_GADGET
435 public:
439     EverCloudLocalData localData;
440
445     Optional<qint32> order;
450     Optional<bool> ascending;
455     Optional<QString> words;
460     Optional<Guid> notebookGuid;
465     Optional<QList<Guid>> tagGuids;
475     Optional<QString> timeZone;
481     Optional<bool> inactive;
488     Optional<QString> emphasized;
494     Optional<bool> includeAllReadableNotebooks;
500     Optional<bool> includeAllReadableWorkspaces;
506     Optional<QString> context;
511     Optional<QString> rawWords;
518     Optional<QByteArray> searchContextBytes;
519
520     virtual void print(QTextStream & strm) const override;
521
522     bool operator==(const NoteFilter & other)const
523 {
524         return order.isEqual(other.order)
525             && ascending.isEqual(other.ascending)
526             && words.isEqual(other.words)
527             && notebookGuid.isEqual(other.notebookGuid)
528             && tagGuids.isEqual(other.tagGuids)
529             && timeZone.isEqual(other.timeZone)
530             && inactive.isEqual(other.inactive)
531             && emphasized.isEqual(other.emphasized)
532             && includeAllReadableNotebooks.isEqual(other.includeAllReadableNotebooks)
533             && includeAllReadableWorkspaces.isEqual(other.includeAllReadableWorkspaces)
534             && context.isEqual(other.context)
535             && rawWords.isEqual(other.rawWords)
536             && searchContextBytes.isEqual(other.searchContextBytes)
537         ;
538     }
539
540     bool operator!=(const NoteFilter & other)const
541 {
542         return !(*this == other);
543     }
544
545     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
546     Q_PROPERTY(Optional<qint32> order MEMBER order)
547     Q_PROPERTY(Optional<bool> ascending MEMBER ascending)
548     Q_PROPERTY(Optional<QString> words MEMBER words)
549     Q_PROPERTY(Optional<Guid> notebookGuid MEMBER notebookGuid)
550     Q_PROPERTY(Optional<QList<Guid» tagGuids MEMBER tagGuids)
551     Q_PROPERTY(Optional<QString> timeZone MEMBER timeZone)
552     Q_PROPERTY(Optional<bool> inactive MEMBER inactive)
553     Q_PROPERTY(Optional<QString> emphasized MEMBER emphasized)
554     Q_PROPERTY(Optional<bool> includeAllReadableNotebooks MEMBER includeAllReadableNotebooks)
555     Q_PROPERTY(Optional<bool> includeAllReadableWorkspaces MEMBER includeAllReadableWorkspaces)
556     Q_PROPERTY(Optional<QString> context MEMBER context)
557     Q_PROPERTY(Optional<QString> rawWords MEMBER rawWords)
558     Q_PROPERTY(Optional<QByteArray> searchContextBytes MEMBER searchContextBytes)
559 };
560
574 struct QEVERCLOUD_EXPORT NotesMetadataResultSpec:  public Printable
575 {
576 private:
577     Q_GADGET
578 public:
582     EverCloudLocalData localData;
583
585     Optional<bool> includeTitle;
587     Optional<bool> includeContentLength;
```

```
589     Optional<bool> includeCreated;
591     Optional<bool> includeUpdated;
593     Optional<bool> includeDeleted;
595     Optional<bool> includeUpdateSequenceNum;
597     Optional<bool> includeNotebookGuid;
599     Optional<bool> includeTagGuids;
601     Optional<bool> includeAttributes;
603     Optional<bool> includeLargestResourceMime;
605     Optional<bool> includeLargestResourceSize;
606
607     virtual void print(QTextStream & strm) const override;
608
609     bool operator==(const NotesMetadataResultSpec & other)const
610 {
611         return includeTitle.isEqual(other.includeTitle)
612             && includeContentLength.isEqual(other.includeContentLength)
613             && includeCreated.isEqual(other.includeCreated)
614             && includeUpdated.isEqual(other.includeUpdated)
615             && includeDeleted.isEqual(other.includeDeleted)
616             && includeUpdateSequenceNum.isEqual(other.includeUpdateSequenceNum)
617             && includeNotebookGuid.isEqual(other.includeNotebookGuid)
618             && includeTagGuids.isEqual(other.includeTagGuids)
619             && includeAttributes.isEqual(other.includeAttributes)
620             && includeLargestResourceMime.isEqual(other.includeLargestResourceMime)
621             && includeLargestResourceSize.isEqual(other.includeLargestResourceSize)
622         ;
623     }
624
625     bool operator!=(const NotesMetadataResultSpec & other)const
626 {
627         return !(*this == other);
628     }
629
630     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
631     Q_PROPERTY(Optional<bool> includeTitle MEMBER includeTitle)
632     Q_PROPERTY(Optional<bool> includeContentLength MEMBER includeContentLength)
633     Q_PROPERTY(Optional<bool> includeCreated MEMBER includeCreated)
634     Q_PROPERTY(Optional<bool> includeUpdated MEMBER includeUpdated)
635     Q_PROPERTY(Optional<bool> includeDeleted MEMBER includeDeleted)
636     Q_PROPERTY(Optional<bool> includeUpdateSequenceNum MEMBER includeUpdateSequenceNum)
637     Q_PROPERTY(Optional<bool> includeNotebookGuid MEMBER includeNotebookGuid)
638     Q_PROPERTY(Optional<bool> includeTagGuids MEMBER includeTagGuids)
639     Q_PROPERTY(Optional<bool> includeAttributes MEMBER includeAttributes)
640     Q_PROPERTY(Optional<bool> includeLargestResourceMime MEMBER includeLargestResourceMime)
641     Q_PROPERTY(Optional<bool> includeLargestResourceSize MEMBER includeLargestResourceSize)
642 };
643
649 struct QEVERCLOUD_EXPORT NoteCollectionCounts:  public Printable
650 {
651 private:
652     Q_GADGET
653 public:
657     EverCloudLocalData localData;
658
663     Optional<QMap<Guid, qint32>> notebookCounts;
668     Optional<QMap<Guid, qint32>> tagCounts;
675     Optional<qint32> trashCount;
676
677     virtual void print(QTextStream & strm) const override;
678
679     bool operator==(const NoteCollectionCounts & other)const
680 {
681         return notebookCounts.isEqual(other.notebookCounts)
682             && tagCounts.isEqual(other.tagCounts)
683             && trashCount.isEqual(other.trashCount)
684         ;
685     }
686
687     bool operator!=(const NoteCollectionCounts & other)const
688 {
689         return !(*this == other);
690     }
691
692     using TagCounts = QMap<Guid, qint32>;
693
694     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
695     Q_PROPERTY(Optional<TagCounts> notebookCounts MEMBER notebookCounts)
696     Q_PROPERTY(Optional<TagCounts> tagCounts MEMBER tagCounts)
697     Q_PROPERTY(Optional<qint32> trashCount MEMBER trashCount)
698 };
699
710 struct QEVERCLOUD_EXPORT NoteResultSpec:  public Printable
711 {
712 private:
713     Q_GADGET
714 public:
718     EverCloudLocalData localData;
```

```
719
723     Optional<bool> includeContent;
728     Optional<bool> includeResourcesData;
733     Optional<bool> includeResourcesRecognition;
738     Optional<bool> includeResourcesAlternateData;
742     Optional<bool> includeSharedNotes;
746     Optional<bool> includeNoteAppDataValues;
750     Optional<bool> includeResourceAppDataValues;
754     Optional<bool> includeAccountLimits;
755
756     virtual void print(QTextStream & strm) const override;
757
758     bool operator==(const NoteResultSpec & other)const
759 {
760         return includeContent.isEqual(other.includeContent)
761             && includeResourcesData.isEqual(other.includeResourcesData)
762             && includeResourcesRecognition.isEqual(other.includeResourcesRecognition)
763             && includeResourcesAlternateData.isEqual(other.includeResourcesAlternateData)
764             && includeSharedNotes.isEqual(other.includeSharedNotes)
765             && includeNoteAppDataValues.isEqual(other.includeNoteAppDataValues)
766             && includeResourceAppDataValues.isEqual(other.includeResourceAppDataValues)
767             && includeAccountLimits.isEqual(other.includeAccountLimits)
768         ;
769     }
770
771     bool operator!=(const NoteResultSpec & other)const
772 {
773         return !(*this == other);
774     }
775
776     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
777     Q_PROPERTY(Optional<bool> includeContent MEMBER includeContent)
778     Q_PROPERTY(Optional<bool> includeResourcesData MEMBER includeResourcesData)
779     Q_PROPERTY(Optional<bool> includeResourcesRecognition MEMBER includeResourcesRecognition)
780     Q_PROPERTY(Optional<bool> includeResourcesAlternateData MEMBER includeResourcesAlternateData)
781     Q_PROPERTY(Optional<bool> includeSharedNotes MEMBER includeSharedNotes)
782     Q_PROPERTY(Optional<bool> includeNoteAppDataValues MEMBER includeNoteAppDataValues)
783     Q_PROPERTY(Optional<bool> includeResourceAppDataValues MEMBER includeResourceAppDataValues)
784     Q_PROPERTY(Optional<bool> includeAccountLimits MEMBER includeAccountLimits)
785 };
786
793 struct QEVERCLOUD_EXPORT NoteVersionId:  public Printable
794 {
795 private:
796     Q_GADGET
797 public:
801     EverCloudLocalData localData;
802
808     qint32 updateSequenceNum = 0;
816     Timestamp updated = 0;
821     Timestamp saved = 0;
826     QString title;
831     Optional<UserID> lastEditorId;
832
833     virtual void print(QTextStream & strm) const override;
834
835     bool operator==(const NoteVersionId & other)const
836 {
837         return (updateSequenceNum == other.updateSequenceNum)
838             && (updated == other.updated)
839             && (saved == other.saved)
840             && (title == other.title)
841             && lastEditorId.isEqual(other.lastEditorId)
842         ;
843     }
844
845     bool operator!=(const NoteVersionId & other)const
846 {
847         return !(*this == other);
848     }
849
850     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
851     Q_PROPERTY(qint32 updateSequenceNum MEMBER updateSequenceNum)
852     Q_PROPERTY(Timestamp updated MEMBER updated)
853     Q_PROPERTY(Timestamp saved MEMBER saved)
854     Q_PROPERTY(QString title MEMBER title)
855     Q_PROPERTY(Optional<UserID> lastEditorId MEMBER lastEditorId)
856 };
857
866 struct QEVERCLOUD_EXPORT RelatedQuery:  public Printable
867 {
868 private:
869     Q_GADGET
870 public:
874     EverCloudLocalData localData;
875
880     Optional<QString> noteGuid;
```

```
886     Optional<QString> plainText;
893     Optional<NoteFilter> filter;
898     Optional<QString> referenceUri;
904     Optional<QString> context;
916     Optional<QString> cacheKey;
917 
918     virtual void print(QTextStream & strm) const override;
919 
920     bool operator==(const RelatedQuery & other)const
921 {
922         return noteGuid.isEqual(other.noteGuid)
923             && plainText.isEqual(other.plainText)
924             && filter.isEqual(other.filter)
925             && referenceUri.isEqual(other.referenceUri)
926             && context.isEqual(other.context)
927             && cacheKey.isEqual(other.cacheKey)
928         ;
929     }
930 
931     bool operator!=(const RelatedQuery & other)const
932 {
933         return !(*this == other);
934     }
935 
936     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
937     Q_PROPERTY(Optional<QString> noteGuid MEMBER noteGuid)
938     Q_PROPERTY(Optional<QString> plainText MEMBER plainText)
939     Q_PROPERTY(Optional<NoteFilter> filter MEMBER filter)
940     Q_PROPERTY(Optional<QString> referenceUri MEMBER referenceUri)
941     Q_PROPERTY(Optional<QString> context MEMBER context)
942     Q_PROPERTY(Optional<QString> cacheKey MEMBER cacheKey)
943 };
944 
952 struct QEVERCLOUD_EXPORT RelatedResultSpec:  public Printable
953 {
954 private:
955     Q_GADGET
956 public:
960     EverCloudLocalData localData;
961 
968     Optional<qint32> maxNotes;
975     Optional<qint32> maxNotebooks;
982     Optional<qint32> maxTags;
989     Optional<bool> writableNotebooksOnly;
995     Optional<bool> includeContainingNotebooks;
1001     Optional<bool> includeDebugInfo;
1008     Optional<qint32> maxExperts;
1014     Optional<qint32> maxRelatedContent;
1018     Optional<QSet<RelatedContentType>> relatedContentTypes;
1019 
1020     virtual void print(QTextStream & strm) const override;
1021 
1022     bool operator==(const RelatedResultSpec & other)const
1023 {
1024         return maxNotes.isEqual(other.maxNotes)
1025             && maxNotebooks.isEqual(other.maxNotebooks)
1026             && maxTags.isEqual(other.maxTags)
1027             && writableNotebooksOnly.isEqual(other.writableNotebooksOnly)
1028             && includeContainingNotebooks.isEqual(other.includeContainingNotebooks)
1029             && includeDebugInfo.isEqual(other.includeDebugInfo)
1030             && maxExperts.isEqual(other.maxExperts)
1031             && maxRelatedContent.isEqual(other.maxRelatedContent)
1032             && relatedContentTypes.isEqual(other.relatedContentTypes)
1033         ;
1034     }
1035 
1036     bool operator!=(const RelatedResultSpec & other)const
1037 {
1038         return !(*this == other);
1039     }
1040 
1041     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1042     Q_PROPERTY(Optional<qint32> maxNotes MEMBER maxNotes)
1043     Q_PROPERTY(Optional<qint32> maxNotebooks MEMBER maxNotebooks)
1044     Q_PROPERTY(Optional<qint32> maxTags MEMBER maxTags)
1045     Q_PROPERTY(Optional<bool> writableNotebooksOnly MEMBER writableNotebooksOnly)
1046     Q_PROPERTY(Optional<bool> includeContainingNotebooks MEMBER includeContainingNotebooks)
1047     Q_PROPERTY(Optional<bool> includeDebugInfo MEMBER includeDebugInfo)
1048     Q_PROPERTY(Optional<qint32> maxExperts MEMBER maxExperts)
1049     Q_PROPERTY(Optional<qint32> maxRelatedContent MEMBER maxRelatedContent)
1050     Q_PROPERTY(Optional<QSet<RelatedContentType» relatedContentTypes MEMBER relatedContentTypes)
1051 };
1052 
1054 struct QEVERCLOUD_EXPORT ShareRelationshipRestrictions:  public Printable
1055 {
1056 private:
1057     Q_GADGET
```

```
1058 public:
1062     EverCloudLocalData localData;
1063 
1065     Optional<bool> noSetReadOnly;
1067     Optional<bool> noSetReadPlusActivity;
1069     Optional<bool> noSetModify;
1071     Optional<bool> noSetFullAccess;
1072 
1073     virtual void print(QTextStream & strm) const override;
1074 
1075     bool operator==(const ShareRelationshipRestrictions & other)const
1076 {
1077         return noSetReadOnly.isEqual(other.noSetReadOnly)
1078             && noSetReadPlusActivity.isEqual(other.noSetReadPlusActivity)
1079             && noSetModify.isEqual(other.noSetModify)
1080             && noSetFullAccess.isEqual(other.noSetFullAccess)
1081         ;
1082     }
1083 
1084     bool operator!=(const ShareRelationshipRestrictions & other)const
1085 {
1086         return !(*this == other);
1087     }
1088 
1089     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1090     Q_PROPERTY(Optional<bool> noSetReadOnly MEMBER noSetReadOnly)
1091     Q_PROPERTY(Optional<bool> noSetReadPlusActivity MEMBER noSetReadPlusActivity)
1092     Q_PROPERTY(Optional<bool> noSetModify MEMBER noSetModify)
1093     Q_PROPERTY(Optional<bool> noSetFullAccess MEMBER noSetFullAccess)
1094 };
1095 
1101 struct QEVERCLOUD_EXPORT MemberShareRelationship:  public Printable
1102 {
1103 private:
1104     Q_GADGET
1105 public:
1109     EverCloudLocalData localData;
1110 
1115     Optional<QString> displayName;
1119     Optional<UserID> recipientUserId;
1127     Optional<ShareRelationshipPrivilegeLevel> bestPrivilege;
1137     Optional<ShareRelationshipPrivilegeLevel> individualPrivilege;
1142     Optional<ShareRelationshipRestrictions> restrictions;
1151     Optional<UserID> sharerUserId;
1152 
1153     virtual void print(QTextStream & strm) const override;
1154 
1155     bool operator==(const MemberShareRelationship & other)const
1156 {
1157         return displayName.isEqual(other.displayName)
1158             && recipientUserId.isEqual(other.recipientUserId)
1159             && bestPrivilege.isEqual(other.bestPrivilege)
1160             && individualPrivilege.isEqual(other.individualPrivilege)
1161             && restrictions.isEqual(other.restrictions)
1162             && sharerUserId.isEqual(other.sharerUserId)
1163         ;
1164     }
1165 
1166     bool operator!=(const MemberShareRelationship & other)const
1167 {
1168         return !(*this == other);
1169     }
1170 
1171     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1172     Q_PROPERTY(Optional<QString> displayName MEMBER displayName)
1173     Q_PROPERTY(Optional<UserID> recipientUserId MEMBER recipientUserId)
1174     Q_PROPERTY(Optional<ShareRelationshipPrivilegeLevel> bestPrivilege MEMBER bestPrivilege)
1175     Q_PROPERTY(Optional<ShareRelationshipPrivilegeLevel> individualPrivilege MEMBER
      individualPrivilege)
1176     Q_PROPERTY(Optional<ShareRelationshipRestrictions> restrictions MEMBER restrictions)
1177     Q_PROPERTY(Optional<UserID> sharerUserId MEMBER sharerUserId)
1178 };
1179 
1186 struct QEVERCLOUD_EXPORT NoteShareRelationshipRestrictions:  public Printable
1187 {
1188 private:
1189     Q_GADGET
1190 public:
1194     EverCloudLocalData localData;
1195 
1200     Optional<bool> noSetReadNote;
1205     Optional<bool> noSetModifyNote;
1210     Optional<bool> noSetFullAccess;
1211 
1212     virtual void print(QTextStream & strm) const override;
1213 
1214     bool operator==(const NoteShareRelationshipRestrictions & other)const
```

```
1215 {
1216         return noSetReadNote.isEqual(other.noSetReadNote)
1217             && noSetModifyNote.isEqual(other.noSetModifyNote)
1218             && noSetFullAccess.isEqual(other.noSetFullAccess)
1219         ;
1220     }
1221
1222     bool operator!=(const NoteShareRelationshipRestrictions & other)const
1223 {
1224         return !(*this == other);
1225     }
1226
1227     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1228     Q_PROPERTY(Optional<bool> noSetReadNote MEMBER noSetReadNote)
1229     Q_PROPERTY(Optional<bool> noSetModifyNote MEMBER noSetModifyNote)
1230     Q_PROPERTY(Optional<bool> noSetFullAccess MEMBER noSetFullAccess)
1231 };
1232
1238 struct QEVERCLOUD_EXPORT NoteMemberShareRelationship:  public Printable
1239 {
1240 private:
1241     Q_GADGET
1242 public:
1246     EverCloudLocalData localData;
1247
1252     Optional<QString> displayName;
1256     Optional<UserID> recipientUserId;
1264     Optional<SharedNotePrivilegeLevel> privilege;
1271     Optional<NoteShareRelationshipRestrictions> restrictions;
1277     Optional<UserID> sharerUserId;
1278
1279     virtual void print(QTextStream & strm) const override;
1280
1281     bool operator==(const NoteMemberShareRelationship & other)const
1282 {
1283         return displayName.isEqual(other.displayName)
1284             && recipientUserId.isEqual(other.recipientUserId)
1285             && privilege.isEqual(other.privilege)
1286             && restrictions.isEqual(other.restrictions)
1287             && sharerUserId.isEqual(other.sharerUserId)
1288         ;
1289     }
1290
1291     bool operator!=(const NoteMemberShareRelationship & other)const
1292 {
1293         return !(*this == other);
1294     }
1295
1296     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1297     Q_PROPERTY(Optional<QString> displayName MEMBER displayName)
1298     Q_PROPERTY(Optional<UserID> recipientUserId MEMBER recipientUserId)
1299     Q_PROPERTY(Optional<SharedNotePrivilegeLevel> privilege MEMBER privilege)
1300     Q_PROPERTY(Optional<NoteShareRelationshipRestrictions> restrictions MEMBER restrictions)
1301     Q_PROPERTY(Optional<UserID> sharerUserId MEMBER sharerUserId)
1302 };
1303
1309 struct QEVERCLOUD_EXPORT NoteInvitationShareRelationship:  public Printable
1310 {
1311 private:
1312     Q_GADGET
1313 public:
1317     EverCloudLocalData localData;
1318
1323     Optional<QString> displayName;
1331     Optional<IdentityID> recipientIdentityId;
1337     Optional<SharedNotePrivilegeLevel> privilege;
1343     Optional<UserID> sharerUserId;
1344
1345     virtual void print(QTextStream & strm) const override;
1346
1347     bool operator==(const NoteInvitationShareRelationship & other)const
1348 {
1349         return displayName.isEqual(other.displayName)
1350             && recipientIdentityId.isEqual(other.recipientIdentityId)
1351             && privilege.isEqual(other.privilege)
1352             && sharerUserId.isEqual(other.sharerUserId)
1353         ;
1354     }
1355
1356     bool operator!=(const NoteInvitationShareRelationship & other)const
1357 {
1358         return !(*this == other);
1359     }
1360
1361     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1362     Q_PROPERTY(Optional<QString> displayName MEMBER displayName)
1363     Q_PROPERTY(Optional<IdentityID> recipientIdentityId MEMBER recipientIdentityId)
```

```
1364     Q_PROPERTY(Optional<SharedNotePrivilegeLevel> privilege MEMBER privilege)
1365     Q_PROPERTY(Optional<UserID> sharerUserId MEMBER sharerUserId)
1366 };
1367
1375 struct QEVERCLOUD_EXPORT NoteShareRelationships:  public Printable
1376 {
1377 private:
1378     Q_GADGET
1379 public:
1383     EverCloudLocalData localData;
1384
1389     Optional<QList<NoteInvitationShareRelationship>> invitations;
1395     Optional<QList<NoteMemberShareRelationship>> memberships;
1397     Optional<NoteShareRelationshipRestrictions> invitationRestrictions;
1398
1399     virtual void print(QTextStream & strm) const override;
1400
1401     bool operator==(const NoteShareRelationships & other)const
1402 {
1403         return invitations.isEqual(other.invitations)
1404             && memberships.isEqual(other.memberships)
1405             && invitationRestrictions.isEqual(other.invitationRestrictions)
1406         ;
1407     }
1408
1409     bool operator!=(const NoteShareRelationships & other)const
1410 {
1411         return !(*this == other);
1412     }
1413
1414     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1415     Q_PROPERTY(Optional<QList<NoteInvitationShareRelationship» invitations MEMBER invitations)
1416     Q_PROPERTY(Optional<QList<NoteMemberShareRelationship» memberships MEMBER memberships)
1417     Q_PROPERTY(Optional<NoteShareRelationshipRestrictions> invitationRestrictions MEMBER
      invitationRestrictions)
1418 };
1419
1430 struct QEVERCLOUD_EXPORT ManageNoteSharesParameters:  public Printable
1431 {
1432 private:
1433     Q_GADGET
1434 public:
1438     EverCloudLocalData localData;
1439
1443     Optional<QString> noteGuid;
1451     Optional<QList<NoteMemberShareRelationship>> membershipsToUpdate;
1459     Optional<QList<NoteInvitationShareRelationship>> invitationsToUpdate;
1463     Optional<QList<UserID>> membershipsToUnshare;
1467     Optional<QList<IdentityID>> invitationsToUnshare;
1468
1469     virtual void print(QTextStream & strm) const override;
1470
1471     bool operator==(const ManageNoteSharesParameters & other)const
1472 {
1473         return noteGuid.isEqual(other.noteGuid)
1474             && membershipsToUpdate.isEqual(other.membershipsToUpdate)
1475             && invitationsToUpdate.isEqual(other.invitationsToUpdate)
1476             && membershipsToUnshare.isEqual(other.membershipsToUnshare)
1477             && invitationsToUnshare.isEqual(other.invitationsToUnshare)
1478         ;
1479     }
1480
1481     bool operator!=(const ManageNoteSharesParameters & other)const
1482 {
1483         return !(*this == other);
1484     }
1485
1486     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1487     Q_PROPERTY(Optional<QString> noteGuid MEMBER noteGuid)
1488     Q_PROPERTY(Optional<QList<NoteMemberShareRelationship» membershipsToUpdate MEMBER
      membershipsToUpdate)
1489     Q_PROPERTY(Optional<QList<NoteInvitationShareRelationship» invitationsToUpdate MEMBER
      invitationsToUpdate)
1490     Q_PROPERTY(Optional<QList<UserID» membershipsToUnshare MEMBER membershipsToUnshare)
1491     Q_PROPERTY(Optional<QList<IdentityID» invitationsToUnshare MEMBER invitationsToUnshare)
1492 };
1493
1503 struct QEVERCLOUD_EXPORT Data:  public Printable
1504 {
1505 private:
1506     Q_GADGET
1507 public:
1511     EverCloudLocalData localData;
1512
1518     Optional<QByteArray> bodyHash;
1522     Optional<qint32> size;
1530     Optional<QByteArray> body;
```

