Mobilitytracking

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Packages

- package uloop

5.2 Package eu.uloop

Packages

- package messages
- package mobilitytracker

5.3 Package eu.uloop.messages

Classes

- class UloopMessages

5.4 Package eu.uloop.mobilitytracker

Classes

- class BuildConfig
- interface DataBaseChangeListener
- class DetailsActivity
- class MTrackerAP
- class MTrackerApplication
- class MTrackerDataSource
- class MTrackerService
- class MTrackerSQLiteHelper
- class MTrackerVisit
- class MTrackerWifiManager
- class R
- interface WifiChangeListener

5.4.1 Detailed Description

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ULOOP Mobility tracking plugin: Mtracker

Mtracker is an Android app that collects information concerning visited APs It computes a rank and then estimates a potential handover - time and target AP v1.0 - pre-prototype, D3.3, July 2012 v2.0 - prototype on September 2012 - D3.6 v3.0 - prototype on June 2013

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ULOOP Mobility tracking plugin: Mtracker

Mtracker is an Android app that collects information concerning visited APs It computes a rank and then estimates a potential handover - time and target AP v1.0 - pre-prototype, D3.3, July 2012 v2.0 - prototype on September 2012 - D3.6 v3.0 - prototype on June 2013

Author

Jonnahtan Saltarin
Rute Sofia
Christian da Silva Pereira
Luis Amaral Lopes

Version

3.0

5.5 Package lib

Packages

- package api

5.6 Package lib.api

Classes

- class CryptoID
- class MessageDigest
- interface UloopAbstractMessage
- interface UloopMessageAPI
- class UloopMessageAPIImp
- class UloopMTracker
- class UloopMTrackerMessage
- class UloopService
- class UloopServiceReply
- class UloopServiceRequest
- class UloopServiceUpdate

Chapter 6

Class Documentation

6.1 eu.uloop.mobilitytracker.BuildConfig Class Reference

Static Public Attributes

- static final boolean DEBUG = true

6.1.1 Member Data Documentation

6.1.1.1 final boolean eu.uloop.mobilitytracker.BuildConfig.DEBUG = true [static]

The documentation for this class was generated from the following file:

- gen/eu/uloop/mobilitytracker/BuildConfig.java

6.2 lib.api.CryptoID Class Reference

Public Member Functions

- CryptoID (ByteString bs)
- byte[] getBytes ()

Private Attributes

- byte[] cid

6.2.1 Constructor & Destructor Documentation

6.2.1.1 lib.api.CryptoID.CryptoID (ByteString *bs*)

6.2.2 Member Function Documentation

6.2.2.1 byte [] lib.api.CryptoID.getBytes ( )

6.2.3 Member Data Documentation

6.2.3.1 byte [] lib.api.CryptoID.cid [private]

The documentation for this class was generated from the following file:

- src/lib/api/CryptoID.java

6.3 eu.uloop.mobilitytracker.DataBaseChangeListener Interface Reference

Public Member Functions

- void onDataBaseChange (List< MTrackerAP > apEntries)
- void onStatusMessageChange (String newMessage)

6.3.1 Member Function Documentation

6.3.1.1 void eu.uloop.mobilitytracker.DataBaseChangeListener.onDataBaseChange (List< **MTrackerAP** > *apEntries*)

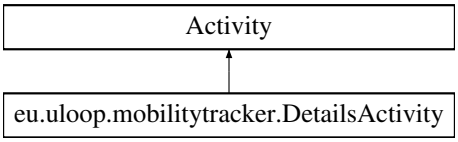
6.3.1.2 void eu.uloop.mobilitytracker.DataBaseChangeListener.onStatusMessageChange (String *newMessage*)

The documentation for this interface was generated from the following file:

- src/eu/uloop/mobilitytracker/DataBaseChangeListener.java

6.4 eu.uloop.mobilitytracker.DetailsActivity Class Reference

Inheritance diagram for eu.uloop.mobilitytracker.DetailsActivity:



Protected Member Functions

- void onCreate (Bundle savedInstanceState)
- void onStart ()
- void onStop ()
- void onDestroy ()

6.4.1 Detailed Description

This class provides an activity that shows detailed information of a given AP.

Author

Jonnahtan Saltarin (ULHT)
Rute Sofia (ULHT)
Christian da Silva Pereira (ULHT)
Luis Amaral Lopes (ULHT)

Version

3.0

6.4.2 Member Function Documentation

6.4.2.1 void eu.uloop.mobilitytracker.DetailsActivity.onCreate (Bundle *savedInstanceState*) [protected]

6.4.2.2 void eu.uloop.mobilitytracker.DetailsActivity.onDestroy ( ) [protected]

6.4.2.3 void eu.uloop.mobilitytracker.DetailsActivity.onStart ( ) [protected]

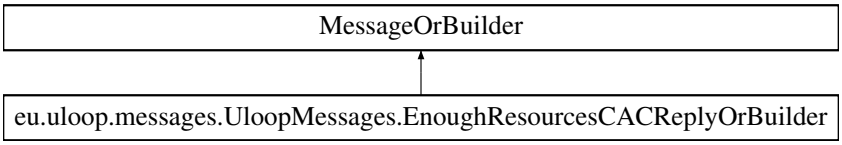
6.4.2.4 void eu.uloop.mobilitytracker.DetailsActivity.onStop ( ) [protected]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/DetailsActivity.java

6.5 eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder:



Public Member Functions

- boolean hasCryptoid ()
- com.google.protobuf.ByteString getCryptoid ()
- boolean hasToken ()
- double getToken ()
- boolean hasEnough ()
- boolean getEnough ()

6.5.1 Member Function Documentation

6.5.1.1 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder.getCryptoid ( )

6.5.1.2 boolean eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder.getEnough ( )

6.5.1.3 double eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder.getToken ( )

6.5.1.4 boolean eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder.hasCryptoid ( )

6.5.1.5 boolean eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder.hasEnough ( )