```
1531
1532     virtual void print(QTextStream & strm) const override;
1533
1534     bool operator==(const Data & other)const
1535 {
1536         return bodyHash.isEqual(other.bodyHash)
1537             && size.isEqual(other.size)
1538             && body.isEqual(other.body)
1539         ;
1540     }
1541
1542     bool operator!=(const Data & other)const
1543 {
1544         return !(*this == other);
1545     }
1546
1547     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1548     Q_PROPERTY(Optional<QByteArray> bodyHash MEMBER bodyHash)
1549     Q_PROPERTY(Optional<qint32> size MEMBER size)
1550     Q_PROPERTY(Optional<QByteArray> body MEMBER body)
1551 };
1552
1558 struct QEVERCLOUD_EXPORT UserAttributes:  public Printable
1559 {
1560 private:
1561     Q_GADGET
1562 public:
1566     EverCloudLocalData localData;
1567
1574     Optional<QString> defaultLocationName;
1579     Optional<double> defaultLatitude;
1584     Optional<double> defaultLongitude;
1590     Optional<bool> preactivation;
1597     Optional<QStringList> viewedPromotions;
1606     Optional<QString> incomingEmailAddress;
1616     Optional<QStringList> recentMailedAddresses;
1622     Optional<QString> comments;
1628     Optional<Timestamp> dateAgreedToTermsOfService;
1633     Optional<qint32> maxReferrals;
1637     Optional<qint32> referralCount;
1642     Optional<QString> refererCode;
1648     Optional<Timestamp> sentEmailDate;
1654     Optional<qint32> sentEmailCount;
1660     Optional<qint32> dailyEmailLimit;
1666     Optional<Timestamp> emailOptOutDate;
1673     Optional<Timestamp> partnerEmailOptInDate;
1680     Optional<QString> preferredLanguage;
1685     Optional<QString> preferredCountry;
1690     Optional<bool> clipFullPage;
1696     Optional<QString> twitterUserName;
1701     Optional<QString> twitterId;
1706     Optional<QString> groupName;
1714     Optional<QString> recognitionLanguage;
1716     Optional<QString> referralProof;
1718     Optional<bool> educationalDiscount;
1722     Optional<QString> businessAddress;
1727     Optional<bool> hideSponsorBilling;
1732     Optional<bool> useEmailAutoFiling;
1740     Optional<ReminderEmailConfig> reminderEmailConfig;
1746     Optional<Timestamp> emailAddressLastConfirmed;
1752     Optional<Timestamp> passwordUpdated;
1754     Optional<bool> salesforcePushEnabled;
1759     Optional<bool> shouldLogClientEvent;
1764     Optional<bool> optOutMachineLearning;
1765
1766     virtual void print(QTextStream & strm) const override;
1767
1768     bool operator==(const UserAttributes & other)const
1769 {
1770         return defaultLocationName.isEqual(other.defaultLocationName)
1771             && defaultLatitude.isEqual(other.defaultLatitude)
1772             && defaultLongitude.isEqual(other.defaultLongitude)
1773             && preactivation.isEqual(other.preactivation)
1774             && viewedPromotions.isEqual(other.viewedPromotions)
1775             && incomingEmailAddress.isEqual(other.incomingEmailAddress)
1776             && recentMailedAddresses.isEqual(other.recentMailedAddresses)
1777             && comments.isEqual(other.comments)
1778             && dateAgreedToTermsOfService.isEqual(other.dateAgreedToTermsOfService)
1779             && maxReferrals.isEqual(other.maxReferrals)
1780             && referralCount.isEqual(other.referralCount)
1781             && refererCode.isEqual(other.refererCode)
1782             && sentEmailDate.isEqual(other.sentEmailDate)
1783             && sentEmailCount.isEqual(other.sentEmailCount)
1784             && dailyEmailLimit.isEqual(other.dailyEmailLimit)
1785             && emailOptOutDate.isEqual(other.emailOptOutDate)
1786             && partnerEmailOptInDate.isEqual(other.partnerEmailOptInDate)
1787             && preferredLanguage.isEqual(other.preferredLanguage)
```

```
1788             && preferredCountry.isEqual(other.preferredCountry)
1789             && clipFullPage.isEqual(other.clipFullPage)
1790             && twitterUserName.isEqual(other.twitterUserName)
1791             && twitterId.isEqual(other.twitterId)
1792             && groupName.isEqual(other.groupName)
1793             && recognitionLanguage.isEqual(other.recognitionLanguage)
1794             && referralProof.isEqual(other.referralProof)
1795             && educationalDiscount.isEqual(other.educationalDiscount)
1796             && businessAddress.isEqual(other.businessAddress)
1797             && hideSponsorBilling.isEqual(other.hideSponsorBilling)
1798             && useEmailAutoFiling.isEqual(other.useEmailAutoFiling)
1799             && reminderEmailConfig.isEqual(other.reminderEmailConfig)
1800             && emailAddressLastConfirmed.isEqual(other.emailAddressLastConfirmed)
1801             && passwordUpdated.isEqual(other.passwordUpdated)
1802             && salesforcePushEnabled.isEqual(other.salesforcePushEnabled)
1803             && shouldLogClientEvent.isEqual(other.shouldLogClientEvent)
1804             && optOutMachineLearning.isEqual(other.optOutMachineLearning)
1805         ;
1806     }
1807
1808     bool operator!=(const UserAttributes & other)const
1809 {
1810         return !(*this == other);
1811     }
1812
1813     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1814     Q_PROPERTY(Optional<QString> defaultLocationName MEMBER defaultLocationName)
1815     Q_PROPERTY(Optional<double> defaultLatitude MEMBER defaultLatitude)
1816     Q_PROPERTY(Optional<double> defaultLongitude MEMBER defaultLongitude)
1817     Q_PROPERTY(Optional<bool> preactivation MEMBER preactivation)
1818     Q_PROPERTY(Optional<QStringList> viewedPromotions MEMBER viewedPromotions)
1819     Q_PROPERTY(Optional<QString> incomingEmailAddress MEMBER incomingEmailAddress)
1820     Q_PROPERTY(Optional<QStringList> recentMailedAddresses MEMBER recentMailedAddresses)
1821     Q_PROPERTY(Optional<QString> comments MEMBER comments)
1822     Q_PROPERTY(Optional<Timestamp> dateAgreedToTermsOfService MEMBER dateAgreedToTermsOfService)
1823     Q_PROPERTY(Optional<qint32> maxReferrals MEMBER maxReferrals)
1824     Q_PROPERTY(Optional<qint32> referralCount MEMBER referralCount)
1825     Q_PROPERTY(Optional<QString> refererCode MEMBER refererCode)
1826     Q_PROPERTY(Optional<Timestamp> sentEmailDate MEMBER sentEmailDate)
1827     Q_PROPERTY(Optional<qint32> sentEmailCount MEMBER sentEmailCount)
1828     Q_PROPERTY(Optional<qint32> dailyEmailLimit MEMBER dailyEmailLimit)
1829     Q_PROPERTY(Optional<Timestamp> emailOptOutDate MEMBER emailOptOutDate)
1830     Q_PROPERTY(Optional<Timestamp> partnerEmailOptInDate MEMBER partnerEmailOptInDate)
1831     Q_PROPERTY(Optional<QString> preferredLanguage MEMBER preferredLanguage)
1832     Q_PROPERTY(Optional<QString> preferredCountry MEMBER preferredCountry)
1833     Q_PROPERTY(Optional<bool> clipFullPage MEMBER clipFullPage)
1834     Q_PROPERTY(Optional<QString> twitterUserName MEMBER twitterUserName)
1835     Q_PROPERTY(Optional<QString> twitterId MEMBER twitterId)
1836     Q_PROPERTY(Optional<QString> groupName MEMBER groupName)
1837     Q_PROPERTY(Optional<QString> recognitionLanguage MEMBER recognitionLanguage)
1838     Q_PROPERTY(Optional<QString> referralProof MEMBER referralProof)
1839     Q_PROPERTY(Optional<bool> educationalDiscount MEMBER educationalDiscount)
1840     Q_PROPERTY(Optional<QString> businessAddress MEMBER businessAddress)
1841     Q_PROPERTY(Optional<bool> hideSponsorBilling MEMBER hideSponsorBilling)
1842     Q_PROPERTY(Optional<bool> useEmailAutoFiling MEMBER useEmailAutoFiling)
1843     Q_PROPERTY(Optional<ReminderEmailConfig> reminderEmailConfig MEMBER reminderEmailConfig)
1844     Q_PROPERTY(Optional<Timestamp> emailAddressLastConfirmed MEMBER emailAddressLastConfirmed)
1845     Q_PROPERTY(Optional<Timestamp> passwordUpdated MEMBER passwordUpdated)
1846     Q_PROPERTY(Optional<bool> salesforcePushEnabled MEMBER salesforcePushEnabled)
1847     Q_PROPERTY(Optional<bool> shouldLogClientEvent MEMBER shouldLogClientEvent)
1848     Q_PROPERTY(Optional<bool> optOutMachineLearning MEMBER optOutMachineLearning)
1849 };
1850
1856 struct QEVERCLOUD_EXPORT BusinessUserAttributes:  public Printable
1857 {
1858 private:
1859     Q_GADGET
1860 public:
1864     EverCloudLocalData localData;
1865
1869     Optional<QString> title;
1873     Optional<QString> location;
1877     Optional<QString> department;
1881     Optional<QString> mobilePhone;
1886     Optional<QString> linkedInProfileUrl;
1890     Optional<QString> workPhone;
1894     Optional<Timestamp> companyStartDate;
1895
1896     virtual void print(QTextStream & strm) const override;
1897
1898     bool operator==(const BusinessUserAttributes & other)const
1899 {
1900         return title.isEqual(other.title)
1901             && location.isEqual(other.location)
1902             && department.isEqual(other.department)
1903             && mobilePhone.isEqual(other.mobilePhone)
1904             && linkedInProfileUrl.isEqual(other.linkedInProfileUrl)
```

```
1905             && workPhone.isEqual(other.workPhone)
1906             && companyStartDate.isEqual(other.companyStartDate)
1907         ;
1908     }
1909 
1910     bool operator!=(const BusinessUserAttributes & other)const
1911 {
1912         return !(*this == other);
1913     }
1914 
1915     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
1916     Q_PROPERTY(Optional<QString> title MEMBER title)
1917     Q_PROPERTY(Optional<QString> location MEMBER location)
1918     Q_PROPERTY(Optional<QString> department MEMBER department)
1919     Q_PROPERTY(Optional<QString> mobilePhone MEMBER mobilePhone)
1920     Q_PROPERTY(Optional<QString> linkedInProfileUrl MEMBER linkedInProfileUrl)
1921     Q_PROPERTY(Optional<QString> workPhone MEMBER workPhone)
1922     Q_PROPERTY(Optional<Timestamp> companyStartDate MEMBER companyStartDate)
1923 };
1924 
1929 struct QEVERCLOUD_EXPORT Accounting:  public Printable
1930 {
1931 private:
1932     Q_GADGET
1933 public:
1937     EverCloudLocalData localData;
1938 
1945     Optional<Timestamp> uploadLimitEnd;
1951     Optional<qint64> uploadLimitNextMonth;
1956     Optional<PremiumOrderStatus> premiumServiceStatus;
1961     Optional<QString> premiumOrderNumber;
1966     Optional<QString> premiumCommerceService;
1972     Optional<Timestamp> premiumServiceStart;
1977     Optional<QString> premiumServiceSKU;
1982     Optional<Timestamp> lastSuccessfulCharge;
1987     Optional<Timestamp> lastFailedCharge;
1991     Optional<QString> lastFailedChargeReason;
1996     Optional<Timestamp> nextPaymentDue;
2001     Optional<Timestamp> premiumLockUntil;
2005     Optional<Timestamp> updated;
2010     Optional<QString> premiumSubscriptionNumber;
2014     Optional<Timestamp> lastRequestedCharge;
2018     Optional<QString> currency;
2022     Optional<qint32> unitPrice;
2026     Optional<qint32> businessId;
2030     Optional<QString> businessName;
2034     Optional<BusinessUserRole> businessRole;
2039     Optional<qint32> unitDiscount;
2044     Optional<Timestamp> nextChargeDate;
2046     Optional<qint32> availablePoints;
2047 
2048     virtual void print(QTextStream & strm) const override;
2049 
2050     bool operator==(const Accounting & other)const
2051 {
2052         return uploadLimitEnd.isEqual(other.uploadLimitEnd)
2053             && uploadLimitNextMonth.isEqual(other.uploadLimitNextMonth)
2054             && premiumServiceStatus.isEqual(other.premiumServiceStatus)
2055             && premiumOrderNumber.isEqual(other.premiumOrderNumber)
2056             && premiumCommerceService.isEqual(other.premiumCommerceService)
2057             && premiumServiceStart.isEqual(other.premiumServiceStart)
2058             && premiumServiceSKU.isEqual(other.premiumServiceSKU)
2059             && lastSuccessfulCharge.isEqual(other.lastSuccessfulCharge)
2060             && lastFailedCharge.isEqual(other.lastFailedCharge)
2061             && lastFailedChargeReason.isEqual(other.lastFailedChargeReason)
2062             && nextPaymentDue.isEqual(other.nextPaymentDue)
2063             && premiumLockUntil.isEqual(other.premiumLockUntil)
2064             && updated.isEqual(other.updated)
2065             && premiumSubscriptionNumber.isEqual(other.premiumSubscriptionNumber)
2066             && lastRequestedCharge.isEqual(other.lastRequestedCharge)
2067             && currency.isEqual(other.currency)
2068             && unitPrice.isEqual(other.unitPrice)
2069             && businessId.isEqual(other.businessId)
2070             && businessName.isEqual(other.businessName)
2071             && businessRole.isEqual(other.businessRole)
2072             && unitDiscount.isEqual(other.unitDiscount)
2073             && nextChargeDate.isEqual(other.nextChargeDate)
2074             && availablePoints.isEqual(other.availablePoints)
2075         ;
2076     }
2077 
2078     bool operator!=(const Accounting & other)const
2079 {
2080         return !(*this == other);
2081     }
2082 
2083     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
```

```
2084     Q_PROPERTY(Optional<Timestamp> uploadLimitEnd MEMBER uploadLimitEnd)
2085     Q_PROPERTY(Optional<qint64> uploadLimitNextMonth MEMBER uploadLimitNextMonth)
2086     Q_PROPERTY(Optional<PremiumOrderStatus> premiumServiceStatus MEMBER premiumServiceStatus)
2087     Q_PROPERTY(Optional<QString> premiumOrderNumber MEMBER premiumOrderNumber)
2088     Q_PROPERTY(Optional<QString> premiumCommerceService MEMBER premiumCommerceService)
2089     Q_PROPERTY(Optional<Timestamp> premiumServiceStart MEMBER premiumServiceStart)
2090     Q_PROPERTY(Optional<QString> premiumServiceSKU MEMBER premiumServiceSKU)
2091     Q_PROPERTY(Optional<Timestamp> lastSuccessfulCharge MEMBER lastSuccessfulCharge)
2092     Q_PROPERTY(Optional<Timestamp> lastFailedCharge MEMBER lastFailedCharge)
2093     Q_PROPERTY(Optional<QString> lastFailedChargeReason MEMBER lastFailedChargeReason)
2094     Q_PROPERTY(Optional<Timestamp> nextPaymentDue MEMBER nextPaymentDue)
2095     Q_PROPERTY(Optional<Timestamp> premiumLockUntil MEMBER premiumLockUntil)
2096     Q_PROPERTY(Optional<Timestamp> updated MEMBER updated)
2097     Q_PROPERTY(Optional<QString> premiumSubscriptionNumber MEMBER premiumSubscriptionNumber)
2098     Q_PROPERTY(Optional<Timestamp> lastRequestedCharge MEMBER lastRequestedCharge)
2099     Q_PROPERTY(Optional<QString> currency MEMBER currency)
2100     Q_PROPERTY(Optional<qint32> unitPrice MEMBER unitPrice)
2101     Q_PROPERTY(Optional<qint32> businessId MEMBER businessId)
2102     Q_PROPERTY(Optional<QString> businessName MEMBER businessName)
2103     Q_PROPERTY(Optional<BusinessUserRole> businessRole MEMBER businessRole)
2104     Q_PROPERTY(Optional<qint32> unitDiscount MEMBER unitDiscount)
2105     Q_PROPERTY(Optional<Timestamp> nextChargeDate MEMBER nextChargeDate)
2106     Q_PROPERTY(Optional<qint32> availablePoints MEMBER availablePoints)
2107 };
2108
2114 struct QEVERCLOUD_EXPORT BusinessUserInfo:  public Printable
2115 {
2116 private:
2117     Q_GADGET
2118 public:
2122     EverCloudLocalData localData;
2123
2130     Optional<qint32> businessId;
2132     Optional<QString> businessName;
2137     Optional<BusinessUserRole> role;
2145     Optional<QString> email;
2149     Optional<Timestamp> updated;
2150
2151     virtual void print(QTextStream & strm) const override;
2152
2153     bool operator==(const BusinessUserInfo & other)const
2154 {
2155         return businessId.isEqual(other.businessId)
2156             && businessName.isEqual(other.businessName)
2157             && role.isEqual(other.role)
2158             && email.isEqual(other.email)
2159             && updated.isEqual(other.updated)
2160         ;
2161     }
2162
2163     bool operator!=(const BusinessUserInfo & other)const
2164 {
2165         return !(*this == other);
2166     }
2167
2168     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2169     Q_PROPERTY(Optional<qint32> businessId MEMBER businessId)
2170     Q_PROPERTY(Optional<QString> businessName MEMBER businessName)
2171     Q_PROPERTY(Optional<BusinessUserRole> role MEMBER role)
2172     Q_PROPERTY(Optional<QString> email MEMBER email)
2173     Q_PROPERTY(Optional<Timestamp> updated MEMBER updated)
2174 };
2175
2179 struct QEVERCLOUD_EXPORT AccountLimits:  public Printable
2180 {
2181 private:
2182     Q_GADGET
2183 public:
2187     EverCloudLocalData localData;
2188
2194     Optional<qint32> userMailLimitDaily;
2201     Optional<qint64> noteSizeMax;
2205     Optional<qint64> resourceSizeMax;
2209     Optional<qint32> userLinkedNotebookMax;
2218     Optional<qint64> uploadLimit;
2222     Optional<qint32> userNoteCountMax;
2226     Optional<qint32> userNotebookCountMax;
2230     Optional<qint32> userTagCountMax;
2234     Optional<qint32> noteTagCountMax;
2238     Optional<qint32> userSavedSearchesMax;
2242     Optional<qint32> noteResourceCountMax;
2243
2244     virtual void print(QTextStream & strm) const override;
2245
2246     bool operator==(const AccountLimits & other)const
2247 {
2248         return userMailLimitDaily.isEqual(other.userMailLimitDaily)
```

```
2249             && noteSizeMax.isEqual(other.noteSizeMax)
2250             && resourceSizeMax.isEqual(other.resourceSizeMax)
2251             && userLinkedNotebookMax.isEqual(other.userLinkedNotebookMax)
2252             && uploadLimit.isEqual(other.uploadLimit)
2253             && userNoteCountMax.isEqual(other.userNoteCountMax)
2254             && userNotebookCountMax.isEqual(other.userNotebookCountMax)
2255             && userTagCountMax.isEqual(other.userTagCountMax)
2256             && noteTagCountMax.isEqual(other.noteTagCountMax)
2257             && userSavedSearchesMax.isEqual(other.userSavedSearchesMax)
2258             && noteResourceCountMax.isEqual(other.noteResourceCountMax)
2259         ;
2260     }
2261
2262     bool operator!=(const AccountLimits & other)const
2263 {
2264         return !(*this == other);
2265     }
2266
2267     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2268     Q_PROPERTY(Optional<qint32> userMailLimitDaily MEMBER userMailLimitDaily)
2269     Q_PROPERTY(Optional<qint64> noteSizeMax MEMBER noteSizeMax)
2270     Q_PROPERTY(Optional<qint64> resourceSizeMax MEMBER resourceSizeMax)
2271     Q_PROPERTY(Optional<qint32> userLinkedNotebookMax MEMBER userLinkedNotebookMax)
2272     Q_PROPERTY(Optional<qint64> uploadLimit MEMBER uploadLimit)
2273     Q_PROPERTY(Optional<qint32> userNoteCountMax MEMBER userNoteCountMax)
2274     Q_PROPERTY(Optional<qint32> userNotebookCountMax MEMBER userNotebookCountMax)
2275     Q_PROPERTY(Optional<qint32> userTagCountMax MEMBER userTagCountMax)
2276     Q_PROPERTY(Optional<qint32> noteTagCountMax MEMBER noteTagCountMax)
2277     Q_PROPERTY(Optional<qint32> userSavedSearchesMax MEMBER userSavedSearchesMax)
2278     Q_PROPERTY(Optional<qint32> noteResourceCountMax MEMBER noteResourceCountMax)
2279 };
2280
2284 struct QEVERCLOUD_EXPORT User:  public Printable
2285 {
2286 private:
2287     Q_GADGET
2288 public:
2292     EverCloudLocalData localData;
2293
2298     Optional<UserID> id;
2309     Optional<QString> username;
2319     Optional<QString> email;
2331     Optional<QString> name;
2343     Optional<QString> timezone;
2345     Optional<PrivilegeLevel> privilege;
2350     Optional<ServiceLevel> serviceLevel;
2355     Optional<Timestamp> created;
2360     Optional<Timestamp> updated;
2366     Optional<Timestamp> deleted;
2371     Optional<bool> active;
2375     Optional<QString> shardId;
2380     Optional<UserAttributes> attributes;
2384     Optional<Accounting> accounting;
2390     Optional<BusinessUserInfo> businessUserInfo;
2397     Optional<QString> photoUrl;
2403     Optional<Timestamp> photoLastUpdated;
2407     Optional<AccountLimits> accountLimits;
2408
2409     virtual void print(QTextStream & strm) const override;
2410
2411     bool operator==(const User & other)const
2412 {
2413         return id.isEqual(other.id)
2414             && username.isEqual(other.username)
2415             && email.isEqual(other.email)
2416             && name.isEqual(other.name)
2417             && timezone.isEqual(other.timezone)
2418             && privilege.isEqual(other.privilege)
2419             && serviceLevel.isEqual(other.serviceLevel)
2420             && created.isEqual(other.created)
2421             && updated.isEqual(other.updated)
2422             && deleted.isEqual(other.deleted)
2423             && active.isEqual(other.active)
2424             && shardId.isEqual(other.shardId)
2425             && attributes.isEqual(other.attributes)
2426             && accounting.isEqual(other.accounting)
2427             && businessUserInfo.isEqual(other.businessUserInfo)
2428             && photoUrl.isEqual(other.photoUrl)
2429             && photoLastUpdated.isEqual(other.photoLastUpdated)
2430             && accountLimits.isEqual(other.accountLimits)
2431         ;
2432     }
2433
2434     bool operator!=(const User & other)const
2435 {
2436         return !(*this == other);
2437     }
```

```
2438
2439     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2440     Q_PROPERTY(Optional<UserID> id MEMBER id)
2441     Q_PROPERTY(Optional<QString> username MEMBER username)
2442     Q_PROPERTY(Optional<QString> email MEMBER email)
2443     Q_PROPERTY(Optional<QString> name MEMBER name)
2444     Q_PROPERTY(Optional<QString> timezone MEMBER timezone)
2445     Q_PROPERTY(Optional<PrivilegeLevel> privilege MEMBER privilege)
2446     Q_PROPERTY(Optional<ServiceLevel> serviceLevel MEMBER serviceLevel)
2447     Q_PROPERTY(Optional<Timestamp> created MEMBER created)
2448     Q_PROPERTY(Optional<Timestamp> updated MEMBER updated)
2449     Q_PROPERTY(Optional<Timestamp> deleted MEMBER deleted)
2450     Q_PROPERTY(Optional<bool> active MEMBER active)
2451     Q_PROPERTY(Optional<QString> shardId MEMBER shardId)
2452     Q_PROPERTY(Optional<UserAttributes> attributes MEMBER attributes)
2453     Q_PROPERTY(Optional<Accounting> accounting MEMBER accounting)
2454     Q_PROPERTY(Optional<BusinessUserInfo> businessUserInfo MEMBER businessUserInfo)
2455     Q_PROPERTY(Optional<QString> photoUrl MEMBER photoUrl)
2456     Q_PROPERTY(Optional<Timestamp> photoLastUpdated MEMBER photoLastUpdated)
2457     Q_PROPERTY(Optional<AccountLimits> accountLimits MEMBER accountLimits)
2458 };
2459
2465 struct QEVERCLOUD_EXPORT Contact:  public Printable
2466 {
2467 private:
2468     Q_GADGET
2469 public:
2473     EverCloudLocalData localData;
2474
2479     Optional<QString> name;
2483     Optional<QString> id;
2487     Optional<ContactType> type;
2492     Optional<QString> photoUrl;
2498     Optional<Timestamp> photoLastUpdated;
2506     Optional<QByteArray> messagingPermit;
2513     Optional<Timestamp> messagingPermitExpires;
2514
2515     virtual void print(QTextStream & strm) const override;
2516
2517     bool operator==(const Contact & other)const
2518 {
2519         return name.isEqual(other.name)
2520             && id.isEqual(other.id)
2521             && type.isEqual(other.type)
2522             && photoUrl.isEqual(other.photoUrl)
2523             && photoLastUpdated.isEqual(other.photoLastUpdated)
2524             && messagingPermit.isEqual(other.messagingPermit)
2525             && messagingPermitExpires.isEqual(other.messagingPermitExpires)
2526         ;
2527     }
2528
2529     bool operator!=(const Contact & other)const
2530 {
2531         return !(*this == other);
2532     }
2533
2534     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2535     Q_PROPERTY(Optional<QString> name MEMBER name)
2536     Q_PROPERTY(Optional<QString> id MEMBER id)
2537     Q_PROPERTY(Optional<ContactType> type MEMBER type)
2538     Q_PROPERTY(Optional<QString> photoUrl MEMBER photoUrl)
2539     Q_PROPERTY(Optional<Timestamp> photoLastUpdated MEMBER photoLastUpdated)
2540     Q_PROPERTY(Optional<QByteArray> messagingPermit MEMBER messagingPermit)
2541     Q_PROPERTY(Optional<Timestamp> messagingPermitExpires MEMBER messagingPermitExpires)
2542 };
2543
2549 struct QEVERCLOUD_EXPORT Identity:  public Printable
2550 {
2551 private:
2552     Q_GADGET
2553 public:
2557     EverCloudLocalData localData;
2558
2562     IdentityID id = 0;
2564     Optional<Contact> contact;
2570     Optional<UserID> userId;
2578     Optional<bool> deactivated;
2583     Optional<bool> sameBusiness;
2587     Optional<bool> blocked;
2604     Optional<bool> userConnected;
2609     Optional<MessageEventID> eventId;
2610
2611     virtual void print(QTextStream & strm) const override;
2612
2613     bool operator==(const Identity & other)const
2614 {
2615         return (id == other.id)
```

```
2616             && contact.isEqual(other.contact)
2617             && userId.isEqual(other.userId)
2618             && deactivated.isEqual(other.deactivated)
2619             && sameBusiness.isEqual(other.sameBusiness)
2620             && blocked.isEqual(other.blocked)
2621             && userConnected.isEqual(other.userConnected)
2622             && eventId.isEqual(other.eventId)
2623         ;
2624     }
2625
2626     bool operator!=(const Identity & other)const
2627 {
2628         return !(*this == other);
2629     }
2630
2631     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2632     Q_PROPERTY(IdentityID id MEMBER id)
2633     Q_PROPERTY(Optional<Contact> contact MEMBER contact)
2634     Q_PROPERTY(Optional<UserID> userId MEMBER userId)
2635     Q_PROPERTY(Optional<bool> deactivated MEMBER deactivated)
2636     Q_PROPERTY(Optional<bool> sameBusiness MEMBER sameBusiness)
2637     Q_PROPERTY(Optional<bool> blocked MEMBER blocked)
2638     Q_PROPERTY(Optional<bool> userConnected MEMBER userConnected)
2639     Q_PROPERTY(Optional<MessageEventID> eventId MEMBER eventId)
2640 };
2641
2646 struct QEVERCLOUD_EXPORT Tag:  public Printable
2647 {
2648 private:
2649     Q_GADGET
2650 public:
2654     EverCloudLocalData localData;
2655
2664     Optional<Guid> guid;
2677     Optional<QString> name;
2689     Optional<Guid> parentGuid;
2696     Optional<qint32> updateSequenceNum;
2697
2698     virtual void print(QTextStream & strm) const override;
2699
2700     bool operator==(const Tag & other)const
2701 {
2702         return guid.isEqual(other.guid)
2703             && name.isEqual(other.name)
2704             && parentGuid.isEqual(other.parentGuid)
2705             && updateSequenceNum.isEqual(other.updateSequenceNum)
2706         ;
2707     }
2708
2709     bool operator!=(const Tag & other)const
2710 {
2711         return !(*this == other);
2712     }
2713
2714     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2715     Q_PROPERTY(Optional<Guid> guid MEMBER guid)
2716     Q_PROPERTY(Optional<QString> name MEMBER name)
2717     Q_PROPERTY(Optional<Guid> parentGuid MEMBER parentGuid)
2718     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
2719 };
2720
2740 struct QEVERCLOUD_EXPORT LazyMap:  public Printable
2741 {
2742 private:
2743     Q_GADGET
2744 public:
2748     EverCloudLocalData localData;
2749
2754     Optional<QSet<QString>> keysOnly;
2758     Optional<QMap<QString, QString>> fullMap;
2759
2760     virtual void print(QTextStream & strm) const override;
2761
2762     bool operator==(const LazyMap & other)const
2763 {
2764         return keysOnly.isEqual(other.keysOnly)
2765             && fullMap.isEqual(other.fullMap)
2766         ;
2767     }
2768
2769     bool operator!=(const LazyMap & other)const
2770 {
2771         return !(*this == other);
2772     }
2773
2774     using FullMap = QMap<QString, QString>;
2775
```

```
2776     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2777     Q_PROPERTY(Optional<QSet<QString» keysOnly MEMBER keysOnly)
2778     Q_PROPERTY(Optional<FullMap> fullMap MEMBER fullMap)
2779 };
2780
2784 struct QEVERCLOUD_EXPORT ResourceAttributes:  public Printable
2785 {
2786 private:
2787     Q_GADGET
2788 public:
2792     EverCloudLocalData localData;
2793
2799     Optional<QString> sourceURL;
2804     Optional<Timestamp> timestamp;
2808     Optional<double> latitude;
2812     Optional<double> longitude;
2816     Optional<double> altitude;
2823     Optional<QString> cameraMake;
2830     Optional<QString> cameraModel;
2836     Optional<bool> clientWillIndex;
2841     Optional<QString> recoType;
2847     Optional<QString> fileName;
2852     Optional<bool> attachment;
2869     Optional<LazyMap> applicationData;
2870
2871     virtual void print(QTextStream & strm) const override;
2872
2873     bool operator==(const ResourceAttributes & other)const
2874 {
2875         return sourceURL.isEqual(other.sourceURL)
2876             && timestamp.isEqual(other.timestamp)
2877             && latitude.isEqual(other.latitude)
2878             && longitude.isEqual(other.longitude)
2879             && altitude.isEqual(other.altitude)
2880             && cameraMake.isEqual(other.cameraMake)
2881             && cameraModel.isEqual(other.cameraModel)
2882             && clientWillIndex.isEqual(other.clientWillIndex)
2883             && recoType.isEqual(other.recoType)
2884             && fileName.isEqual(other.fileName)
2885             && attachment.isEqual(other.attachment)
2886             && applicationData.isEqual(other.applicationData)
2887         ;
2888     }
2889
2890     bool operator!=(const ResourceAttributes & other)const
2891 {
2892         return !(*this == other);
2893     }
2894
2895     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
2896     Q_PROPERTY(Optional<QString> sourceURL MEMBER sourceURL)
2897     Q_PROPERTY(Optional<Timestamp> timestamp MEMBER timestamp)
2898     Q_PROPERTY(Optional<double> latitude MEMBER latitude)
2899     Q_PROPERTY(Optional<double> longitude MEMBER longitude)
2900     Q_PROPERTY(Optional<double> altitude MEMBER altitude)
2901     Q_PROPERTY(Optional<QString> cameraMake MEMBER cameraMake)
2902     Q_PROPERTY(Optional<QString> cameraModel MEMBER cameraModel)
2903     Q_PROPERTY(Optional<bool> clientWillIndex MEMBER clientWillIndex)
2904     Q_PROPERTY(Optional<QString> recoType MEMBER recoType)
2905     Q_PROPERTY(Optional<QString> fileName MEMBER fileName)
2906     Q_PROPERTY(Optional<bool> attachment MEMBER attachment)
2907     Q_PROPERTY(Optional<LazyMap> applicationData MEMBER applicationData)
2908 };
2909
2914 struct QEVERCLOUD_EXPORT Resource:  public Printable
2915 {
2916 private:
2917     Q_GADGET
2918 public:
2922     EverCloudLocalData localData;
2923
2933     Optional<Guid> guid;
2943     Optional<Guid> noteGuid;
2949     Optional<Data> data;
2957     Optional<QString> mime;
2962     Optional<qint16> width;
2967     Optional<qint16> height;
2971     Optional<qint16> duration;
2975     Optional<bool> active;
2980     Optional<Data> recognition;
2984     Optional<ResourceAttributes> attributes;
2991     Optional<qint32> updateSequenceNum;
2999     Optional<Data> alternateData;
3000
3001     virtual void print(QTextStream & strm) const override;
3002
3003     bool operator==(const Resource & other)const
```

```
3004 {
3005         return guid.isEqual(other.guid)
3006             && noteGuid.isEqual(other.noteGuid)
3007             && data.isEqual(other.data)
3008             && mime.isEqual(other.mime)
3009             && width.isEqual(other.width)
3010             && height.isEqual(other.height)
3011             && duration.isEqual(other.duration)
3012             && active.isEqual(other.active)
3013             && recognition.isEqual(other.recognition)
3014             && attributes.isEqual(other.attributes)
3015             && updateSequenceNum.isEqual(other.updateSequenceNum)
3016             && alternateData.isEqual(other.alternateData)
3017         ;
3018     }
3019
3020     bool operator!=(const Resource & other)const
3021 {
3022         return !(*this == other);
3023     }
3024
3025     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3026     Q_PROPERTY(Optional<Guid> guid MEMBER guid)
3027     Q_PROPERTY(Optional<Guid> noteGuid MEMBER noteGuid)
3028     Q_PROPERTY(Optional<Data> data MEMBER data)
3029     Q_PROPERTY(Optional<QString> mime MEMBER mime)
3030     Q_PROPERTY(Optional<qint16> width MEMBER width)
3031     Q_PROPERTY(Optional<qint16> height MEMBER height)
3032     Q_PROPERTY(Optional<qint16> duration MEMBER duration)
3033     Q_PROPERTY(Optional<bool> active MEMBER active)
3034     Q_PROPERTY(Optional<Data> recognition MEMBER recognition)
3035     Q_PROPERTY(Optional<ResourceAttributes> attributes MEMBER attributes)
3036     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
3037     Q_PROPERTY(Optional<Data> alternateData MEMBER alternateData)
3038 };
3039
3043 struct QEVERCLOUD_EXPORT NoteAttributes:  public Printable
3044 {
3045 private:
3046     Q_GADGET
3047 public:
3051     EverCloudLocalData localData;
3052
3056     Optional<Timestamp> subjectDate;
3060     Optional<double> latitude;
3064     Optional<double> longitude;
3068     Optional<double> altitude;
3074     Optional<QString> author;
3081     Optional<QString> source;
3088     Optional<QString> sourceURL;
3096     Optional<QString> sourceApplication;
3104     Optional<Timestamp> shareDate;
3131     Optional<qint64> reminderOrder;
3138     Optional<Timestamp> reminderDoneTime;
3149     Optional<Timestamp> reminderTime;
3161     Optional<QString> placeName;
3184     Optional<QString> contentClass;
3201     Optional<LazyMap> applicationData;
3213     Optional<QString> lastEditedBy;
3219     Optional<QMap<QString, QString>> classifications;
3223     Optional<UserID> creatorId;
3227     Optional<UserID> lastEditorId;
3236     Optional<bool> sharedWithBusiness;
3245     Optional<Guid> conflictSourceNoteGuid;
3258     Optional<qint32> noteTitleQuality;
3259
3260     virtual void print(QTextStream & strm) const override;
3261
3262     bool operator==(const NoteAttributes & other)const
3263 {
3264         return subjectDate.isEqual(other.subjectDate)
3265             && latitude.isEqual(other.latitude)
3266             && longitude.isEqual(other.longitude)
3267             && altitude.isEqual(other.altitude)
3268             && author.isEqual(other.author)
3269             && source.isEqual(other.source)
3270             && sourceURL.isEqual(other.sourceURL)
3271             && sourceApplication.isEqual(other.sourceApplication)
3272             && shareDate.isEqual(other.shareDate)
3273             && reminderOrder.isEqual(other.reminderOrder)
3274             && reminderDoneTime.isEqual(other.reminderDoneTime)
3275             && reminderTime.isEqual(other.reminderTime)
3276             && placeName.isEqual(other.placeName)
3277             && contentClass.isEqual(other.contentClass)
3278             && applicationData.isEqual(other.applicationData)
3279             && lastEditedBy.isEqual(other.lastEditedBy)
3280             && classifications.isEqual(other.classifications)
```

```
3281             && creatorId.isEqual(other.creatorId)
3282             && lastEditorId.isEqual(other.lastEditorId)
3283             && sharedWithBusiness.isEqual(other.sharedWithBusiness)
3284             && conflictSourceNoteGuid.isEqual(other.conflictSourceNoteGuid)
3285             && noteTitleQuality.isEqual(other.noteTitleQuality)
3286         ;
3287     }
3288
3289     bool operator!=(const NoteAttributes & other)const
3290 {
3291         return !(*this == other);
3292     }
3293
3294     using Classifications = QMap<QString, QString>;
3295
3296     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3297     Q_PROPERTY(Optional<Timestamp> subjectDate MEMBER subjectDate)
3298     Q_PROPERTY(Optional<double> latitude MEMBER latitude)
3299     Q_PROPERTY(Optional<double> longitude MEMBER longitude)
3300     Q_PROPERTY(Optional<double> altitude MEMBER altitude)
3301     Q_PROPERTY(Optional<QString> author MEMBER author)
3302     Q_PROPERTY(Optional<QString> source MEMBER source)
3303     Q_PROPERTY(Optional<QString> sourceURL MEMBER sourceURL)
3304     Q_PROPERTY(Optional<QString> sourceApplication MEMBER sourceApplication)
3305     Q_PROPERTY(Optional<Timestamp> shareDate MEMBER shareDate)
3306     Q_PROPERTY(Optional<qint64> reminderOrder MEMBER reminderOrder)
3307     Q_PROPERTY(Optional<Timestamp> reminderDoneTime MEMBER reminderDoneTime)
3308     Q_PROPERTY(Optional<Timestamp> reminderTime MEMBER reminderTime)
3309     Q_PROPERTY(Optional<QString> placeName MEMBER placeName)
3310     Q_PROPERTY(Optional<QString> contentClass MEMBER contentClass)
3311     Q_PROPERTY(Optional<LazyMap> applicationData MEMBER applicationData)
3312     Q_PROPERTY(Optional<QString> lastEditedBy MEMBER lastEditedBy)
3313     Q_PROPERTY(Optional<Classifications> classifications MEMBER classifications)
3314     Q_PROPERTY(Optional<UserID> creatorId MEMBER creatorId)
3315     Q_PROPERTY(Optional<UserID> lastEditorId MEMBER lastEditorId)
3316     Q_PROPERTY(Optional<bool> sharedWithBusiness MEMBER sharedWithBusiness)
3317     Q_PROPERTY(Optional<Guid> conflictSourceNoteGuid MEMBER conflictSourceNoteGuid)
3318     Q_PROPERTY(Optional<qint32> noteTitleQuality MEMBER noteTitleQuality)
3319 };
3320
3327 struct QEVERCLOUD_EXPORT SharedNote:  public Printable
3328 {
3329 private:
3330     Q_GADGET
3331 public:
3335     EverCloudLocalData localData;
3336
3340     Optional<UserID> sharerUserID;
3347     Optional<Identity> recipientIdentity;
3351     Optional<SharedNotePrivilegeLevel> privilege;
3355     Optional<Timestamp> serviceCreated;
3359     Optional<Timestamp> serviceUpdated;
3363     Optional<Timestamp> serviceAssigned;
3364
3365     virtual void print(QTextStream & strm) const override;
3366
3367     bool operator==(const SharedNote & other)const
3368 {
3369         return sharerUserID.isEqual(other.sharerUserID)
3370             && recipientIdentity.isEqual(other.recipientIdentity)
3371             && privilege.isEqual(other.privilege)
3372             && serviceCreated.isEqual(other.serviceCreated)
3373             && serviceUpdated.isEqual(other.serviceUpdated)
3374             && serviceAssigned.isEqual(other.serviceAssigned)
3375         ;
3376     }
3377
3378     bool operator!=(const SharedNote & other)const
3379 {
3380         return !(*this == other);
3381     }
3382
3383     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3384     Q_PROPERTY(Optional<UserID> sharerUserID MEMBER sharerUserID)
3385     Q_PROPERTY(Optional<Identity> recipientIdentity MEMBER recipientIdentity)
3386     Q_PROPERTY(Optional<SharedNotePrivilegeLevel> privilege MEMBER privilege)
3387     Q_PROPERTY(Optional<Timestamp> serviceCreated MEMBER serviceCreated)
3388     Q_PROPERTY(Optional<Timestamp> serviceUpdated MEMBER serviceUpdated)
3389     Q_PROPERTY(Optional<Timestamp> serviceAssigned MEMBER serviceAssigned)
3390 };
3391
3429 struct QEVERCLOUD_EXPORT NoteRestrictions:  public Printable
3430 {
3431 private:
3432     Q_GADGET
3433 public:
3437     EverCloudLocalData localData;
```

```
3438
3442     Optional<bool> noUpdateTitle;
3444     Optional<bool> noUpdateContent;
3448     Optional<bool> noEmail;
3453     Optional<bool> noShare;
3457     Optional<bool> noSharePublicly;
3458
3459     virtual void print(QTextStream & strm) const override;
3460
3461     bool operator==(const NoteRestrictions & other)const
3462 {
3463         return noUpdateTitle.isEqual(other.noUpdateTitle)
3464             && noUpdateContent.isEqual(other.noUpdateContent)
3465             && noEmail.isEqual(other.noEmail)
3466             && noShare.isEqual(other.noShare)
3467             && noSharePublicly.isEqual(other.noSharePublicly)
3468         ;
3469     }
3470
3471     bool operator!=(const NoteRestrictions & other)const
3472 {
3473         return !(*this == other);
3474     }
3475
3476     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3477     Q_PROPERTY(Optional<bool> noUpdateTitle MEMBER noUpdateTitle)
3478     Q_PROPERTY(Optional<bool> noUpdateContent MEMBER noUpdateContent)
3479     Q_PROPERTY(Optional<bool> noEmail MEMBER noEmail)
3480     Q_PROPERTY(Optional<bool> noShare MEMBER noShare)
3481     Q_PROPERTY(Optional<bool> noSharePublicly MEMBER noSharePublicly)
3482 };
3483
3492 struct QEVERCLOUD_EXPORT NoteLimits:  public Printable
3493 {
3494 private:
3495     Q_GADGET
3496 public:
3500     EverCloudLocalData localData;
3501
3503     Optional<qint32> noteResourceCountMax;
3505     Optional<qint64> uploadLimit;
3507     Optional<qint64> resourceSizeMax;
3509     Optional<qint64> noteSizeMax;
3511     Optional<qint64> uploaded;
3512
3513     virtual void print(QTextStream & strm) const override;
3514
3515     bool operator==(const NoteLimits & other)const
3516 {
3517         return noteResourceCountMax.isEqual(other.noteResourceCountMax)
3518             && uploadLimit.isEqual(other.uploadLimit)
3519             && resourceSizeMax.isEqual(other.resourceSizeMax)
3520             && noteSizeMax.isEqual(other.noteSizeMax)
3521             && uploaded.isEqual(other.uploaded)
3522         ;
3523     }
3524
3525     bool operator!=(const NoteLimits & other)const
3526 {
3527         return !(*this == other);
3528     }
3529
3530     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3531     Q_PROPERTY(Optional<qint32> noteResourceCountMax MEMBER noteResourceCountMax)
3532     Q_PROPERTY(Optional<qint64> uploadLimit MEMBER uploadLimit)
3533     Q_PROPERTY(Optional<qint64> resourceSizeMax MEMBER resourceSizeMax)
3534     Q_PROPERTY(Optional<qint64> noteSizeMax MEMBER noteSizeMax)
3535     Q_PROPERTY(Optional<qint64> uploaded MEMBER uploaded)
3536 };
3537
3542 struct QEVERCLOUD_EXPORT Note:  public Printable
3543 {
3544 private:
3545     Q_GADGET
3546 public:
3550     EverCloudLocalData localData;
3551
3560     Optional<Guid> guid;
3568     Optional<QString> title;
3579     Optional<QString> content;
3587     Optional<QByteArray> contentHash;
3593     Optional<qint32> contentLength;
3603     Optional<Timestamp> created;
3610     Optional<Timestamp> updated;
3618     Optional<Timestamp> deleted;
3623     Optional<bool> active;
3630     Optional<qint32> updateSequenceNum;
```

```
3640     Optional<QString> notebookGuid;
3651     Optional<QList<Guid>> tagGuids;
3661     Optional<QList<Resource>> resources;
3667     Optional<NoteAttributes> attributes;
3675     Optional<QStringList> tagNames;
3682     Optional<QList<SharedNote>> sharedNotes;
3691     Optional<NoteRestrictions> restrictions;
3693     Optional<NoteLimits> limits;
3694
3695     virtual void print(QTextStream & strm) const override;
3696
3697     bool operator==(const Note & other)const
3698 {
3699         return guid.isEqual(other.guid)
3700             && title.isEqual(other.title)
3701             && content.isEqual(other.content)
3702             && contentHash.isEqual(other.contentHash)
3703             && contentLength.isEqual(other.contentLength)
3704             && created.isEqual(other.created)
3705             && updated.isEqual(other.updated)
3706             && deleted.isEqual(other.deleted)
3707             && active.isEqual(other.active)
3708             && updateSequenceNum.isEqual(other.updateSequenceNum)
3709             && notebookGuid.isEqual(other.notebookGuid)
3710             && tagGuids.isEqual(other.tagGuids)
3711             && resources.isEqual(other.resources)
3712             && attributes.isEqual(other.attributes)
3713             && tagNames.isEqual(other.tagNames)
3714             && sharedNotes.isEqual(other.sharedNotes)
3715             && restrictions.isEqual(other.restrictions)
3716             && limits.isEqual(other.limits)
3717         ;
3718     }
3719
3720     bool operator!=(const Note & other)const
3721 {
3722         return !(*this == other);
3723     }
3724
3725     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3726     Q_PROPERTY(Optional<Guid> guid MEMBER guid)
3727     Q_PROPERTY(Optional<QString> title MEMBER title)
3728     Q_PROPERTY(Optional<QString> content MEMBER content)
3729     Q_PROPERTY(Optional<QByteArray> contentHash MEMBER contentHash)
3730     Q_PROPERTY(Optional<qint32> contentLength MEMBER contentLength)
3731     Q_PROPERTY(Optional<Timestamp> created MEMBER created)
3732     Q_PROPERTY(Optional<Timestamp> updated MEMBER updated)
3733     Q_PROPERTY(Optional<Timestamp> deleted MEMBER deleted)
3734     Q_PROPERTY(Optional<bool> active MEMBER active)
3735     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
3736     Q_PROPERTY(Optional<QString> notebookGuid MEMBER notebookGuid)
3737     Q_PROPERTY(Optional<QList<Guid» tagGuids MEMBER tagGuids)
3738     Q_PROPERTY(Optional<QList<Resource» resources MEMBER resources)
3739     Q_PROPERTY(Optional<NoteAttributes> attributes MEMBER attributes)
3740     Q_PROPERTY(Optional<QStringList> tagNames MEMBER tagNames)
3741     Q_PROPERTY(Optional<QList<SharedNote» sharedNotes MEMBER sharedNotes)
3742     Q_PROPERTY(Optional<NoteRestrictions> restrictions MEMBER restrictions)
3743     Q_PROPERTY(Optional<NoteLimits> limits MEMBER limits)
3744 };
3745
3751 struct QEVERCLOUD_EXPORT Publishing:  public Printable
3752 {
3753 private:
3754     Q_GADGET
3755 public:
3759     EverCloudLocalData localData;
3760
3772     Optional<QString> uri;
3777     Optional<NoteSortOrder> order;
3783     Optional<bool> ascending;
3794     Optional<QString> publicDescription;
3795
3796     virtual void print(QTextStream & strm) const override;
3797
3798     bool operator==(const Publishing & other)const
3799 {
3800         return uri.isEqual(other.uri)
3801             && order.isEqual(other.order)
3802             && ascending.isEqual(other.ascending)
3803             && publicDescription.isEqual(other.publicDescription)
3804         ;
3805     }
3806
3807     bool operator!=(const Publishing & other)const
3808 {
3809         return !(*this == other);
3810     }
```

```
3811
3812     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3813     Q_PROPERTY(Optional<QString> uri MEMBER uri)
3814     Q_PROPERTY(Optional<NoteSortOrder> order MEMBER order)
3815     Q_PROPERTY(Optional<bool> ascending MEMBER ascending)
3816     Q_PROPERTY(Optional<QString> publicDescription MEMBER publicDescription)
3817 };
3818
3826 struct QEVERCLOUD_EXPORT BusinessNotebook:  public Printable
3827 {
3828 private:
3829     Q_GADGET
3830 public:
3834     EverCloudLocalData localData;
3835
3846     Optional<QString> notebookDescription;
3851     Optional<SharedNotebookPrivilegeLevel> privilege;
3856     Optional<bool> recommended;
3857
3858     virtual void print(QTextStream & strm) const override;
3859
3860     bool operator==(const BusinessNotebook & other)const
3861 {
3862         return notebookDescription.isEqual(other.notebookDescription)
3863             && privilege.isEqual(other.privilege)
3864             && recommended.isEqual(other.recommended)
3865         ;
3866     }
3867
3868     bool operator!=(const BusinessNotebook & other)const
3869 {
3870         return !(*this == other);
3871     }
3872
3873     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3874     Q_PROPERTY(Optional<QString> notebookDescription MEMBER notebookDescription)
3875     Q_PROPERTY(Optional<SharedNotebookPrivilegeLevel> privilege MEMBER privilege)
3876     Q_PROPERTY(Optional<bool> recommended MEMBER recommended)
3877 };
3878
3883 struct QEVERCLOUD_EXPORT SavedSearchScope:  public Printable
3884 {
3885 private:
3886     Q_GADGET
3887 public:
3891     EverCloudLocalData localData;
3892
3896     Optional<bool> includeAccount;
3901     Optional<bool> includePersonalLinkedNotebooks;
3907     Optional<bool> includeBusinessLinkedNotebooks;
3908
3909     virtual void print(QTextStream & strm) const override;
3910
3911     bool operator==(const SavedSearchScope & other)const
3912 {
3913         return includeAccount.isEqual(other.includeAccount)
3914             && includePersonalLinkedNotebooks.isEqual(other.includePersonalLinkedNotebooks)
3915             && includeBusinessLinkedNotebooks.isEqual(other.includeBusinessLinkedNotebooks)
3916         ;
3917     }
3918
3919     bool operator!=(const SavedSearchScope & other)const
3920 {
3921         return !(*this == other);
3922     }
3923
3924     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
3925     Q_PROPERTY(Optional<bool> includeAccount MEMBER includeAccount)
3926     Q_PROPERTY(Optional<bool> includePersonalLinkedNotebooks MEMBER includePersonalLinkedNotebooks)
3927     Q_PROPERTY(Optional<bool> includeBusinessLinkedNotebooks MEMBER includeBusinessLinkedNotebooks)
3928 };
3929
3933 struct QEVERCLOUD_EXPORT SavedSearch:  public Printable
3934 {
3935 private:
3936     Q_GADGET
3937 public:
3941     EverCloudLocalData localData;
3942
3951     Optional<Guid> guid;
3961     Optional<QString> name;
3967     Optional<QString> query;
3972     Optional<QueryFormat> format;
3979     Optional<qint32> updateSequenceNum;
3993     Optional<SavedSearchScope> scope;
3994
3995     virtual void print(QTextStream & strm) const override;
```

```
3996
3997     bool operator==(const SavedSearch & other)const
3998 {
3999         return guid.isEqual(other.guid)
4000             && name.isEqual(other.name)
4001             && query.isEqual(other.query)
4002             && format.isEqual(other.format)
4003             && updateSequenceNum.isEqual(other.updateSequenceNum)
4004             && scope.isEqual(other.scope)
4005         ;
4006     }
4007
4008     bool operator!=(const SavedSearch & other)const
4009 {
4010         return !(*this == other);
4011     }
4012
4013     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4014     Q_PROPERTY(Optional<Guid> guid MEMBER guid)
4015     Q_PROPERTY(Optional<QString> name MEMBER name)
4016     Q_PROPERTY(Optional<QString> query MEMBER query)
4017     Q_PROPERTY(Optional<QueryFormat> format MEMBER format)
4018     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
4019     Q_PROPERTY(Optional<SavedSearchScope> scope MEMBER scope)
4020 };
4021
4036 struct QEVERCLOUD_EXPORT SharedNotebookRecipientSettings:  public Printable
4037 {
4038 private:
4039     Q_GADGET
4040 public:
4044     EverCloudLocalData localData;
4045
4052     Optional<bool> reminderNotifyEmail;
4059     Optional<bool> reminderNotifyInApp;
4060
4061     virtual void print(QTextStream & strm) const override;
4062
4063     bool operator==(const SharedNotebookRecipientSettings & other)const
4064 {
4065         return reminderNotifyEmail.isEqual(other.reminderNotifyEmail)
4066             && reminderNotifyInApp.isEqual(other.reminderNotifyInApp)
4067         ;
4068     }
4069
4070     bool operator!=(const SharedNotebookRecipientSettings & other)const
4071 {
4072         return !(*this == other);
4073     }
4074
4075     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4076     Q_PROPERTY(Optional<bool> reminderNotifyEmail MEMBER reminderNotifyEmail)
4077     Q_PROPERTY(Optional<bool> reminderNotifyInApp MEMBER reminderNotifyInApp)
4078 };
4079
4090 struct QEVERCLOUD_EXPORT NotebookRecipientSettings:  public Printable
4091 {
4092 private:
4093     Q_GADGET
4094 public:
4098     EverCloudLocalData localData;
4099
4107     Optional<bool> reminderNotifyEmail;
4114     Optional<bool> reminderNotifyInApp;
4120     Optional<bool> inMyList;
4126     Optional<QString> stack;
4132     Optional<RecipientStatus> recipientStatus;
4133
4134     virtual void print(QTextStream & strm) const override;
4135
4136     bool operator==(const NotebookRecipientSettings & other)const
4137 {
4138         return reminderNotifyEmail.isEqual(other.reminderNotifyEmail)
4139             && reminderNotifyInApp.isEqual(other.reminderNotifyInApp)
4140             && inMyList.isEqual(other.inMyList)
4141             && stack.isEqual(other.stack)
4142             && recipientStatus.isEqual(other.recipientStatus)
4143         ;
4144     }
4145
4146     bool operator!=(const NotebookRecipientSettings & other)const
4147 {
4148         return !(*this == other);
4149     }
4150
4151     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4152     Q_PROPERTY(Optional<bool> reminderNotifyEmail MEMBER reminderNotifyEmail)
```

```
4153     Q_PROPERTY(Optional<bool> reminderNotifyInApp MEMBER reminderNotifyInApp)
4154     Q_PROPERTY(Optional<bool> inMyList MEMBER inMyList)
4155     Q_PROPERTY(Optional<QString> stack MEMBER stack)
4156     Q_PROPERTY(Optional<RecipientStatus> recipientStatus MEMBER recipientStatus)
4157 };
4158
4163 struct QEVERCLOUD_EXPORT SharedNotebook:  public Printable
4164 {
4165 private:
4166     Q_GADGET
4167 public:
4171     EverCloudLocalData localData;
4172
4176     Optional<qint64> id;
4180     Optional<UserID> userId;
4184     Optional<Guid> notebookGuid;
4191     Optional<QString> email;
4196     Optional<IdentityID> recipientIdentityId;
4200     Optional<bool> notebookModifiable;
4205     Optional<Timestamp> serviceCreated;
4214     Optional<Timestamp> serviceUpdated;
4222     Optional<QString> globalId;
4228     Optional<QString> username;
4233     Optional<SharedNotebookPrivilegeLevel> privilege;
4240     Optional<SharedNotebookRecipientSettings> recipientSettings;
4249     Optional<UserID> sharerUserId;
4257     Optional<QString> recipientUsername;
4266     Optional<UserID> recipientUserId;
4272     Optional<Timestamp> serviceAssigned;
4273
4274     virtual void print(QTextStream & strm) const override;
4275
4276     bool operator==(const SharedNotebook & other)const
4277 {
4278         return id.isEqual(other.id)
4279             && userId.isEqual(other.userId)
4280             && notebookGuid.isEqual(other.notebookGuid)
4281             && email.isEqual(other.email)
4282             && recipientIdentityId.isEqual(other.recipientIdentityId)
4283             && notebookModifiable.isEqual(other.notebookModifiable)
4284             && serviceCreated.isEqual(other.serviceCreated)
4285             && serviceUpdated.isEqual(other.serviceUpdated)
4286             && globalId.isEqual(other.globalId)
4287             && username.isEqual(other.username)
4288             && privilege.isEqual(other.privilege)
4289             && recipientSettings.isEqual(other.recipientSettings)
4290             && sharerUserId.isEqual(other.sharerUserId)
4291             && recipientUsername.isEqual(other.recipientUsername)
4292             && recipientUserId.isEqual(other.recipientUserId)
4293             && serviceAssigned.isEqual(other.serviceAssigned)
4294         ;
4295     }
4296
4297     bool operator!=(const SharedNotebook & other)const
4298 {
4299         return !(*this == other);
4300     }
4301
4302     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4303     Q_PROPERTY(Optional<qint64> id MEMBER id)
4304     Q_PROPERTY(Optional<UserID> userId MEMBER userId)
4305     Q_PROPERTY(Optional<Guid> notebookGuid MEMBER notebookGuid)
4306     Q_PROPERTY(Optional<QString> email MEMBER email)
4307     Q_PROPERTY(Optional<IdentityID> recipientIdentityId MEMBER recipientIdentityId)
4308     Q_PROPERTY(Optional<bool> notebookModifiable MEMBER notebookModifiable)
4309     Q_PROPERTY(Optional<Timestamp> serviceCreated MEMBER serviceCreated)
4310     Q_PROPERTY(Optional<Timestamp> serviceUpdated MEMBER serviceUpdated)
4311     Q_PROPERTY(Optional<QString> globalId MEMBER globalId)
4312     Q_PROPERTY(Optional<QString> username MEMBER username)
4313     Q_PROPERTY(Optional<SharedNotebookPrivilegeLevel> privilege MEMBER privilege)
4314     Q_PROPERTY(Optional<SharedNotebookRecipientSettings> recipientSettings MEMBER recipientSettings)
4315     Q_PROPERTY(Optional<UserID> sharerUserId MEMBER sharerUserId)
4316     Q_PROPERTY(Optional<QString> recipientUsername MEMBER recipientUsername)
4317     Q_PROPERTY(Optional<UserID> recipientUserId MEMBER recipientUserId)
4318     Q_PROPERTY(Optional<Timestamp> serviceAssigned MEMBER serviceAssigned)
4319 };
4320
4324 struct QEVERCLOUD_EXPORT CanMoveToContainerRestrictions:  public Printable
4325 {
4326 private:
4327     Q_GADGET
4328 public:
4332     EverCloudLocalData localData;
4333
4335     Optional<CanMoveToContainerStatus> canMoveToContainer;
4336
4337     virtual void print(QTextStream & strm) const override;
```

```
4338
4339     bool operator==(const CanMoveToContainerRestrictions & other)const
4340 {
4341         return canMoveToContainer.isEqual(other.canMoveToContainer)
4342         ;
4343     }
4344
4345     bool operator!=(const CanMoveToContainerRestrictions & other)const
4346 {
4347         return !(*this == other);
4348     }
4349
4350     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4351     Q_PROPERTY(Optional<CanMoveToContainerStatus> canMoveToContainer MEMBER canMoveToContainer)
4352 };
4353
4380 struct QEVERCLOUD_EXPORT NotebookRestrictions:  public Printable
4381 {
4382 private:
4383     Q_GADGET
4384 public:
4388     EverCloudLocalData localData;
4389
4394     Optional<bool> noReadNotes;
4398     Optional<bool> noCreateNotes;
4402     Optional<bool> noUpdateNotes;
4406     Optional<bool> noExpungeNotes;
4411     Optional<bool> noShareNotes;
4417     Optional<bool> noEmailNotes;
4422     Optional<bool> noSendMessageToRecipients;
4427     Optional<bool> noUpdateNotebook;
4432     Optional<bool> noExpungeNotebook;
4437     Optional<bool> noSetDefaultNotebook;
4442     Optional<bool> noSetNotebookStack;
4447     Optional<bool> noPublishToPublic;
4451     Optional<bool> noPublishToBusinessLibrary;
4456     Optional<bool> noCreateTags;
4460     Optional<bool> noUpdateTags;
4464     Optional<bool> noExpungeTags;
4469     Optional<bool> noSetParentTag;
4473     Optional<bool> noCreateSharedNotebooks;
4480     Optional<SharedNotebookInstanceRestrictions> updateWhichSharedNotebookRestrictions;
4487     Optional<SharedNotebookInstanceRestrictions> expungeWhichSharedNotebookRestrictions;
4492     Optional<bool> noShareNotesWithBusiness;
4496     Optional<bool> noRenameNotebook;
4501     Optional<bool> noSetInMyList;
4503     Optional<bool> noChangeContact;
4508     Optional<CanMoveToContainerRestrictions> canMoveToContainerRestrictions;
4510     Optional<bool> noSetReminderNotifyEmail;
4512     Optional<bool> noSetReminderNotifyInApp;
4514     Optional<bool> noSetRecipientSettingsStack;
4518     Optional<bool> noCanMoveNote;
4519
4520     virtual void print(QTextStream & strm) const override;
4521
4522     bool operator==(const NotebookRestrictions & other)const
4523 {
4524         return noReadNotes.isEqual(other.noReadNotes)
4525             && noCreateNotes.isEqual(other.noCreateNotes)
4526             && noUpdateNotes.isEqual(other.noUpdateNotes)
4527             && noExpungeNotes.isEqual(other.noExpungeNotes)
4528             && noShareNotes.isEqual(other.noShareNotes)
4529             && noEmailNotes.isEqual(other.noEmailNotes)
4530             && noSendMessageToRecipients.isEqual(other.noSendMessageToRecipients)
4531             && noUpdateNotebook.isEqual(other.noUpdateNotebook)
4532             && noExpungeNotebook.isEqual(other.noExpungeNotebook)
4533             && noSetDefaultNotebook.isEqual(other.noSetDefaultNotebook)
4534             && noSetNotebookStack.isEqual(other.noSetNotebookStack)
4535             && noPublishToPublic.isEqual(other.noPublishToPublic)
4536             && noPublishToBusinessLibrary.isEqual(other.noPublishToBusinessLibrary)
4537             && noCreateTags.isEqual(other.noCreateTags)
4538             && noUpdateTags.isEqual(other.noUpdateTags)
4539             && noExpungeTags.isEqual(other.noExpungeTags)
4540             && noSetParentTag.isEqual(other.noSetParentTag)
4541             && noCreateSharedNotebooks.isEqual(other.noCreateSharedNotebooks)
4542             &&
     updateWhichSharedNotebookRestrictions.isEqual(other.updateWhichSharedNotebookRestrictions)
4543             &&
     expungeWhichSharedNotebookRestrictions.isEqual(other.expungeWhichSharedNotebookRestrictions)
4544             && noShareNotesWithBusiness.isEqual(other.noShareNotesWithBusiness)
4545             && noRenameNotebook.isEqual(other.noRenameNotebook)
4546             && noSetInMyList.isEqual(other.noSetInMyList)
4547             && noChangeContact.isEqual(other.noChangeContact)
4548             && canMoveToContainerRestrictions.isEqual(other.canMoveToContainerRestrictions)
4549             && noSetReminderNotifyEmail.isEqual(other.noSetReminderNotifyEmail)
4550             && noSetReminderNotifyInApp.isEqual(other.noSetReminderNotifyInApp)
4551             && noSetRecipientSettingsStack.isEqual(other.noSetRecipientSettingsStack)
```

```
4552             && noCanMoveNote.isEqual(other.noCanMoveNote)
4553         ;
4554     }
4555 
4556     bool operator!=(const NotebookRestrictions & other)const
4557 {
4558         return !(*this == other);
4559     }
4560 
4561     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4562     Q_PROPERTY(Optional<bool> noReadNotes MEMBER noReadNotes)
4563     Q_PROPERTY(Optional<bool> noCreateNotes MEMBER noCreateNotes)
4564     Q_PROPERTY(Optional<bool> noUpdateNotes MEMBER noUpdateNotes)
4565     Q_PROPERTY(Optional<bool> noExpungeNotes MEMBER noExpungeNotes)
4566     Q_PROPERTY(Optional<bool> noShareNotes MEMBER noShareNotes)
4567     Q_PROPERTY(Optional<bool> noEmailNotes MEMBER noEmailNotes)
4568     Q_PROPERTY(Optional<bool> noSendMessageToRecipients MEMBER noSendMessageToRecipients)
4569     Q_PROPERTY(Optional<bool> noUpdateNotebook MEMBER noUpdateNotebook)
4570     Q_PROPERTY(Optional<bool> noExpungeNotebook MEMBER noExpungeNotebook)
4571     Q_PROPERTY(Optional<bool> noSetDefaultNotebook MEMBER noSetDefaultNotebook)
4572     Q_PROPERTY(Optional<bool> noSetNotebookStack MEMBER noSetNotebookStack)
4573     Q_PROPERTY(Optional<bool> noPublishToPublic MEMBER noPublishToPublic)
4574     Q_PROPERTY(Optional<bool> noPublishToBusinessLibrary MEMBER noPublishToBusinessLibrary)
4575     Q_PROPERTY(Optional<bool> noCreateTags MEMBER noCreateTags)
4576     Q_PROPERTY(Optional<bool> noUpdateTags MEMBER noUpdateTags)
4577     Q_PROPERTY(Optional<bool> noExpungeTags MEMBER noExpungeTags)
4578     Q_PROPERTY(Optional<bool> noSetParentTag MEMBER noSetParentTag)
4579     Q_PROPERTY(Optional<bool> noCreateSharedNotebooks MEMBER noCreateSharedNotebooks)
4580     Q_PROPERTY(Optional<SharedNotebookInstanceRestrictions> updateWhichSharedNotebookRestrictions
     MEMBER updateWhichSharedNotebookRestrictions)
4581     Q_PROPERTY(Optional<SharedNotebookInstanceRestrictions> expungeWhichSharedNotebookRestrictions
     MEMBER expungeWhichSharedNotebookRestrictions)
4582     Q_PROPERTY(Optional<bool> noShareNotesWithBusiness MEMBER noShareNotesWithBusiness)
4583     Q_PROPERTY(Optional<bool> noRenameNotebook MEMBER noRenameNotebook)
4584     Q_PROPERTY(Optional<bool> noSetInMyList MEMBER noSetInMyList)
4585     Q_PROPERTY(Optional<bool> noChangeContact MEMBER noChangeContact)
4586     Q_PROPERTY(Optional<CanMoveToContainerRestrictions> canMoveToContainerRestrictions MEMBER
     canMoveToContainerRestrictions)
4587     Q_PROPERTY(Optional<bool> noSetReminderNotifyEmail MEMBER noSetReminderNotifyEmail)
4588     Q_PROPERTY(Optional<bool> noSetReminderNotifyInApp MEMBER noSetReminderNotifyInApp)
4589     Q_PROPERTY(Optional<bool> noSetRecipientSettingsStack MEMBER noSetRecipientSettingsStack)
4590     Q_PROPERTY(Optional<bool> noCanMoveNote MEMBER noCanMoveNote)
4591 };
4592 
4596 struct QEVERCLOUD_EXPORT Notebook:  public Printable
4597 {
4598 private:
4599     Q_GADGET
4600 public:
4604     EverCloudLocalData localData;
4605 
4613     Optional<Guid> guid;
4624     Optional<QString> name;
4631     Optional<qint32> updateSequenceNum;
4644     Optional<bool> defaultNotebook;
4651     Optional<Timestamp> serviceCreated;
4658     Optional<Timestamp> serviceUpdated;
4668     Optional<Publishing> publishing;
4677     Optional<bool> published;
4685     Optional<QString> stack;
4689     Optional<QList<qint64>> sharedNotebookIds;
4699     Optional<QList<SharedNotebook>> sharedNotebooks;
4706     Optional<BusinessNotebook> businessNotebook;
4716     Optional<User> contact;
4718     Optional<NotebookRestrictions> restrictions;
4724     Optional<NotebookRecipientSettings> recipientSettings;
4725 
4726     virtual void print(QTextStream & strm) const override;
4727 
4728     bool operator==(const Notebook & other)const
4729 {
4730         return guid.isEqual(other.guid)
4731             && name.isEqual(other.name)
4732             && updateSequenceNum.isEqual(other.updateSequenceNum)
4733             && defaultNotebook.isEqual(other.defaultNotebook)
4734             && serviceCreated.isEqual(other.serviceCreated)
4735             && serviceUpdated.isEqual(other.serviceUpdated)
4736             && publishing.isEqual(other.publishing)
4737             && published.isEqual(other.published)
4738             && stack.isEqual(other.stack)
4739             && sharedNotebookIds.isEqual(other.sharedNotebookIds)
4740             && sharedNotebooks.isEqual(other.sharedNotebooks)
4741             && businessNotebook.isEqual(other.businessNotebook)
4742             && contact.isEqual(other.contact)
4743             && restrictions.isEqual(other.restrictions)
4744             && recipientSettings.isEqual(other.recipientSettings)
4745         ;
```

```
4746     }
4747
4748     bool operator!=(const Notebook & other)const
4749 {
4750         return !(*this == other);
4751     }
4752
4753     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4754     Q_PROPERTY(Optional<Guid> guid MEMBER guid)
4755     Q_PROPERTY(Optional<QString> name MEMBER name)
4756     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
4757     Q_PROPERTY(Optional<bool> defaultNotebook MEMBER defaultNotebook)
4758     Q_PROPERTY(Optional<Timestamp> serviceCreated MEMBER serviceCreated)
4759     Q_PROPERTY(Optional<Timestamp> serviceUpdated MEMBER serviceUpdated)
4760     Q_PROPERTY(Optional<Publishing> publishing MEMBER publishing)
4761     Q_PROPERTY(Optional<bool> published MEMBER published)
4762     Q_PROPERTY(Optional<QString> stack MEMBER stack)
4763     Q_PROPERTY(Optional<QList<qint64» sharedNotebookIds MEMBER sharedNotebookIds)
4764     Q_PROPERTY(Optional<QList<SharedNotebook» sharedNotebooks MEMBER sharedNotebooks)
4765     Q_PROPERTY(Optional<BusinessNotebook> businessNotebook MEMBER businessNotebook)
4766     Q_PROPERTY(Optional<User> contact MEMBER contact)
4767     Q_PROPERTY(Optional<NotebookRestrictions> restrictions MEMBER restrictions)
4768     Q_PROPERTY(Optional<NotebookRecipientSettings> recipientSettings MEMBER recipientSettings)
4769 };
4770
4776 struct QEVERCLOUD_EXPORT LinkedNotebook:  public Printable
4777 {
4778 private:
4779     Q_GADGET
4780 public:
4784     EverCloudLocalData localData;
4785
4789     Optional<QString> shareName;
4793     Optional<QString> username;
4800     Optional<QString> shardId;
4808     Optional<QString> sharedNotebookGlobalId;
4810     Optional<QString> uri;
4820     Optional<Guid> guid;
4827     Optional<qint32> updateSequenceNum;
4834     Optional<QString> noteStoreUrl;
4844     Optional<QString> webApiUrlPrefix;
4853     Optional<QString> stack;
4858     Optional<qint32> businessId;
4859
4860     virtual void print(QTextStream & strm) const override;
4861
4862     bool operator==(const LinkedNotebook & other)const
4863 {
4864         return shareName.isEqual(other.shareName)
4865             && username.isEqual(other.username)
4866             && shardId.isEqual(other.shardId)
4867             && sharedNotebookGlobalId.isEqual(other.sharedNotebookGlobalId)
4868             && uri.isEqual(other.uri)
4869             && guid.isEqual(other.guid)
4870             && updateSequenceNum.isEqual(other.updateSequenceNum)
4871             && noteStoreUrl.isEqual(other.noteStoreUrl)
4872             && webApiUrlPrefix.isEqual(other.webApiUrlPrefix)
4873             && stack.isEqual(other.stack)
4874             && businessId.isEqual(other.businessId)
4875         ;
4876     }
4877
4878     bool operator!=(const LinkedNotebook & other)const
4879 {
4880         return !(*this == other);
4881     }
4882
4883     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4884     Q_PROPERTY(Optional<QString> shareName MEMBER shareName)
4885     Q_PROPERTY(Optional<QString> username MEMBER username)
4886     Q_PROPERTY(Optional<QString> shardId MEMBER shardId)
4887     Q_PROPERTY(Optional<QString> sharedNotebookGlobalId MEMBER sharedNotebookGlobalId)
4888     Q_PROPERTY(Optional<QString> uri MEMBER uri)
4889     Q_PROPERTY(Optional<Guid> guid MEMBER guid)
4890     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
4891     Q_PROPERTY(Optional<QString> noteStoreUrl MEMBER noteStoreUrl)
4892     Q_PROPERTY(Optional<QString> webApiUrlPrefix MEMBER webApiUrlPrefix)
4893     Q_PROPERTY(Optional<QString> stack MEMBER stack)
4894     Q_PROPERTY(Optional<qint32> businessId MEMBER businessId)
4895 };
4896
4902 struct QEVERCLOUD_EXPORT NotebookDescriptor:  public Printable
4903 {
4904 private:
4905     Q_GADGET
4906 public:
4910     EverCloudLocalData localData;
```

```
4911
4915     Optional<Guid> guid;
4920     Optional<QString> notebookDisplayName;
4924     Optional<QString> contactName;
4929     Optional<bool> hasSharedNotebook;
4933     Optional<qint32> joinedUserCount;
4934
4935     virtual void print(QTextStream & strm) const override;
4936
4937     bool operator==(const NotebookDescriptor & other)const
4938 {
4939         return guid.isEqual(other.guid)
4940             && notebookDisplayName.isEqual(other.notebookDisplayName)
4941             && contactName.isEqual(other.contactName)
4942             && hasSharedNotebook.isEqual(other.hasSharedNotebook)
4943             && joinedUserCount.isEqual(other.joinedUserCount)
4944         ;
4945     }
4946
4947     bool operator!=(const NotebookDescriptor & other)const
4948 {
4949         return !(*this == other);
4950     }
4951
4952     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
4953     Q_PROPERTY(Optional<Guid> guid MEMBER guid)
4954     Q_PROPERTY(Optional<QString> notebookDisplayName MEMBER notebookDisplayName)
4955     Q_PROPERTY(Optional<QString> contactName MEMBER contactName)
4956     Q_PROPERTY(Optional<bool> hasSharedNotebook MEMBER hasSharedNotebook)
4957     Q_PROPERTY(Optional<qint32> joinedUserCount MEMBER joinedUserCount)
4958 };
4959
4964 struct QEVERCLOUD_EXPORT UserProfile:  public Printable
4965 {
4966 private:
4967     Q_GADGET
4968 public:
4972     EverCloudLocalData localData;
4973
4977     Optional<UserID> id;
4981     Optional<QString> name;
4986     Optional<QString> email;
4990     Optional<QString> username;
4994     Optional<BusinessUserAttributes> attributes;
4998     Optional<Timestamp> joined;
5002     Optional<Timestamp> photoLastUpdated;
5006     Optional<QString> photoUrl;
5010     Optional<BusinessUserRole> role;
5014     Optional<BusinessUserStatus> status;
5015
5016     virtual void print(QTextStream & strm) const override;
5017
5018     bool operator==(const UserProfile & other)const
5019 {
5020         return id.isEqual(other.id)
5021             && name.isEqual(other.name)
5022             && email.isEqual(other.email)
5023             && username.isEqual(other.username)
5024             && attributes.isEqual(other.attributes)
5025             && joined.isEqual(other.joined)
5026             && photoLastUpdated.isEqual(other.photoLastUpdated)
5027             && photoUrl.isEqual(other.photoUrl)
5028             && role.isEqual(other.role)
5029             && status.isEqual(other.status)
5030         ;
5031     }
5032
5033     bool operator!=(const UserProfile & other)const
5034 {
5035         return !(*this == other);
5036     }
5037
5038     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5039     Q_PROPERTY(Optional<UserID> id MEMBER id)
5040     Q_PROPERTY(Optional<QString> name MEMBER name)
5041     Q_PROPERTY(Optional<QString> email MEMBER email)
5042     Q_PROPERTY(Optional<QString> username MEMBER username)
5043     Q_PROPERTY(Optional<BusinessUserAttributes> attributes MEMBER attributes)
5044     Q_PROPERTY(Optional<Timestamp> joined MEMBER joined)
5045     Q_PROPERTY(Optional<Timestamp> photoLastUpdated MEMBER photoLastUpdated)
5046     Q_PROPERTY(Optional<QString> photoUrl MEMBER photoUrl)
5047     Q_PROPERTY(Optional<BusinessUserRole> role MEMBER role)
5048     Q_PROPERTY(Optional<BusinessUserStatus> status MEMBER status)
5049 };
5050
5057 struct QEVERCLOUD_EXPORT RelatedContentImage:  public Printable
5058 {
```

```
5059 private:
5060     Q_GADGET
5061 public:
5065     EverCloudLocalData localData;
5066
5070     Optional<QString> url;
5074     Optional<qint32> width;
5078     Optional<qint32> height;
5082     Optional<double> pixelRatio;
5086     Optional<qint32> fileSize;
5087
5088     virtual void print(QTextStream & strm) const override;
5089
5090     bool operator==(const RelatedContentImage & other)const
5091 {
5092         return url.isEqual(other.url)
5093             && width.isEqual(other.width)
5094             && height.isEqual(other.height)
5095             && pixelRatio.isEqual(other.pixelRatio)
5096             && fileSize.isEqual(other.fileSize)
5097         ;
5098     }
5099
5100     bool operator!=(const RelatedContentImage & other)const
5101 {
5102         return !(*this == other);
5103     }
5104
5105     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5106     Q_PROPERTY(Optional<QString> url MEMBER url)
5107     Q_PROPERTY(Optional<qint32> width MEMBER width)
5108     Q_PROPERTY(Optional<qint32> height MEMBER height)
5109     Q_PROPERTY(Optional<double> pixelRatio MEMBER pixelRatio)
5110     Q_PROPERTY(Optional<qint32> fileSize MEMBER fileSize)
5111 };
5112
5118 struct QEVERCLOUD_EXPORT RelatedContent:  public Printable
5119 {
5120 private:
5121     Q_GADGET
5122 public:
5126     EverCloudLocalData localData;
5127
5131     Optional<QString> contentId;
5135     Optional<QString> title;
5139     Optional<QString> url;
5143     Optional<QString> sourceId;
5147     Optional<QString> sourceUrl;
5151     Optional<QString> sourceFaviconUrl;
5155     Optional<QString> sourceName;
5159     Optional<Timestamp> date;
5164     Optional<QString> teaser;
5168     Optional<QList<RelatedContentImage>> thumbnails;
5172     Optional<RelatedContentType> contentType;
5177     Optional<RelatedContentAccess> accessType;
5183     Optional<QString> visibleUrl;
5189     Optional<QString> clipUrl;
5194     Optional<Contact> contact;
5198     Optional<QStringList> authors;
5199
5200     virtual void print(QTextStream & strm) const override;
5201
5202     bool operator==(const RelatedContent & other)const
5203 {
5204         return contentId.isEqual(other.contentId)
5205             && title.isEqual(other.title)
5206             && url.isEqual(other.url)
5207             && sourceId.isEqual(other.sourceId)
5208             && sourceUrl.isEqual(other.sourceUrl)
5209             && sourceFaviconUrl.isEqual(other.sourceFaviconUrl)
5210             && sourceName.isEqual(other.sourceName)
5211             && date.isEqual(other.date)
5212             && teaser.isEqual(other.teaser)
5213             && thumbnails.isEqual(other.thumbnails)
5214             && contentType.isEqual(other.contentType)
5215             && accessType.isEqual(other.accessType)
5216             && visibleUrl.isEqual(other.visibleUrl)
5217             && clipUrl.isEqual(other.clipUrl)
5218             && contact.isEqual(other.contact)
5219             && authors.isEqual(other.authors)
5220         ;
5221     }
5222
5223     bool operator!=(const RelatedContent & other)const
5224 {
5225         return !(*this == other);
5226     }
```

```
5227
5228     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5229     Q_PROPERTY(Optional<QString> contentId MEMBER contentId)
5230     Q_PROPERTY(Optional<QString> title MEMBER title)
5231     Q_PROPERTY(Optional<QString> url MEMBER url)
5232     Q_PROPERTY(Optional<QString> sourceId MEMBER sourceId)
5233     Q_PROPERTY(Optional<QString> sourceUrl MEMBER sourceUrl)
5234     Q_PROPERTY(Optional<QString> sourceFaviconUrl MEMBER sourceFaviconUrl)
5235     Q_PROPERTY(Optional<QString> sourceName MEMBER sourceName)
5236     Q_PROPERTY(Optional<Timestamp> date MEMBER date)
5237     Q_PROPERTY(Optional<QString> teaser MEMBER teaser)
5238     Q_PROPERTY(Optional<QList<RelatedContentImage» thumbnails MEMBER thumbnails)
5239     Q_PROPERTY(Optional<RelatedContentType> contentType MEMBER contentType)
5240     Q_PROPERTY(Optional<RelatedContentAccess> accessType MEMBER accessType)
5241     Q_PROPERTY(Optional<QString> visibleUrl MEMBER visibleUrl)
5242     Q_PROPERTY(Optional<QString> clipUrl MEMBER clipUrl)
5243     Q_PROPERTY(Optional<Contact> contact MEMBER contact)
5244     Q_PROPERTY(Optional<QStringList> authors MEMBER authors)
5245 };
5246
5251 struct QEVERCLOUD_EXPORT BusinessInvitation:  public Printable
5252 {
5253 private:
5254     Q_GADGET
5255 public:
5259     EverCloudLocalData localData;
5260
5264     Optional<qint32> businessId;
5268     Optional<QString> email;
5272     Optional<BusinessUserRole> role;
5276     Optional<BusinessInvitationStatus> status;
5282     Optional<UserID> requesterId;
5287     Optional<bool> fromWorkChat;
5291     Optional<Timestamp> created;
5295     Optional<Timestamp> mostRecentReminder;
5296
5297     virtual void print(QTextStream & strm) const override;
5298
5299     bool operator==(const BusinessInvitation & other)const
5300 {
5301         return businessId.isEqual(other.businessId)
5302             && email.isEqual(other.email)
5303             && role.isEqual(other.role)
5304             && status.isEqual(other.status)
5305             && requesterId.isEqual(other.requesterId)
5306             && fromWorkChat.isEqual(other.fromWorkChat)
5307             && created.isEqual(other.created)
5308             && mostRecentReminder.isEqual(other.mostRecentReminder)
5309         ;
5310     }
5311
5312     bool operator!=(const BusinessInvitation & other)const
5313 {
5314         return !(*this == other);
5315     }
5316
5317     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5318     Q_PROPERTY(Optional<qint32> businessId MEMBER businessId)
5319     Q_PROPERTY(Optional<QString> email MEMBER email)
5320     Q_PROPERTY(Optional<BusinessUserRole> role MEMBER role)
5321     Q_PROPERTY(Optional<BusinessInvitationStatus> status MEMBER status)
5322     Q_PROPERTY(Optional<UserID> requesterId MEMBER requesterId)
5323     Q_PROPERTY(Optional<bool> fromWorkChat MEMBER fromWorkChat)
5324     Q_PROPERTY(Optional<Timestamp> created MEMBER created)
5325     Q_PROPERTY(Optional<Timestamp> mostRecentReminder MEMBER mostRecentReminder)
5326 };
5327
5357 struct QEVERCLOUD_EXPORT UserIdentity:  public Printable
5358 {
5359 private:
5360     Q_GADGET
5361 public:
5365     EverCloudLocalData localData;
5366
5368     Optional<UserIdentityType> type;
5370     Optional<QString> stringIdentifier;
5372     Optional<qint64> longIdentifier;
5373
5374     virtual void print(QTextStream & strm) const override;
5375
5376     bool operator==(const UserIdentity & other)const
5377 {
5378         return type.isEqual(other.type)
5379             && stringIdentifier.isEqual(other.stringIdentifier)
5380             && longIdentifier.isEqual(other.longIdentifier)
5381         ;
5382     }
```

```
5383
5384     bool operator!=(const UserIdentity & other)const
5385 {
5386         return !(*this == other);
5387     }
5388
5389     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5390     Q_PROPERTY(Optional<UserIdentityType> type MEMBER type)
5391     Q_PROPERTY(Optional<QString> stringIdentifier MEMBER stringIdentifier)
5392     Q_PROPERTY(Optional<qint64> longIdentifier MEMBER longIdentifier)
5393 };
5394
5399 struct QEVERCLOUD_EXPORT PublicUserInfo:  public Printable
5400 {
5401 private:
5402     Q_GADGET
5403 public:
5407     EverCloudLocalData localData;
5408
5412     UserID userId = 0;
5416     Optional<ServiceLevel> serviceLevel;
5418     Optional<QString> username;
5425     Optional<QString> noteStoreUrl;
5435     Optional<QString> webApiUrlPrefix;
5436
5437     virtual void print(QTextStream & strm) const override;
5438
5439     bool operator==(const PublicUserInfo & other)const
5440 {
5441         return (userId == other.userId)
5442             && serviceLevel.isEqual(other.serviceLevel)
5443             && username.isEqual(other.username)
5444             && noteStoreUrl.isEqual(other.noteStoreUrl)
5445             && webApiUrlPrefix.isEqual(other.webApiUrlPrefix)
5446         ;
5447     }
5448
5449     bool operator!=(const PublicUserInfo & other)const
5450 {
5451         return !(*this == other);
5452     }
5453
5454     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5455     Q_PROPERTY(UserID userId MEMBER userId)
5456     Q_PROPERTY(Optional<ServiceLevel> serviceLevel MEMBER serviceLevel)
5457     Q_PROPERTY(Optional<QString> username MEMBER username)
5458     Q_PROPERTY(Optional<QString> noteStoreUrl MEMBER noteStoreUrl)
5459     Q_PROPERTY(Optional<QString> webApiUrlPrefix MEMBER webApiUrlPrefix)
5460 };
5461
5464 struct QEVERCLOUD_EXPORT UserUrls:  public Printable
5465 {
5466 private:
5467     Q_GADGET
5468 public:
5472     EverCloudLocalData localData;
5473
5480     Optional<QString> noteStoreUrl;
5490     Optional<QString> webApiUrlPrefix;
5497     Optional<QString> userStoreUrl;
5504     Optional<QString> utilityUrl;
5511     Optional<QString> messageStoreUrl;
5516     Optional<QString> userWebSocketUrl;
5517
5518     virtual void print(QTextStream & strm) const override;
5519
5520     bool operator==(const UserUrls & other)const
5521 {
5522         return noteStoreUrl.isEqual(other.noteStoreUrl)
5523             && webApiUrlPrefix.isEqual(other.webApiUrlPrefix)
5524             && userStoreUrl.isEqual(other.userStoreUrl)
5525             && utilityUrl.isEqual(other.utilityUrl)
5526             && messageStoreUrl.isEqual(other.messageStoreUrl)
5527             && userWebSocketUrl.isEqual(other.userWebSocketUrl)
5528         ;
5529     }
5530
5531     bool operator!=(const UserUrls & other)const
5532 {
5533         return !(*this == other);
5534     }
5535
5536     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5537     Q_PROPERTY(Optional<QString> noteStoreUrl MEMBER noteStoreUrl)
5538     Q_PROPERTY(Optional<QString> webApiUrlPrefix MEMBER webApiUrlPrefix)
5539     Q_PROPERTY(Optional<QString> userStoreUrl MEMBER userStoreUrl)
5540     Q_PROPERTY(Optional<QString> utilityUrl MEMBER utilityUrl)
```

```
5541     Q_PROPERTY(Optional<QString> messageStoreUrl MEMBER messageStoreUrl)
5542     Q_PROPERTY(Optional<QString> userWebSocketUrl MEMBER userWebSocketUrl)
5543 };
5544
5549 struct QEVERCLOUD_EXPORT AuthenticationResult:  public Printable
5550 {
5551 private:
5552     Q_GADGET
5553 public:
5557     EverCloudLocalData localData;
5558
5563     Timestamp currentTime = 0;
5568     QString authenticationToken;
5575     Timestamp expiration = 0;
5581     Optional<User> user;
5587     Optional<PublicUserInfo> publicUserInfo;
5591     Optional<QString> noteStoreUrl;
5595     Optional<QString> webApiUrlPrefix;
5603     Optional<bool> secondFactorRequired;
5611     Optional<QString> secondFactorDeliveryHint;
5616     Optional<UserUrls> urls;
5617
5618     virtual void print(QTextStream & strm) const override;
5619
5620     bool operator==(const AuthenticationResult & other)const
5621 {
5622         return (currentTime == other.currentTime)
5623             && (authenticationToken == other.authenticationToken)
5624             && (expiration == other.expiration)
5625             && user.isEqual(other.user)
5626             && publicUserInfo.isEqual(other.publicUserInfo)
5627             && noteStoreUrl.isEqual(other.noteStoreUrl)
5628             && webApiUrlPrefix.isEqual(other.webApiUrlPrefix)
5629             && secondFactorRequired.isEqual(other.secondFactorRequired)
5630             && secondFactorDeliveryHint.isEqual(other.secondFactorDeliveryHint)
5631             && urls.isEqual(other.urls)
5632         ;
5633     }
5634
5635     bool operator!=(const AuthenticationResult & other)const
5636 {
5637         return !(*this == other);
5638     }
5639
5640     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5641     Q_PROPERTY(Timestamp currentTime MEMBER currentTime)
5642     Q_PROPERTY(QString authenticationToken MEMBER authenticationToken)
5643     Q_PROPERTY(Timestamp expiration MEMBER expiration)
5644     Q_PROPERTY(Optional<User> user MEMBER user)
5645     Q_PROPERTY(Optional<PublicUserInfo> publicUserInfo MEMBER publicUserInfo)
5646     Q_PROPERTY(Optional<QString> noteStoreUrl MEMBER noteStoreUrl)
5647     Q_PROPERTY(Optional<QString> webApiUrlPrefix MEMBER webApiUrlPrefix)
5648     Q_PROPERTY(Optional<bool> secondFactorRequired MEMBER secondFactorRequired)
5649     Q_PROPERTY(Optional<QString> secondFactorDeliveryHint MEMBER secondFactorDeliveryHint)
5650     Q_PROPERTY(Optional<UserUrls> urls MEMBER urls)
5651 };
5652
5656 struct QEVERCLOUD_EXPORT BootstrapSettings:  public Printable
5657 {
5658 private:
5659     Q_GADGET
5660 public:
5664     EverCloudLocalData localData;
5665
5676     QString serviceHost;
5682     QString marketingUrl;
5686     QString supportUrl;
5691     QString accountEmailDomain;
5695     Optional<bool> enableFacebookSharing;
5699     Optional<bool> enableGiftSubscriptions;
5703     Optional<bool> enableSupportTickets;
5707     Optional<bool> enableSharedNotebooks;
5711     Optional<bool> enableSingleNoteSharing;
5715     Optional<bool> enableSponsoredAccounts;
5719     Optional<bool> enableTwitterSharing;
5721     Optional<bool> enableLinkedInSharing;
5723     Optional<bool> enablePublicNotebooks;
5728     Optional<bool> enableGoogle;
5729
5730     virtual void print(QTextStream & strm) const override;
5731
5732     bool operator==(const BootstrapSettings & other)const
5733 {
5734         return (serviceHost == other.serviceHost)
5735             && (marketingUrl == other.marketingUrl)
5736             && (supportUrl == other.supportUrl)
5737             && (accountEmailDomain == other.accountEmailDomain)
```

```
5738             && enableFacebookSharing.isEqual(other.enableFacebookSharing)
5739             && enableGiftSubscriptions.isEqual(other.enableGiftSubscriptions)
5740             && enableSupportTickets.isEqual(other.enableSupportTickets)
5741             && enableSharedNotebooks.isEqual(other.enableSharedNotebooks)
5742             && enableSingleNoteSharing.isEqual(other.enableSingleNoteSharing)
5743             && enableSponsoredAccounts.isEqual(other.enableSponsoredAccounts)
5744             && enableTwitterSharing.isEqual(other.enableTwitterSharing)
5745             && enableLinkedInSharing.isEqual(other.enableLinkedInSharing)
5746             && enablePublicNotebooks.isEqual(other.enablePublicNotebooks)
5747             && enableGoogle.isEqual(other.enableGoogle)
5748         ;
5749     }
5750
5751     bool operator!=(const BootstrapSettings & other)const
5752 {
5753         return !(*this == other);
5754     }
5755
5756     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5757     Q_PROPERTY(QString serviceHost MEMBER serviceHost)
5758     Q_PROPERTY(QString marketingUrl MEMBER marketingUrl)
5759     Q_PROPERTY(QString supportUrl MEMBER supportUrl)
5760     Q_PROPERTY(QString accountEmailDomain MEMBER accountEmailDomain)
5761     Q_PROPERTY(Optional<bool> enableFacebookSharing MEMBER enableFacebookSharing)
5762     Q_PROPERTY(Optional<bool> enableGiftSubscriptions MEMBER enableGiftSubscriptions)
5763     Q_PROPERTY(Optional<bool> enableSupportTickets MEMBER enableSupportTickets)
5764     Q_PROPERTY(Optional<bool> enableSharedNotebooks MEMBER enableSharedNotebooks)
5765     Q_PROPERTY(Optional<bool> enableSingleNoteSharing MEMBER enableSingleNoteSharing)
5766     Q_PROPERTY(Optional<bool> enableSponsoredAccounts MEMBER enableSponsoredAccounts)
5767     Q_PROPERTY(Optional<bool> enableTwitterSharing MEMBER enableTwitterSharing)
5768     Q_PROPERTY(Optional<bool> enableLinkedInSharing MEMBER enableLinkedInSharing)
5769     Q_PROPERTY(Optional<bool> enablePublicNotebooks MEMBER enablePublicNotebooks)
5770     Q_PROPERTY(Optional<bool> enableGoogle MEMBER enableGoogle)
5771 };
5772
5776 struct QEVERCLOUD_EXPORT BootstrapProfile:  public Printable
5777 {
5778 private:
5779     Q_GADGET
5780 public:
5784     EverCloudLocalData localData;
5785
5790     QString name;
5794     BootstrapSettings settings;
5795
5796     virtual void print(QTextStream & strm) const override;
5797
5798     bool operator==(const BootstrapProfile & other)const
5799 {
5800         return (name == other.name)
5801             && (settings == other.settings)
5802         ;
5803     }
5804
5805     bool operator!=(const BootstrapProfile & other)const
5806 {
5807         return !(*this == other);
5808     }
5809
5810     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
5811     Q_PROPERTY(QString name MEMBER name)
5812     Q_PROPERTY(BootstrapSettings settings MEMBER settings)
5813 };
5814
5818 struct QEVERCLOUD_EXPORT BootstrapInfo:  public Printable
5819 {
5820 private:
5821     Q_GADGET
5822 public:
5826     EverCloudLocalData localData;
5827
5832     QList<BootstrapProfile> profiles;
5833
5834     virtual void print(QTextStream & strm) const override;
5835
5836     bool operator==(const BootstrapInfo & other)const
5837 {
5838         return (profiles == other.profiles)
5839         ;
5840     }
5841
5842     bool operator!=(const BootstrapInfo & other)const
5843 {
5844         return !(*this == other);
5845     }
5846
5847     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
```

```
5848     Q_PROPERTY(QList<BootstrapProfile> profiles MEMBER profiles)
5849 };
5850
5869 class QEVERCLOUD_EXPORT EDAMUserException:  public EvernoteException, public Printable
5870 {
5871     Q_GADGET
5872 public:
5873     EDAMErrorCode errorCode;
5874     Optional<QString> parameter;
5875
5876     EDAMUserException();
5877     virtual ~EDAMUserException() noexcept override;
5878
5879     EDAMUserException(const EDAMUserException & other);
5880     const char * what() const noexcept override;
5881     virtual EverCloudExceptionDataPtr exceptionData() const override;
5882
5883     virtual void print(QTextStream & strm) const override;
5884
5885     bool operator==(const EDAMUserException & other)const
5886 {
5887         return (errorCode == other.errorCode)
5888             && parameter.isEqual(other.parameter)
5889         ;
5890     }
5891
5892     bool operator!=(const EDAMUserException & other)const
5893 {
5894         return !(*this == other);
5895     }
5896
5897     Q_PROPERTY(EDAMErrorCode errorCode MEMBER errorCode)
5898     Q_PROPERTY(Optional<QString> parameter MEMBER parameter)
5899 };
5900
5915 class QEVERCLOUD_EXPORT EDAMSystemException:  public EvernoteException, public Printable
5916 {
5917     Q_GADGET
5918 public:
5919     EDAMErrorCode errorCode;
5920     Optional<QString> message;
5921     Optional<qint32> rateLimitDuration;
5922
5923     EDAMSystemException();
5924     virtual ~EDAMSystemException() noexcept override;
5925
5926     EDAMSystemException(const EDAMSystemException & other);
5927     const char * what() const noexcept override;
5928     virtual EverCloudExceptionDataPtr exceptionData() const override;
5929
5930     virtual void print(QTextStream & strm) const override;
5931
5932     bool operator==(const EDAMSystemException & other)const
5933 {
5934         return (errorCode == other.errorCode)
5935             && message.isEqual(other.message)
5936             && rateLimitDuration.isEqual(other.rateLimitDuration)
5937         ;
5938     }
5939
5940     bool operator!=(const EDAMSystemException & other)const
5941 {
5942         return !(*this == other);
5943     }
5944
5945     Q_PROPERTY(EDAMErrorCode errorCode MEMBER errorCode)
5946     Q_PROPERTY(Optional<QString> message MEMBER message)
5947     Q_PROPERTY(Optional<qint32> rateLimitDuration MEMBER rateLimitDuration)
5948 };
5949
5963 class QEVERCLOUD_EXPORT EDAMNotFoundException:  public EvernoteException, public Printable
5964 {
5965     Q_GADGET
5966 public:
5967     Optional<QString> identifier;
5968     Optional<QString> key;
5969
5970     EDAMNotFoundException();
5971     virtual ~EDAMNotFoundException() noexcept override;
5972
5973     EDAMNotFoundException(const EDAMNotFoundException & other);
5974     const char * what() const noexcept override;
5975     virtual EverCloudExceptionDataPtr exceptionData() const override;
5976
5977     virtual void print(QTextStream & strm) const override;
5978
5979     bool operator==(const EDAMNotFoundException & other)const
```

```
5980 {
5981         return identifier.isEqual(other.identifier)
5982             && key.isEqual(other.key)
5983         ;
5984     }
5985 
5986     bool operator!=(const EDAMNotFoundException & other)const
5987 {
5988         return !(*this == other);
5989     }
5990 
5991     Q_PROPERTY(Optional<QString> identifier MEMBER identifier)
5992     Q_PROPERTY(Optional<QString> key MEMBER key)
5993 };
5994 
6017 class QEVERCLOUD_EXPORT EDAMInvalidContactsException:  public EvernoteException, public Printable
6018 {
6019     Q_GADGET
6020 public:
6021     QList<Contact> contacts;
6022     Optional<QString> parameter;
6023     Optional<QList<EDAMInvalidContactReason>> reasons;
6024 
6025     EDAMInvalidContactsException();
6026     virtual ~EDAMInvalidContactsException() noexcept override;
6027 
6028     EDAMInvalidContactsException(const EDAMInvalidContactsException & other);
6029     const char * what() const noexcept override;
6030     virtual EverCloudExceptionDataPtr exceptionData() const override;
6031 
6032     virtual void print(QTextStream & strm) const override;
6033 
6034     bool operator==(const EDAMInvalidContactsException & other)const
6035 {
6036         return (contacts == other.contacts)
6037             && parameter.isEqual(other.parameter)
6038             && reasons.isEqual(other.reasons)
6039         ;
6040     }
6041 
6042     bool operator!=(const EDAMInvalidContactsException & other)const
6043 {
6044         return !(*this == other);
6045     }
6046 
6047     Q_PROPERTY(QList<Contact> contacts MEMBER contacts)
6048     Q_PROPERTY(Optional<QString> parameter MEMBER parameter)
6049     Q_PROPERTY(Optional<QList<EDAMInvalidContactReason» reasons MEMBER reasons)
6050 };
6051 
6063 struct QEVERCLOUD_EXPORT SyncChunk:  public Printable
6064 {
6065 private:
6066     Q_GADGET
6067 public:
6071     EverCloudLocalData localData;
6072 
6076     Timestamp currentTime = 0;
6082     Optional<qint32> chunkHighUSN;
6090     qint32 updateCount = 0;
6098     Optional<QList<Note>> notes;
6103     Optional<QList<Notebook>> notebooks;
6108     Optional<QList<Tag>> tags;
6113     Optional<QList<SavedSearch>> searches;
6120     Optional<QList<Resource>> resources;
6125     Optional<QList<Guid>> expungedNotes;
6132     Optional<QList<Guid>> expungedNotebooks;
6137     Optional<QList<Guid>> expungedTags;
6142     Optional<QList<Guid>> expungedSearches;
6147     Optional<QList<LinkedNotebook>> linkedNotebooks;
6152     Optional<QList<Guid>> expungedLinkedNotebooks;
6153 
6154     virtual void print(QTextStream & strm) const override;
6155 
6156     bool operator==(const SyncChunk & other)const
6157 {
6158         return (currentTime == other.currentTime)
6159             && chunkHighUSN.isEqual(other.chunkHighUSN)
6160             && (updateCount == other.updateCount)
6161             && notes.isEqual(other.notes)
6162             && notebooks.isEqual(other.notebooks)
6163             && tags.isEqual(other.tags)
6164             && searches.isEqual(other.searches)
6165             && resources.isEqual(other.resources)
6166             && expungedNotes.isEqual(other.expungedNotes)
6167             && expungedNotebooks.isEqual(other.expungedNotebooks)
6168             && expungedTags.isEqual(other.expungedTags)
```

```
6169             && expungedSearches.isEqual(other.expungedSearches)
6170             && linkedNotebooks.isEqual(other.linkedNotebooks)
6171             && expungedLinkedNotebooks.isEqual(other.expungedLinkedNotebooks)
6172         ;
6173     }
6174
6175     bool operator!=(const SyncChunk & other)const
6176 {
6177         return !(*this == other);
6178     }
6179
6180     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6181     Q_PROPERTY(Timestamp currentTime MEMBER currentTime)
6182     Q_PROPERTY(Optional<qint32> chunkHighUSN MEMBER chunkHighUSN)
6183     Q_PROPERTY(qint32 updateCount MEMBER updateCount)
6184     Q_PROPERTY(Optional<QList<Note» notes MEMBER notes)
6185     Q_PROPERTY(Optional<QList<Notebook» notebooks MEMBER notebooks)
6186     Q_PROPERTY(Optional<QList<Tag» tags MEMBER tags)
6187     Q_PROPERTY(Optional<QList<SavedSearch» searches MEMBER searches)
6188     Q_PROPERTY(Optional<QList<Resource» resources MEMBER resources)
6189     Q_PROPERTY(Optional<QList<Guid» expungedNotes MEMBER expungedNotes)
6190     Q_PROPERTY(Optional<QList<Guid» expungedNotebooks MEMBER expungedNotebooks)
6191     Q_PROPERTY(Optional<QList<Guid» expungedTags MEMBER expungedTags)
6192     Q_PROPERTY(Optional<QList<Guid» expungedSearches MEMBER expungedSearches)
6193     Q_PROPERTY(Optional<QList<LinkedNotebook» linkedNotebooks MEMBER linkedNotebooks)
6194     Q_PROPERTY(Optional<QList<Guid» expungedLinkedNotebooks MEMBER expungedLinkedNotebooks)
6195 };
6196
6201 struct QEVERCLOUD_EXPORT NoteList:  public Printable
6202 {
6203 private:
6204     Q_GADGET
6205 public:
6209     EverCloudLocalData localData;
6210
6215     qint32 startIndex = 0;
6221     qint32 totalNotes = 0;
6227     QList<Note> notes;
6233     Optional<QStringList> stoppedWords;
6240     Optional<QStringList> searchedWords;
6249     Optional<qint32> updateCount;
6253     Optional<QByteArray> searchContextBytes;
6258     Optional<QString> debugInfo;
6259
6260     virtual void print(QTextStream & strm) const override;
6261
6262     bool operator==(const NoteList & other)const
6263 {
6264         return (startIndex == other.startIndex)
6265             && (totalNotes == other.totalNotes)
6266             && (notes == other.notes)
6267             && stoppedWords.isEqual(other.stoppedWords)
6268             && searchedWords.isEqual(other.searchedWords)
6269             && updateCount.isEqual(other.updateCount)
6270             && searchContextBytes.isEqual(other.searchContextBytes)
6271             && debugInfo.isEqual(other.debugInfo)
6272         ;
6273     }
6274
6275     bool operator!=(const NoteList & other)const
6276 {
6277         return !(*this == other);
6278     }
6279
6280     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6281     Q_PROPERTY(qint32 startIndex MEMBER startIndex)
6282     Q_PROPERTY(qint32 totalNotes MEMBER totalNotes)
6283     Q_PROPERTY(QList<Note> notes MEMBER notes)
6284     Q_PROPERTY(Optional<QStringList> stoppedWords MEMBER stoppedWords)
6285     Q_PROPERTY(Optional<QStringList> searchedWords MEMBER searchedWords)
6286     Q_PROPERTY(Optional<qint32> updateCount MEMBER updateCount)
6287     Q_PROPERTY(Optional<QByteArray> searchContextBytes MEMBER searchContextBytes)
6288     Q_PROPERTY(Optional<QString> debugInfo MEMBER debugInfo)
6289 };
6290
6301 struct QEVERCLOUD_EXPORT NoteMetadata:  public Printable
6302 {
6303 private:
6304     Q_GADGET
6305 public:
6309     EverCloudLocalData localData;
6310
6312     Guid guid;
6314     Optional<QString> title;
6316     Optional<qint32> contentLength;
6318     Optional<Timestamp> created;
6320     Optional<Timestamp> updated;
```

```
6322     Optional<Timestamp> deleted;
6324     Optional<qint32> updateSequenceNum;
6326     Optional<QString> notebookGuid;
6328     Optional<QList<Guid>> tagGuids;
6330     Optional<NoteAttributes> attributes;
6336     Optional<QString> largestResourceMime;
6342     Optional<qint32> largestResourceSize;
6343
6344     virtual void print(QTextStream & strm) const override;
6345
6346     bool operator==(const NoteMetadata & other)const
6347 {
6348         return (guid == other.guid)
6349             && title.isEqual(other.title)
6350             && contentLength.isEqual(other.contentLength)
6351             && created.isEqual(other.created)
6352             && updated.isEqual(other.updated)
6353             && deleted.isEqual(other.deleted)
6354             && updateSequenceNum.isEqual(other.updateSequenceNum)
6355             && notebookGuid.isEqual(other.notebookGuid)
6356             && tagGuids.isEqual(other.tagGuids)
6357             && attributes.isEqual(other.attributes)
6358             && largestResourceMime.isEqual(other.largestResourceMime)
6359             && largestResourceSize.isEqual(other.largestResourceSize)
6360         ;
6361     }
6362
6363     bool operator!=(const NoteMetadata & other)const
6364 {
6365         return !(*this == other);
6366     }
6367
6368     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6369     Q_PROPERTY(Guid guid MEMBER guid)
6370     Q_PROPERTY(Optional<QString> title MEMBER title)
6371     Q_PROPERTY(Optional<qint32> contentLength MEMBER contentLength)
6372     Q_PROPERTY(Optional<Timestamp> created MEMBER created)
6373     Q_PROPERTY(Optional<Timestamp> updated MEMBER updated)
6374     Q_PROPERTY(Optional<Timestamp> deleted MEMBER deleted)
6375     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
6376     Q_PROPERTY(Optional<QString> notebookGuid MEMBER notebookGuid)
6377     Q_PROPERTY(Optional<QList<Guid» tagGuids MEMBER tagGuids)
6378     Q_PROPERTY(Optional<NoteAttributes> attributes MEMBER attributes)
6379     Q_PROPERTY(Optional<QString> largestResourceMime MEMBER largestResourceMime)
6380     Q_PROPERTY(Optional<qint32> largestResourceSize MEMBER largestResourceSize)
6381 };
6382
6389 struct QEVERCLOUD_EXPORT NotesMetadataList:  public Printable
6390 {
6391 private:
6392     Q_GADGET
6393 public:
6397     EverCloudLocalData localData;
6398
6403     qint32 startIndex = 0;
6409     qint32 totalNotes = 0;
6417     QList<NoteMetadata> notes;
6423     Optional<QStringList> stoppedWords;
6430     Optional<QStringList> searchedWords;
6439     Optional<qint32> updateCount;
6443     Optional<QByteArray> searchContextBytes;
6448     Optional<QString> debugInfo;
6449
6450     virtual void print(QTextStream & strm) const override;
6451
6452     bool operator==(const NotesMetadataList & other)const
6453 {
6454         return (startIndex == other.startIndex)
6455             && (totalNotes == other.totalNotes)
6456             && (notes == other.notes)
6457             && stoppedWords.isEqual(other.stoppedWords)
6458             && searchedWords.isEqual(other.searchedWords)
6459             && updateCount.isEqual(other.updateCount)
6460             && searchContextBytes.isEqual(other.searchContextBytes)
6461             && debugInfo.isEqual(other.debugInfo)
6462         ;
6463     }
6464
6465     bool operator!=(const NotesMetadataList & other)const
6466 {
6467         return !(*this == other);
6468     }
6469
6470     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6471     Q_PROPERTY(qint32 startIndex MEMBER startIndex)
6472     Q_PROPERTY(qint32 totalNotes MEMBER totalNotes)
6473     Q_PROPERTY(QList<NoteMetadata> notes MEMBER notes)
```

```
6474     Q_PROPERTY(Optional<QStringList> stoppedWords MEMBER stoppedWords)
6475     Q_PROPERTY(Optional<QStringList> searchedWords MEMBER searchedWords)
6476     Q_PROPERTY(Optional<qint32> updateCount MEMBER updateCount)
6477     Q_PROPERTY(Optional<QByteArray> searchContextBytes MEMBER searchContextBytes)
6478     Q_PROPERTY(Optional<QString> debugInfo MEMBER debugInfo)
6479 };
6480
6486 struct QEVERCLOUD_EXPORT NoteEmailParameters:  public Printable
6487 {
6488 private:
6489     Q_GADGET
6490 public:
6494     EverCloudLocalData localData;
6495
6501     Optional<QString> guid;
6508     Optional<Note> note;
6514     Optional<QStringList> toAddresses;
6520     Optional<QStringList> ccAddresses;
6526     Optional<QString> subject;
6531     Optional<QString> message;
6532
6533     virtual void print(QTextStream & strm) const override;
6534
6535     bool operator==(const NoteEmailParameters & other)const
6536 {
6537         return guid.isEqual(other.guid)
6538             && note.isEqual(other.note)
6539             && toAddresses.isEqual(other.toAddresses)
6540             && ccAddresses.isEqual(other.ccAddresses)
6541             && subject.isEqual(other.subject)
6542             && message.isEqual(other.message)
6543         ;
6544     }
6545
6546     bool operator!=(const NoteEmailParameters & other)const
6547 {
6548         return !(*this == other);
6549     }
6550
6551     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6552     Q_PROPERTY(Optional<QString> guid MEMBER guid)
6553     Q_PROPERTY(Optional<Note> note MEMBER note)
6554     Q_PROPERTY(Optional<QStringList> toAddresses MEMBER toAddresses)
6555     Q_PROPERTY(Optional<QStringList> ccAddresses MEMBER ccAddresses)
6556     Q_PROPERTY(Optional<QString> subject MEMBER subject)
6557     Q_PROPERTY(Optional<QString> message MEMBER message)
6558 };
6559
6568 struct QEVERCLOUD_EXPORT RelatedResult:  public Printable
6569 {
6570 private:
6571     Q_GADGET
6572 public:
6576     EverCloudLocalData localData;
6577
6582     Optional<QList<Note>> notes;
6587     Optional<QList<Notebook>> notebooks;
6592     Optional<QList<Tag>> tags;
6600     Optional<QList<NotebookDescriptor>> containingNotebooks;
6602     Optional<QString> debugInfo;
6607     Optional<QList<UserProfile>> experts;
6612     Optional<QList<RelatedContent>> relatedContent;
6646     Optional<QString> cacheKey;
6655     Optional<qint32> cacheExpires;
6656
6657     virtual void print(QTextStream & strm) const override;
6658
6659     bool operator==(const RelatedResult & other)const
6660 {
6661         return notes.isEqual(other.notes)
6662             && notebooks.isEqual(other.notebooks)
6663             && tags.isEqual(other.tags)
6664             && containingNotebooks.isEqual(other.containingNotebooks)
6665             && debugInfo.isEqual(other.debugInfo)
6666             && experts.isEqual(other.experts)
6667             && relatedContent.isEqual(other.relatedContent)
6668             && cacheKey.isEqual(other.cacheKey)
6669             && cacheExpires.isEqual(other.cacheExpires)
6670         ;
6671     }
6672
6673     bool operator!=(const RelatedResult & other)const
6674 {
6675         return !(*this == other);
6676     }
6677
6678     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
```

```
6679     Q_PROPERTY(Optional<QList<Note» notes MEMBER notes)
6680     Q_PROPERTY(Optional<QList<Notebook» notebooks MEMBER notebooks)
6681     Q_PROPERTY(Optional<QList<Tag» tags MEMBER tags)
6682     Q_PROPERTY(Optional<QList<NotebookDescriptor» containingNotebooks MEMBER containingNotebooks)
6683     Q_PROPERTY(Optional<QString> debugInfo MEMBER debugInfo)
6684     Q_PROPERTY(Optional<QList<UserProfile» experts MEMBER experts)
6685     Q_PROPERTY(Optional<QList<RelatedContent» relatedContent MEMBER relatedContent)
6686     Q_PROPERTY(Optional<QString> cacheKey MEMBER cacheKey)
6687     Q_PROPERTY(Optional<qint32> cacheExpires MEMBER cacheExpires)
6688 };
6689
6695 struct QEVERCLOUD_EXPORT UpdateNoteIfUsnMatchesResult:  public Printable
6696 {
6697 private:
6698     Q_GADGET
6699 public:
6703     EverCloudLocalData localData;
6704
6713     Optional<Note> note;
6717     Optional<bool> updated;
6718
6719     virtual void print(QTextStream & strm) const override;
6720
6721     bool operator==(const UpdateNoteIfUsnMatchesResult & other)const
6722 {
6723         return note.isEqual(other.note)
6724             && updated.isEqual(other.updated)
6725         ;
6726     }
6727
6728     bool operator!=(const UpdateNoteIfUsnMatchesResult & other)const
6729 {
6730         return !(*this == other);
6731     }
6732
6733     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6734     Q_PROPERTY(Optional<Note> note MEMBER note)
6735     Q_PROPERTY(Optional<bool> updated MEMBER updated)
6736 };
6737
6743 struct QEVERCLOUD_EXPORT InvitationShareRelationship:  public Printable
6744 {
6745 private:
6746     Q_GADGET
6747 public:
6751     EverCloudLocalData localData;
6752
6757     Optional<QString> displayName;
6766     Optional<UserIdentity> recipientUserIdentity;
6774     Optional<ShareRelationshipPrivilegeLevel> privilege;
6780     Optional<UserID> sharerUserId;
6781
6782     virtual void print(QTextStream & strm) const override;
6783
6784     bool operator==(const InvitationShareRelationship & other)const
6785 {
6786         return displayName.isEqual(other.displayName)
6787             && recipientUserIdentity.isEqual(other.recipientUserIdentity)
6788             && privilege.isEqual(other.privilege)
6789             && sharerUserId.isEqual(other.sharerUserId)
6790         ;
6791     }
6792
6793     bool operator!=(const InvitationShareRelationship & other)const
6794 {
6795         return !(*this == other);
6796     }
6797
6798     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6799     Q_PROPERTY(Optional<QString> displayName MEMBER displayName)
6800     Q_PROPERTY(Optional<UserIdentity> recipientUserIdentity MEMBER recipientUserIdentity)
6801     Q_PROPERTY(Optional<ShareRelationshipPrivilegeLevel> privilege MEMBER privilege)
6802     Q_PROPERTY(Optional<UserID> sharerUserId MEMBER sharerUserId)
6803 };
6804
6812 struct QEVERCLOUD_EXPORT ShareRelationships:  public Printable
6813 {
6814 private:
6815     Q_GADGET
6816 public:
6820     EverCloudLocalData localData;
6821
6826     Optional<QList<InvitationShareRelationship>> invitations;
6832     Optional<QList<MemberShareRelationship>> memberships;
6841     Optional<ShareRelationshipRestrictions> invitationRestrictions;
6842
6843     virtual void print(QTextStream & strm) const override;
```

```
6844
6845     bool operator==(const ShareRelationships & other)const
6846 {
6847         return invitations.isEqual(other.invitations)
6848             && memberships.isEqual(other.memberships)
6849             && invitationRestrictions.isEqual(other.invitationRestrictions)
6850         ;
6851     }
6852
6853     bool operator!=(const ShareRelationships & other)const
6854 {
6855         return !(*this == other);
6856     }
6857
6858     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6859     Q_PROPERTY(Optional<QList<InvitationShareRelationship» invitations MEMBER invitations)
6860     Q_PROPERTY(Optional<QList<MemberShareRelationship» memberships MEMBER memberships)
6861     Q_PROPERTY(Optional<ShareRelationshipRestrictions> invitationRestrictions MEMBER
      invitationRestrictions)
6862 };
6863
6869 struct QEVERCLOUD_EXPORT ManageNotebookSharesParameters:  public Printable
6870 {
6871 private:
6872     Q_GADGET
6873 public:
6877     EverCloudLocalData localData;
6878
6882     Optional<QString> notebookGuid;
6887     Optional<QString> inviteMessage;
6900     Optional<QList<MemberShareRelationship>> membershipsToUpdate;
6914     Optional<QList<InvitationShareRelationship>> invitationsToCreateOrUpdate;
6923     Optional<QList<UserIdentity>> unshares;
6924
6925     virtual void print(QTextStream & strm) const override;
6926
6927     bool operator==(const ManageNotebookSharesParameters & other)const
6928 {
6929         return notebookGuid.isEqual(other.notebookGuid)
6930             && inviteMessage.isEqual(other.inviteMessage)
6931             && membershipsToUpdate.isEqual(other.membershipsToUpdate)
6932             && invitationsToCreateOrUpdate.isEqual(other.invitationsToCreateOrUpdate)
6933             && unshares.isEqual(other.unshares)
6934         ;
6935     }
6936
6937     bool operator!=(const ManageNotebookSharesParameters & other)const
6938 {
6939         return !(*this == other);
6940     }
6941
6942     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
6943     Q_PROPERTY(Optional<QString> notebookGuid MEMBER notebookGuid)
6944     Q_PROPERTY(Optional<QString> inviteMessage MEMBER inviteMessage)
6945     Q_PROPERTY(Optional<QList<MemberShareRelationship» membershipsToUpdate MEMBER membershipsToUpdate)
6946     Q_PROPERTY(Optional<QList<InvitationShareRelationship» invitationsToCreateOrUpdate MEMBER
      invitationsToCreateOrUpdate)
6947     Q_PROPERTY(Optional<QList<UserIdentity» unshares MEMBER unshares)
6948 };
6949
6961 struct QEVERCLOUD_EXPORT ManageNotebookSharesError:  public Printable
6962 {
6963 private:
6964     Q_GADGET
6965 public:
6969     EverCloudLocalData localData;
6970
6975     Optional<UserIdentity> userIdentity;
6981     Optional<EDAMUserException> userException;
6987     Optional<EDAMNotFoundException> notFoundException;
6988
6989     virtual void print(QTextStream & strm) const override;
6990
6991     bool operator==(const ManageNotebookSharesError & other)const
6992 {
6993         return userIdentity.isEqual(other.userIdentity)
6994             && userException.isEqual(other.userException)
6995             && notFoundException.isEqual(other.notFoundException)
6996         ;
6997     }
6998
6999     bool operator!=(const ManageNotebookSharesError & other)const
7000 {
7001         return !(*this == other);
7002     }
7003
7004     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
```

```
7005     Q_PROPERTY(Optional<UserIdentity> userIdentity MEMBER userIdentity)
7006     Q_PROPERTY(Optional<EDAMUserException> userException MEMBER userException)
7007     Q_PROPERTY(Optional<EDAMNotFoundException> notFoundException MEMBER notFoundException)
7008 };
7009
7014 struct QEVERCLOUD_EXPORT ManageNotebookSharesResult:  public Printable
7015 {
7016 private:
7017     Q_GADGET
7018 public:
7022     EverCloudLocalData localData;
7023
7029     Optional<QList<ManageNotebookSharesError>> errors;
7030
7031     virtual void print(QTextStream & strm) const override;
7032
7033     bool operator==(const ManageNotebookSharesResult & other)const
7034 {
7035         return errors.isEqual(other.errors)
7036         ;
7037     }
7038
7039     bool operator!=(const ManageNotebookSharesResult & other)const
7040 {
7041         return !(*this == other);
7042     }
7043
7044     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
7045     Q_PROPERTY(Optional<QList<ManageNotebookSharesError» errors MEMBER errors)
7046 };
7047
7052 struct QEVERCLOUD_EXPORT SharedNoteTemplate:  public Printable
7053 {
7054 private:
7055     Q_GADGET
7056 public:
7060     EverCloudLocalData localData;
7061
7065     Optional<Guid> noteGuid;
7073     Optional<MessageThreadID> recipientThreadId;
7080     Optional<QList<Contact>> recipientContacts;
7084     Optional<SharedNotePrivilegeLevel> privilege;
7085
7086     virtual void print(QTextStream & strm) const override;
7087
7088     bool operator==(const SharedNoteTemplate & other)const
7089 {
7090         return noteGuid.isEqual(other.noteGuid)
7091             && recipientThreadId.isEqual(other.recipientThreadId)
7092             && recipientContacts.isEqual(other.recipientContacts)
7093             && privilege.isEqual(other.privilege)
7094         ;
7095     }
7096
7097     bool operator!=(const SharedNoteTemplate & other)const
7098 {
7099         return !(*this == other);
7100     }
7101
7102     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
7103     Q_PROPERTY(Optional<Guid> noteGuid MEMBER noteGuid)
7104     Q_PROPERTY(Optional<MessageThreadID> recipientThreadId MEMBER recipientThreadId)
7105     Q_PROPERTY(Optional<QList<Contact» recipientContacts MEMBER recipientContacts)
7106     Q_PROPERTY(Optional<SharedNotePrivilegeLevel> privilege MEMBER privilege)
7107 };
7108
7113 struct QEVERCLOUD_EXPORT NotebookShareTemplate:  public Printable
7114 {
7115 private:
7116     Q_GADGET
7117 public:
7121     EverCloudLocalData localData;
7122
7126     Optional<Guid> notebookGuid;
7134     Optional<MessageThreadID> recipientThreadId;
7141     Optional<QList<Contact>> recipientContacts;
7145     Optional<SharedNotebookPrivilegeLevel> privilege;
7146
7147     virtual void print(QTextStream & strm) const override;
7148
7149     bool operator==(const NotebookShareTemplate & other)const
7150 {
7151         return notebookGuid.isEqual(other.notebookGuid)
7152             && recipientThreadId.isEqual(other.recipientThreadId)
7153             && recipientContacts.isEqual(other.recipientContacts)
7154             && privilege.isEqual(other.privilege)
7155         ;
```

```
7156     }
7157
7158     bool operator!=(const NotebookShareTemplate & other)const
7159 {
7160         return !(*this == other);
7161     }
7162
7163     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
7164     Q_PROPERTY(Optional<Guid> notebookGuid MEMBER notebookGuid)
7165     Q_PROPERTY(Optional<MessageThreadID> recipientThreadId MEMBER recipientThreadId)
7166     Q_PROPERTY(Optional<QList<Contact» recipientContacts MEMBER recipientContacts)
7167     Q_PROPERTY(Optional<SharedNotebookPrivilegeLevel> privilege MEMBER privilege)
7168 };
7169
7174 struct QEVERCLOUD_EXPORT CreateOrUpdateNotebookSharesResult:  public Printable
7175 {
7176 private:
7177     Q_GADGET
7178 public:
7182     EverCloudLocalData localData;
7183
7187     Optional<qint32> updateSequenceNum;
7194     Optional<QList<SharedNotebook>> matchingShares;
7195
7196     virtual void print(QTextStream & strm) const override;
7197
7198     bool operator==(const CreateOrUpdateNotebookSharesResult & other)const
7199 {
7200         return updateSequenceNum.isEqual(other.updateSequenceNum)
7201             && matchingShares.isEqual(other.matchingShares)
7202         ;
7203     }
7204
7205     bool operator!=(const CreateOrUpdateNotebookSharesResult & other)const
7206 {
7207         return !(*this == other);
7208     }
7209
7210     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
7211     Q_PROPERTY(Optional<qint32> updateSequenceNum MEMBER updateSequenceNum)
7212     Q_PROPERTY(Optional<QList<SharedNotebook» matchingShares MEMBER matchingShares)
7213 };
7214
7226 struct QEVERCLOUD_EXPORT ManageNoteSharesError:  public Printable
7227 {
7228 private:
7229     Q_GADGET
7230 public:
7234     EverCloudLocalData localData;
7235
7240     Optional<IdentityID> identityID;
7245     Optional<UserID> userID;
7250     Optional<EDAMUserException> userException;
7258     Optional<EDAMNotFoundException> notFoundException;
7259
7260     virtual void print(QTextStream & strm) const override;
7261
7262     bool operator==(const ManageNoteSharesError & other)const
7263 {
7264         return identityID.isEqual(other.identityID)
7265             && userID.isEqual(other.userID)
7266             && userException.isEqual(other.userException)
7267             && notFoundException.isEqual(other.notFoundException)
7268         ;
7269     }
7270
7271     bool operator!=(const ManageNoteSharesError & other)const
7272 {
7273         return !(*this == other);
7274     }
7275
7276     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
7277     Q_PROPERTY(Optional<IdentityID> identityID MEMBER identityID)
7278     Q_PROPERTY(Optional<UserID> userID MEMBER userID)
7279     Q_PROPERTY(Optional<EDAMUserException> userException MEMBER userException)
7280     Q_PROPERTY(Optional<EDAMNotFoundException> notFoundException MEMBER notFoundException)
7281 };
7282
7287 struct QEVERCLOUD_EXPORT ManageNoteSharesResult:  public Printable
7288 {
7289 private:
7290     Q_GADGET
7291 public:
7295     EverCloudLocalData localData;
7296
7302     Optional<QList<ManageNoteSharesError>> errors;
7303
```

```
7304     virtual void print(QTextStream & strm) const override;
7305
7306     bool operator==(const ManageNoteSharesResult & other)const
7307 {
7308         return errors.isEqual(other.errors)
7309         ;
7310     }
7311
7312     bool operator!=(const ManageNoteSharesResult & other)const
7313 {
7314         return !(*this == other);
7315     }
7316
7317     Q_PROPERTY(EverCloudLocalData localData MEMBER localData)
7318     Q_PROPERTY(Optional<QList<ManageNoteSharesError» errors MEMBER errors)
7319 };
7320
7321 } // namespace qevercloud
7322
7323 Q_DECLARE_METATYPE(qevercloud::EverCloudLocalData)
7324 Q_DECLARE_METATYPE(qevercloud::SyncState)
7325 Q_DECLARE_METATYPE(qevercloud::SyncChunkFilter)
7326 Q_DECLARE_METATYPE(qevercloud::NoteFilter)
7327 Q_DECLARE_METATYPE(qevercloud::NotesMetadataResultSpec)
7328 Q_DECLARE_METATYPE(qevercloud::NoteCollectionCounts)
7329 Q_DECLARE_METATYPE(qevercloud::NoteResultSpec)
7330 Q_DECLARE_METATYPE(qevercloud::NoteVersionId)
7331 Q_DECLARE_METATYPE(qevercloud::RelatedQuery)
7332 Q_DECLARE_METATYPE(qevercloud::RelatedResultSpec)
7333 Q_DECLARE_METATYPE(qevercloud::ShareRelationshipRestrictions)
7334 Q_DECLARE_METATYPE(qevercloud::MemberShareRelationship)
7335 Q_DECLARE_METATYPE(qevercloud::NoteShareRelationshipRestrictions)
7336 Q_DECLARE_METATYPE(qevercloud::NoteMemberShareRelationship)
7337 Q_DECLARE_METATYPE(qevercloud::NoteInvitationShareRelationship)
7338 Q_DECLARE_METATYPE(qevercloud::NoteShareRelationships)
7339 Q_DECLARE_METATYPE(qevercloud::ManageNoteSharesParameters)
7340 Q_DECLARE_METATYPE(qevercloud::Data)
7341 Q_DECLARE_METATYPE(qevercloud::UserAttributes)
7342 Q_DECLARE_METATYPE(qevercloud::BusinessUserAttributes)
7343 Q_DECLARE_METATYPE(qevercloud::Accounting)
7344 Q_DECLARE_METATYPE(qevercloud::BusinessUserInfo)
7345 Q_DECLARE_METATYPE(qevercloud::AccountLimits)
7346 Q_DECLARE_METATYPE(qevercloud::User)
7347 Q_DECLARE_METATYPE(qevercloud::Contact)
7348 Q_DECLARE_METATYPE(qevercloud::Identity)
7349 Q_DECLARE_METATYPE(qevercloud::Tag)
7350 Q_DECLARE_METATYPE(qevercloud::LazyMap)
7351 Q_DECLARE_METATYPE(qevercloud::ResourceAttributes)
7352 Q_DECLARE_METATYPE(qevercloud::Resource)
7353 Q_DECLARE_METATYPE(qevercloud::NoteAttributes)
7354 Q_DECLARE_METATYPE(qevercloud::SharedNote)
7355 Q_DECLARE_METATYPE(qevercloud::NoteRestrictions)
7356 Q_DECLARE_METATYPE(qevercloud::NoteLimits)
7357 Q_DECLARE_METATYPE(qevercloud::Note)
7358 Q_DECLARE_METATYPE(qevercloud::Publishing)
7359 Q_DECLARE_METATYPE(qevercloud::BusinessNotebook)
7360 Q_DECLARE_METATYPE(qevercloud::SavedSearchScope)
7361 Q_DECLARE_METATYPE(qevercloud::SavedSearch)
7362 Q_DECLARE_METATYPE(qevercloud::SharedNotebookRecipientSettings)
7363 Q_DECLARE_METATYPE(qevercloud::NotebookRecipientSettings)
7364 Q_DECLARE_METATYPE(qevercloud::SharedNotebook)
7365 Q_DECLARE_METATYPE(qevercloud::CanMoveToContainerRestrictions)
7366 Q_DECLARE_METATYPE(qevercloud::NotebookRestrictions)
7367 Q_DECLARE_METATYPE(qevercloud::Notebook)
7368 Q_DECLARE_METATYPE(qevercloud::LinkedNotebook)
7369 Q_DECLARE_METATYPE(qevercloud::NotebookDescriptor)
7370 Q_DECLARE_METATYPE(qevercloud::UserProfile)
7371 Q_DECLARE_METATYPE(qevercloud::RelatedContentImage)
7372 Q_DECLARE_METATYPE(qevercloud::RelatedContent)
7373 Q_DECLARE_METATYPE(qevercloud::BusinessInvitation)
7374 Q_DECLARE_METATYPE(qevercloud::UserIdentity)
7375 Q_DECLARE_METATYPE(qevercloud::PublicUserInfo)
7376 Q_DECLARE_METATYPE(qevercloud::UserUrls)
7377 Q_DECLARE_METATYPE(qevercloud::AuthenticationResult)
7378 Q_DECLARE_METATYPE(qevercloud::BootstrapSettings)
7379 Q_DECLARE_METATYPE(qevercloud::BootstrapProfile)
7380 Q_DECLARE_METATYPE(qevercloud::BootstrapInfo)
7381 Q_DECLARE_METATYPE(qevercloud::EDAMUserException)
7382 Q_DECLARE_METATYPE(qevercloud::EDAMSystemException)
7383 Q_DECLARE_METATYPE(qevercloud::EDAMNotFoundException)
7384 Q_DECLARE_METATYPE(qevercloud::EDAMInvalidContactsException)
7385 Q_DECLARE_METATYPE(qevercloud::SyncChunk)
7386 Q_DECLARE_METATYPE(qevercloud::NoteList)
7387 Q_DECLARE_METATYPE(qevercloud::NoteMetadata)
7388 Q_DECLARE_METATYPE(qevercloud::NotesMetadataList)
7389 Q_DECLARE_METATYPE(qevercloud::NoteEmailParameters)
7390 Q_DECLARE_METATYPE(qevercloud::RelatedResult)
```

```
7391 Q_DECLARE_METATYPE(qevercloud::UpdateNoteIfUsnMatchesResult)
7392 Q_DECLARE_METATYPE(qevercloud::InvitationShareRelationship)
7393 Q_DECLARE_METATYPE(qevercloud::ShareRelationships)
7394 Q_DECLARE_METATYPE(qevercloud::ManageNotebookSharesParameters)
7395 Q_DECLARE_METATYPE(qevercloud::ManageNotebookSharesError)
7396 Q_DECLARE_METATYPE(qevercloud::ManageNotebookSharesResult)
7397 Q_DECLARE_METATYPE(qevercloud::SharedNoteTemplate)
7398 Q_DECLARE_METATYPE(qevercloud::NotebookShareTemplate)
7399 Q_DECLARE_METATYPE(qevercloud::CreateOrUpdateNotebookSharesResult)
7400 Q_DECLARE_METATYPE(qevercloud::ManageNoteSharesError)
7401 Q_DECLARE_METATYPE(qevercloud::ManageNoteSharesResult)
7402
7403
7404 #endif // QEVERCLOUD_GENERATED_TYPES_H
```

8.23 Globals.h File Reference

```
#include "Export.h"
#include <QNetworkProxy>
```

Namespaces

- namespace qevercloud

Functions

- QEVERCLOUD_EXPORT QNetworkProxy qevercloud::evernoteNetworkProxy ()
- QEVERCLOUD_EXPORT void qevercloud::setEvernoteNetworkProxy (QNetworkProxy proxy)
- QEVERCLOUD_EXPORT void qevercloud::resetEvernoteNetworkProxy ()
- QEVERCLOUD_EXPORT int qevercloud::libraryVersion ()
- QEVERCLOUD_EXPORT void qevercloud::initializeQEverCloud ()

8.24 Globals.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_GLOBALS_H
10 #define QEVERCLOUD_GLOBALS_H
11
12 #include "Export.h"
13
14 #include <QNetworkProxy>
15
19 namespace qevercloud {
20
22
39 QEVERCLOUD_EXPORT QNetworkProxy evernoteNetworkProxy();
40
56 QEVERCLOUD_EXPORT void setEvernoteNetworkProxy(QNetworkProxy proxy);
57
66 QEVERCLOUD_EXPORT void resetEvernoteNetworkProxy();
67
69
73 Q_DECL_DEPRECATED_X("libraryVersion is deprecated, use qevercloudVersionMajor/Minor/Patch instead")
74 QEVERCLOUD_EXPORT int libraryVersion();
75
77
82 QEVERCLOUD_EXPORT void initializeQEverCloud();
83
84 } // namespace qevercloud
85
86 #endif // QEVERCLOUD_GLOBALS_H
```

8.25 Helpers.h File Reference

```
#include <QtGlobal>
#include <QObject>
#include "VersionInfo.h"
```

Classes

- class qevercloud::QAssociativeContainerReferenceWrapper< Container >
- struct qevercloud::QAssociativeContainerReferenceWrapper< Container >::iterator
- class qevercloud::QAssociativeContainerConstReferenceWrapper< Container >
- struct qevercloud::QAssociativeContainerConstReferenceWrapper< Container >::iterator

Namespaces

- namespace qevercloud

Functions

- template<class Container >
  QAssociativeContainerReferenceWrapper< Container > qevercloud::toRange (Container &container)
- template<class Container >
  QAssociativeContainerConstReferenceWrapper< Container > qevercloud::toRange (const Container &container)

8.26 Helpers.h

Go to the documentation of this file.

```
1
8 #ifndef QEVERCLOUD_HELPERS_H
9 #define QEVERCLOUD_HELPERS_H
10
11 #include <QtGlobal>
12 #include <QObject>
13
14 #include "VersionInfo.h"
15
16 namespace qevercloud {
17
19
20 #if QT_VERSION < QT_VERSION_CHECK(5, 7, 0)
21
22 // this adds const to non-const objects (like std::as_const)
23 template <typename T>
24 Q_DECL_CONSTEXPR
25 typename std::add_const<T>::type & qAsConst(T & t) Q_DECL_NOTHROW
26 {
27     return t;
28 }
29
30 // prevent rvalue arguments:
31 template <typename T>
32 void qAsConst(const T &&) Q_DECL_EQ_DELETE;
33
34 #endif // QT_VERSION_CHECK
35
37
38 template <typename Container>
39 class QAssociativeContainerReferenceWrapper
40 {
```

```
41 public:
42     struct iterator
43     {
44         typename Container::iterator m_iterator;
45         iterator(const typename Container::iterator it) :
46             m_iterator(it)
47         {}
48 
49         typename Container::iterator operator*()
50         {
51             return m_iterator;
52         }
53 
54         iterator & operator++()
55         {
56             ++m_iterator;
57             return *this;
58         }
59 
60         bool operator!=(const iterator & other)const
61 {
62             return m_iterator != other.m_iterator;
63         }
64     };
65 
66 public:
67     QAssociativeContainerReferenceWrapper(Container & container)
68         :  m_container(container)
69     {}
70 
71     iterator begin() {
72         return m_container.begin();
73     }
74 
75     iterator end() {
76         return m_container.end();
77     }
78 
79 private:
80     Container & m_container;
81 };
82 
84 
85 template <typename Container>
86 class QAssociativeContainerConstReferenceWrapper
87 {
88 public:
89     struct iterator
90     {
91         typename Container::const_iterator m_iterator;
92         iterator(const typename Container::const_iterator it) :
93             m_iterator(it)
94         {}
95 
96         typename Container::const_iterator operator*()
97         {
98             return m_iterator;
99         }
100 
101          iterator & operator++()
102          {
103              ++m_iterator;
104              return *this;
105          }
106 
107          bool operator!=(const iterator & other)const
108 {
109              return m_iterator != other.m_iterator;
110          }
111     };
112 
113 public:
114     QAssociativeContainerConstReferenceWrapper(const Container & container)
115         :  m_container(container)
116     {}
117 
118     iterator begin()const {
119         return m_container.begin();
120     }
121 
122     iterator end()const {
123         return m_container.end();
124     }
125 
126 private:
127     const Container & m_container;
128 };
```

```
129
131
132 template <class Container>
133 QAssociativeContainerReferenceWrapper<Container> toRange(Container & container)
134 {
135     return QAssociativeContainerReferenceWrapper<Container>(container);
136 }
137
139
140 template <class Container>
141 QAssociativeContainerConstReferenceWrapper<Container> toRange(
142     const Container & container)
143 {
144     return QAssociativeContainerConstReferenceWrapper<Container>(container);
145 }
146
147 } // namespace qevercloud
148
149 #endif // QEVERCLOUD_HELPERS_H
```

8.27 InkNoteImageDownloader.h File Reference

```
#include "AsyncResult.h"
#include "Export.h"
#include "generated/Types.h"
#include <QByteArray>
#include <QString>
#include <QNetworkAccessManager>
```

Classes

- class qevercloud::InkNoteImageDownloader

  the InkNoteImageDownloader class is for downloading the images of ink notes which can be created with the official Evernote client on Windows (only with it, at least at the time of this writing).

Namespaces

- namespace qevercloud

8.28 InkNoteImageDownloader.h

Go to the documentation of this file.

```
1
8 #ifndef QEVERCLOD_INK_NOTE_IMAGE_DOWNLOADER_H
9 #define QEVERCLOD_INK_NOTE_IMAGE_DOWNLOADER_H
10
11 #include "AsyncResult.h"
12 #include "Export.h"
13
14 #include "generated/Types.h"
15
16 #include <QByteArray>
17 #include <QString>
18 #include <QNetworkAccessManager>
19
20 namespace qevercloud {
21
23 class InkNoteImageDownloaderPrivate;
42 class QEVERCLOUD_EXPORT InkNoteImageDownloader
43 {
44 public:
51     InkNoteImageDownloader();
```

```
52
68      InkNoteImageDownloader(
69          QString host, QString shardId, QString authenticationToken, int width,
70          int height);
71
72      virtual ~InkNoteImageDownloader();
73
78      InkNoteImageDownloader & setHost(QString host);
79
85      InkNoteImageDownloader & setShardId(QString shardId);
86
92      InkNoteImageDownloader & setAuthenticationToken(
93          QString authenticationToken);
94
99      InkNoteImageDownloader & setWidth(int width);
100
105      InkNoteImageDownloader & setHeight(int height);
106
132      QByteArray download(
133          Guid guid, const bool isPublic = false,
134          const qint64 timeoutMsec = 30000);
135
136 private:
137      InkNoteImageDownloaderPrivate * const d_ptr;
138      Q_DECLARE_PRIVATE(InkNoteImageDownloader)
139 };
140
141 } // namespace qevercloud
142
143 #endif // QEVERCLOD_INK_NOTE_IMAGE_DOWNLOADER_H
```

8.29 Log.h File Reference

```
#include "Export.h"
#include "Helpers.h"
#include <QDateTime>
#include <QDebug>
#include <QObject>
#include <QTextStream>
#include <memory>
```

Classes

- class qevercloud::ILogger

Namespaces

- namespace qevercloud

Macros

- #define __QEVERCLOUD_LOG_BASE(component, level, message)
- #define QEC_TRACE(component, message) __QEVERCLOUD_LOG_BASE(component, LogLevel::Trace, message) \
- #define QEC_DEBUG(component, message) __QEVERCLOUD_LOG_BASE(component, LogLevel::↩ Debug, message) \
- #define QEC_INFO(component, message) __QEVERCLOUD_LOG_BASE(component, LogLevel::Info, message) \
- #define QEC_WARNING(component, message) __QEVERCLOUD_LOG_BASE(component, LogLevel::↩ Warn, message) \
- #define QEC_ERROR(component, message) __QEVERCLOUD_LOG_BASE(component, LogLevel::Error, message) \

Typedefs

- using qevercloud::ILoggerPtr = std::shared_ptr< ILogger >

Enumerations

- enum class qevercloud::LogLevel {
  qevercloud::Trace = 0 , qevercloud::Debug , qevercloud::Info , qevercloud::Warn ,
  qevercloud::Error }

Functions

- QEVERCLOUD_EXPORT QTextStream & qevercloud::operator<< (QTextStream &out, const LogLevel level)
- QEVERCLOUD_EXPORT QDebug & qevercloud::operator<< (QDebug &out, const LogLevel level)
- QEVERCLOUD_EXPORT ILoggerPtr qevercloud::logger ()
- QEVERCLOUD_EXPORT void qevercloud::setLogger (ILoggerPtr logger)
- QEVERCLOUD_EXPORT ILoggerPtr qevercloud::nullLogger ()
- QEVERCLOUD_EXPORT ILoggerPtr qevercloud::newStdErrLogger (LogLevel level=LogLevel::Warn)

8.29.1 Macro Definition Documentation

8.29.1.1 __QEVERCLOUD_LOG_BASE

```
#define __QEVERCLOUD_LOG_BASE(
                component,
                level,
                message )
```

Value:

```
    {                                                                   \
        auto __qevercloudLogger = ::qevercloud::logger();               \
        if (__qevercloudLogger->shouldLog(level, component))            \
        {                                                               \
            QString msg;                                                \
            QDebug dbg(&msg);                                           \
            dbg.nospace();                                              \
            dbg.noquote();                                              \
            dbg << message;                                            \
            __qevercloudLogger->log(                                    \
                level,                                                  \
                component,                                              \
                __FILE__,                                               \
                __LINE__,                                               \
                QDateTime::currentMSecsSinceEpoch(),                    \
                msg);                                                   \
        }                                                               \
    }                                                                   \
```

8.29.1.2 QEC_DEBUG

```
#define QEC_DEBUG(
              component,
              message )  __QEVERCLOUD_LOG_BASE(component, LogLevel::Debug, message) \
```

8.29.1.3 QEC_ERROR

```
#define QEC_ERROR(
              component,
              message )  __QEVERCLOUD_LOG_BASE(component, LogLevel::Error, message) \
```

8.29.1.4 QEC_INFO

```
#define QEC_INFO(
              component,
              message )  __QEVERCLOUD_LOG_BASE(component, LogLevel::Info, message) \
```

8.29.1.5 QEC_TRACE

```
#define QEC_TRACE(
              component,
              message )  __QEVERCLOUD_LOG_BASE(component, LogLevel::Trace, message) \
```

8.29.1.6 QEC_WARNING

```
#define QEC_WARNING(
              component,
              message )  __QEVERCLOUD_LOG_BASE(component, LogLevel::Warn, message) \
```

8.30 Log.h

Go to the documentation of this file.

```
1
8 #ifndef QEVERCLOUD_LOG_H
9 #define QEVERCLOUD_LOG_H
10
11 #include "Export.h"
12 #include "Helpers.h"
13
14 #include <QDateTime>
15 #include <QDebug>
16 #include <QObject>
17 #include <QTextStream>
18
19 #include <memory>
20
21 namespace qevercloud {
22
24
25 enum class LogLevel
26 {
27     Trace = 0,
28     Debug,
29     Info,
30     Warn,
31     Error
32 };
33
34 QEVERCLOUD_EXPORT QTextStream & operator<<(
35     QTextStream & out, const LogLevel level);
36
37 QEVERCLOUD_EXPORT QDebug & operator<<(
38     QDebug & out, const LogLevel level);
39
41
42 class QEVERCLOUD_EXPORT ILogger
43 {
44 public:
45     virtual bool shouldLog(
46         const LogLevel level, const char * component) const = 0;
47
48     virtual void log(
49         const LogLevel level, const char * component, const char * fileName,
50         const quint32 lineNumber, const qint64 timestamp,
51         const QString & message) = 0;
52
53     virtual void setLevel(const LogLevel level) = 0;
54
55     virtual LogLevel level() const = 0;
56 };
57
58 using ILoggerPtr = std::shared_ptr<ILogger>;
59
61
62 QEVERCLOUD_EXPORT ILoggerPtr logger();
63
64 QEVERCLOUD_EXPORT void setLogger(ILoggerPtr logger);
65
66 QEVERCLOUD_EXPORT ILoggerPtr nullLogger();
67
68 QEVERCLOUD_EXPORT ILoggerPtr newStdErrLogger(LogLevel level = LogLevel::Warn);
69
71
72 #define __QEVERCLOUD_LOG_BASE(component, level, message)                       \
73 {                                                                          \
74 auto __qevercloudLogger = ::qevercloud::logger();                      \
75 if (__qevercloudLogger->shouldLog(level, component))                   \
76 {                                                                      \
77 QString msg;                                                       \
78 QDebug dbg(&msg);                                                  \
79 dbg.nospace();                                                     \
80 dbg.noquote();                                                     \
81 dbg << message;                                                    \
82 __qevercloudLogger->log(                                           \
83 level,                                                         \
84 component,                                                     \
85 __FILE__,                                                      \
86 __LINE__,                                                      \
87 QDateTime::currentMSecsSinceEpoch(),                           \
88 msg);                                                          \
89 }                                                                  \
90 }                                                                      \
91 // __QEVERCLOUD_LOG_BASE
92
```

```
93 #define QEC_TRACE(component, message)                                          \
94 __QEVERCLOUD_LOG_BASE(component, LogLevel::Trace, message)                 \
95 // QEC_TRACE
96
97 #define QEC_DEBUG(component, message)                                          \
98 __QEVERCLOUD_LOG_BASE(component, LogLevel::Debug, message)                 \
99 // QEC_DEBUG
100
101 #define QEC_INFO(component, message)                                           \
102 __QEVERCLOUD_LOG_BASE(component, LogLevel::Info, message)                  \
103 // QEC_INFO
104
105 #define QEC_WARNING(component, message)                                        \
106 __QEVERCLOUD_LOG_BASE(component, LogLevel::Warn, message)                  \
107 // QEC_WARNING
108
109 #define QEC_ERROR(component, message)                                          \
110 __QEVERCLOUD_LOG_BASE(component, LogLevel::Error, message)                 \
111 // QEC_ERROR
112
113 } // namespace qevercloud
114
115 #endif // QEVERCLOUD_LOG_H
```

8.31 OAuth.h File Reference

```
#include "Export.h"
#include "Helpers.h"
#include "Printable.h"
#include "generated/Types.h"
#include <QDialog>
#include <QList>
#include <QNetworkCookie>
#include <QString>
```

Classes

- class qevercloud::EvernoteOAuthWebView

  The class is tailored specifically for OAuth authorization with Evernote.
- struct qevercloud::EvernoteOAuthWebView::OAuthResult
- class qevercloud::EvernoteOAuthDialog

  Authorizes your app with the Evernote service by means of OAuth authentication.

Namespaces

- namespace qevercloud

Functions

- void qevercloud::setNonceGenerator (quint64(∗nonceGenerator)())

  Sets the function to use for nonce generation for OAuth authentication.

8.32 OAuth.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_OAUTH_H
10 #define QEVERCLOUD_OAUTH_H
11
12 #include "Export.h"
13 #include "Helpers.h"
14 #include "Printable.h"
15
16 #include "generated/Types.h"
17
18 #include <QDialog>
19 #include <QList>
20 #include <QNetworkCookie>
21 #include <QString>
22
23 namespace qevercloud {
24
39 void setNonceGenerator(quint64 (*nonceGenerator)());
40
42 class EvernoteOAuthWebViewPrivate;
57 class QEVERCLOUD_EXPORT EvernoteOAuthWebView:  public QWidget
58 {
59     Q_OBJECT
60 public:
61     EvernoteOAuthWebView(QWidget * parent = Q_NULLPTR);
62
83     void authenticate(
84         QString host, QString consumerKey, QString consumerSecret,
85         const qint64 timeoutMsec = 30000);
86
91     bool isSucceeded() const;
92
94     QString oauthError() const;
95
97     struct QEVERCLOUD_EXPORT OAuthResult:  public Printable
98     {
99         QString noteStoreUrl;
101         Timestamp expires;
102         QString shardId;
103         UserID userId;
104         QString webApiUrlPrefix;
105         QString authenticationToken;
106
118         QList<QNetworkCookie> cookies;
119
120         virtual void print(QTextStream & strm) const override;
121     };
122
124     OAuthResult oauthResult() const;
125
127     void setSizeHint(QSize sizeHint);
128
129     QSize sizeHint() const override;
130
131 Q_SIGNALS:
133     void authenticationFinished(bool success);
134
139     void authenticationSuceeded();
140
145     void authenticationFailed();
146
147 private:
148     EvernoteOAuthWebViewPrivate * const d_ptr;
149     Q_DECLARE_PRIVATE(EvernoteOAuthWebView)
150 };
151
153 class EvernoteOAuthDialogPrivate;
186 class QEVERCLOUD_EXPORT EvernoteOAuthDialog:  public QDialog
187 {
188     Q_OBJECT
189 public:
190     using OAuthResult = EvernoteOAuthWebView::OAuthResult;
191
205     EvernoteOAuthDialog(
206         QString consumerKey, QString consumerSecret,
207         QString host = QStringLiteral("www.evernote.com"),
208         QWidget * parent = Q_NULLPTR);
209
210     virtual ~EvernoteOAuthDialog() override;
211
218     void setWebViewSizeHint(QSize sizeHint);
219
```

```
223     bool isSucceeded() const;
224
229     QString oauthError() const;
230
234     OAuthResult oauthResult() const;
235
240     virtual int exec() override;
241
244     virtual void open() override;
245
246 private:
247     EvernoteOAuthDialogPrivate * const d_ptr;
248     Q_DECLARE_PRIVATE(EvernoteOAuthDialog)
249 };
250
251 } // namespace qevercloud
252
253 #endif // QEVERCLOUD_OAUTH_H
```

8.33 Optional.h File Reference

```
#include "EverCloudException.h"
#include <algorithm>
```

Classes

- class qevercloud::Optional< T >

Namespaces

- namespace qevercloud

8.34 Optional.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_OPTIONAL_H
10 #define QEVERCLOUD_OPTIONAL_H
11
12 #include "EverCloudException.h"
13
14 #include <algorithm>
15
16 namespace qevercloud {
17
42 template<typename T>
43 class Optional
44 {
45 public:
49     Optional() :
50         m_isSet(false),
51         m_value(T())
52     {}
53
57     Optional(const Optional & o) :
58         m_isSet(o.m_isSet),
59         m_value(o.m_value)
60     {}
61
66     template<typename X>
67     Optional(const Optional<X> & o) :
68         m_isSet(o.m_isSet),
69         m_value(o.m_value)
70     {}
71
```

```
75      Optional(const T & value) :
76          m_isSet(true),
77          m_value(value)
78      {}
79
83      template<typename X>
84      Optional(const X & value) :
85          m_isSet(true),
86          m_value(value)
87      {}
88
92      Optional & operator=(const Optional & o)
93      {
94          m_value = o.m_value;
95          m_isSet = o.m_isSet;
96          return *this;
97      }
98
102     template<typename X>
103     Optional & operator=(const Optional<X> & o)
104     {
105         m_value = o.m_value;
106         m_isSet = o.m_isSet;
107         return *this;
108     }
109
113     Optional & operator=(const T & value)
114     {
115         m_value = value;
116         m_isSet = true;
117         return *this;
118     }
119
123     template<typename X>
124     Optional & operator=(const X & value)
125     {
126         m_value = value;
127         m_isSet = true;
128         return *this;
129     }
130
136     operator const T&() const
137     {
138         if (!m_isSet) {
139             throw EverCloudException(
140                 "qevercloud::Optional:  nonexistent value access");
141         }
142
143         return m_value;
144     }
145
151     operator T&()
152     {
153         if (!m_isSet) {
154             throw EverCloudException(
155                 "qevercloud::Optional:  nonexistent value access");
156         }
157
158         return m_value;
159     }
160
167     const T & ref()const
168 {
169         if (!m_isSet) {
170             throw EverCloudException(
171                 "qevercloud::Optional:  nonexistent value access");
172         }
173
174         return m_value;
175     }
176
204     T & ref()
205     {
206         if (!m_isSet) {
207             throw EverCloudException(
208                 "qevercloud::Optional:  nonexistent value access");
209         }
210
211         return m_value;
212     }
213
220     bool isSet()const
221 {
222         return m_isSet;
223     }
224
236     void clear()
```

```
237     {
238         m_isSet = false;
239         m_value = T();
240     }
241 
265     Optional & init()
266     {
267         m_isSet = true;
268         m_value = T();
269         return *this;
270     }
271 
306     T * operator->()
307     {
308         if (!m_isSet) {
309             throw EverCloudException(
310                 "qevercloud::Optional:  nonexistent value access");
311         }
312 
313         return &m_value;
314     }
315 
319     const T * operator->()const
320 {
321         if (!m_isSet) {
322             throw EverCloudException(
323                 "qevercloud::Optional:  nonexistent value access");
324         }
325 
326         return &m_value;
327     }
328 
336     T value(T defaultValue = T())const
337 {
338         return m_isSet ?  m_value :  defaultValue;
339     }
340 
345     bool isEqual(const Optional<T> & other)const
346 {
347         if (m_isSet != other.m_isSet) {
348             return false;
349         }
350 
351         return !m_isSet || (m_value == other.m_value);
352     }
353 
354     bool operator==(const Optional<T> & other)const
355 {
356         return isEqual(other);
357     }
358 
359     bool operator!=(const Optional<T> & other)const
360 {
361         return !operator==(other);
362     }
363 
364     bool operator==(const T & other)const
365 {
366         if (!m_isSet) {
367             return false;
368         }
369 
370         return m_value == other;
371     }
372 
373     bool operator!=(const T & other)const
374 {
375         return !operator==(other);
376     }
377 
378     template<typename X> friend class Optional;
379 
380     friend void swap(Optional & first, Optional & second)
381     {
382         using std::swap;
383         swap(first.m_isSet, second.m_isSet);
384         swap(first.m_value, second.m_value);
385     }
386 
387     Optional(Optional && other)
388     {
389         swap(*this, other);
390     }
391 
392     Optional & operator=(Optional && other)
393     {
394         swap(*this, other);
```

```
395         return *this;
396     }
397
398     Optional(T && other)
399     {
400         using std::swap;
401         m_isSet = true;
402         swap(m_value, other);
403     }
404
405     Optional & operator=(T && other)
406     {
407         using std::swap;
408         m_isSet = true;
409         swap(m_value, other);
410         return *this;
411     }
412
413 private:
414     bool m_isSet;
415     T m_value;
416 };
417
418 } // namespace qevercloud
419
420 #endif // QEVERCLOUD_OPTIONAL_H
```

8.35 Printable.h File Reference

```
#include "Export.h"
#include <QTextStream>
#include <QDebug>
```

Classes

- class qevercloud::Printable

Namespaces

- namespace qevercloud

8.36 Printable.h

Go to the documentation of this file.

```
1
8 #ifndef QEVERCLOUD_PRINTABLE_H
9 #define QEVERCLOUD_PRINTABLE_H
10
11 #include "Export.h"
12
13 #include <QTextStream>
14 #include <QDebug>
15
16 namespace qevercloud {
17
18 class QEVERCLOUD_EXPORT Printable
19 {
20 public:
21     Printable() = default;
22     virtual ~Printable() = default;
23
24     virtual void print(QTextStream & strm) const = 0;
25
26     virtual QString toString() const;
27
```

```
28     friend QEVERCLOUD_EXPORT QTextStream & operator <<(
29         QTextStream & strm, const Printable & printable);
30
31     friend QEVERCLOUD_EXPORT QDebug & operator <<(
32         QDebug & dbg, const Printable & printable);
33 };
34
35 } // namespace qevercloud
36
37 #endif // QEVERCLOUD_PRINTABLE_H
```

8.37 QEverCloud.h File Reference

```
#include "AsyncResult.h"
#include "DurableService.h"
#include "EventLoopFinisher.h"
#include "EverCloudException.h"
#include "Exceptions.h"
#include "Export.h"
#include "Globals.h"
#include "Helpers.h"
#include "InkNoteImageDownloader.h"
#include "Log.h"
#include "Optional.h"
#include "Printable.h"
#include "RequestContext.h"
#include "Thumbnail.h"
#include "VersionInfo.h"
#include "generated/EDAMErrorCode.h"
#include "generated/Constants.h"
#include "generated/Services.h"
#include "generated/Types.h"
```

8.38 QEverCloud.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUD_INFTHEADER_H
10 #define QEVERCLOUD_INFTHEADER_H
11
12 #include "AsyncResult.h"
13 #include "DurableService.h"
14 #include "EventLoopFinisher.h"
15 #include "EverCloudException.h"
16 #include "Exceptions.h"
17 #include "Export.h"
18 #include "Globals.h"
19 #include "Helpers.h"
20 #include "InkNoteImageDownloader.h"
21 #include "Log.h"
22 #include "Optional.h"
23 #include "Printable.h"
24 #include "RequestContext.h"
25 #include "Thumbnail.h"
26 #include "VersionInfo.h"
27 #include "generated/EDAMErrorCode.h"
28 #include "generated/Constants.h"
29 #include "generated/Services.h"
30 #include "generated/Types.h"
31
32 #endif // QEVERCLOUD_INFTHEADER_H
```

8.39 QEverCloudOAuth.h File Reference

```
#include "OAuth.h"
#include "QEverCloud.h"
```

8.40 QEverCloudOAuth.h

Go to the documentation of this file.

```
1
9 #ifndef QEVERCLOUDOAUTH_INFTHEADER_H
10 #define QEVERCLOUDOAUTH_INFTHEADER_H
11
12 #include "OAuth.h"
13 #include "QEverCloud.h"
14
15 #endif // QEVERCLOUDOAUTH_INFTHEADER_H
```

8.41 RequestContext.h File Reference

```
#include "Export.h"
#include <QDebug>
#include <QList>
#include <QNetworkCookie>
#include <QTextStream>
#include <QUuid>
#include <memory>
```

Classes

- class qevercloud::IRequestContext

Namespaces

- namespace qevercloud

Typedefs

- using qevercloud::IRequestContextPtr = std::shared_ptr< IRequestContext >

Functions

- QEVERCLOUD_EXPORT IRequestContextPtr qevercloud::newRequestContext (QString authentication↩ Token={}, qint64 requestTimeout=DEFAULT_REQUEST_TIMEOUT_MSEC, bool increaseRequestTimeout↩ Exponentially=DEFAULT_REQUEST_TIMEOUT_EXPONENTIAL_INCREASE, qint64 maxRequest↩ Timeout=DEFAULT_MAX_REQUEST_TIMEOUT_MSEC, quint32 maxRequestRetryCount=DEFAULT_↩ MAX_REQUEST_RETRY_COUNT, QList< QNetworkCookie > cookies={})

8.42 RequestContext.h

Go to the documentation of this file.

```
1
8 #ifndef QEVERCLOUD_REQUEST_CONTEXT_H
9 #define QEVERCLOUD_REQUEST_CONTEXT_H
10
11 #include "Export.h"
12
13 #include <QDebug>
14 #include <QList>
15 #include <QNetworkCookie>
16 #include <QTextStream>
17 #include <QUuid>
18
19 #include <memory>
20
21 namespace qevercloud {
22
24
25 static constexpr quint64 DEFAULT_REQUEST_TIMEOUT_MSEC = 10000ull;
26
27 static constexpr bool DEFAULT_REQUEST_TIMEOUT_EXPONENTIAL_INCREASE = true;
28
29 static constexpr quint64 DEFAULT_MAX_REQUEST_TIMEOUT_MSEC = 600000ull;
30
31 static constexpr quint32 DEFAULT_MAX_REQUEST_RETRY_COUNT = 10;
32
34
39 class QEVERCLOUD_EXPORT IRequestContext
40 {
41 public:
43     virtual QUuid requestId() const = 0;
44
46     virtual QString authenticationToken() const = 0;
47
49     virtual qint64 requestTimeout() const = 0;
50
52     virtual bool increaseRequestTimeoutExponentially() const = 0;
53
58     virtual qint64 maxRequestTimeout() const = 0;
59
61     virtual quint32 maxRequestRetryCount() const = 0;
62
64     virtual QList<QNetworkCookie> cookies() const = 0;
65
70     virtual IRequestContext * clone() const = 0;
71
72     virtual ~IRequestContext() = default;
73
74     friend QEVERCLOUD_EXPORT QTextStream & operator<<(
75         QTextStream & strm, const IRequestContext & ctx);
76
77     friend QEVERCLOUD_EXPORT QDebug & operator<<(
78         QDebug & dbg, const IRequestContext & ctx);
79 };
80
81 using IRequestContextPtr = std::shared_ptr<IRequestContext>;
82
84
85 QEVERCLOUD_EXPORT IRequestContextPtr newRequestContext(
86     QString authenticationToken = {},
87     qint64 requestTimeout = DEFAULT_REQUEST_TIMEOUT_MSEC,
88     bool increaseRequestTimeoutExponentially = DEFAULT_REQUEST_TIMEOUT_EXPONENTIAL_INCREASE,
89     qint64 maxRequestTimeout = DEFAULT_MAX_REQUEST_TIMEOUT_MSEC,
90     quint32 maxRequestRetryCount = DEFAULT_MAX_REQUEST_RETRY_COUNT,
91     QList<QNetworkCookie> cookies = {});
92
93 } // namespace qevercloud
94
95 #endif // QEVERCLOUD_REQUEST_CONTEXT_H
```

8.43 Thumbnail.h File Reference

```
#include "AsyncResult.h"
#include "Export.h"
#include "generated/Types.h"
#include <QByteArray>
```

```
#include <QNetworkAccessManager>
#include <QString>
#include <utility>
```

Classes

- class qevercloud::Thumbnail

  The class is for downloading thumbnails for notes and resources from Evernote servers.

Namespaces

- namespace qevercloud

8.44 Thumbnail.h

Go to the documentation of this file.

```
1
9  #ifndef QEVERCLOUD_THUMBNAIL_H
10 #define QEVERCLOUD_THUMBNAIL_H
11
12 #include "AsyncResult.h"
13 #include "Export.h"
14
15 #include "generated/Types.h"
16
17 #include <QByteArray>
18 #include <QNetworkAccessManager>
19 #include <QString>
20
21 #include <utility>
22
23 namespace qevercloud {
24
26 class ThumbnailPrivate;
47 class QEVERCLOUD_EXPORT Thumbnail
48 {
49 public:
55     enum class ImageType
56     {
57         PNG,
58         JPEG,
59         GIF,
60         BMP
61     };
62
63     friend QEVERCLOUD_EXPORT QTextStream & operator<<(
64         QTextStream & strm, const ImageType imageType);
65
66     friend QEVERCLOUD_EXPORT QDebug & operator<<(
67         QDebug & dbg, const ImageType imageType);
68
75     Thumbnail();
76
94     Thumbnail(
95         QString host, QString shardId, QString authenticationToken,
96         int size = 300, ImageType imageType = ImageType::PNG);
97
98     virtual ~Thumbnail();
99
104     Thumbnail & setHost(QString host);
105
111     Thumbnail & setShardId(QString shardId);
112
119     Thumbnail & setAuthenticationToken(QString authenticationToken);
120
126     Thumbnail & setSize(int size);
127
132     Thumbnail & setImageType(ImageType imageType);
133
148     QByteArray download(
```

```
149         Guid guid, const bool isPublic = false, const bool isResourceGuid = false,
150         const qint64 timeoutMsec = 30000);
151
153     AsyncResult * downloadAsync(
154         Guid guid, const bool isPublic = false, const bool isResourceGuid = false,
155         const qint64 timeoutMsec = 30000);
156
169     std::pair<QNetworkRequest, QByteArray> createPostRequest(
170         qevercloud::Guid guid, bool isPublic = false, bool isResourceGuid = false);
171
172 private:
173     ThumbnailPrivate * const d_ptr;
174     Q_DECLARE_PRIVATE(Thumbnail)
175 };
176
177 } // namespace qevercloud
178
179 #endif // QEVERCLOUD_THUMBNAIL_H
```

8.45 README.md File Reference

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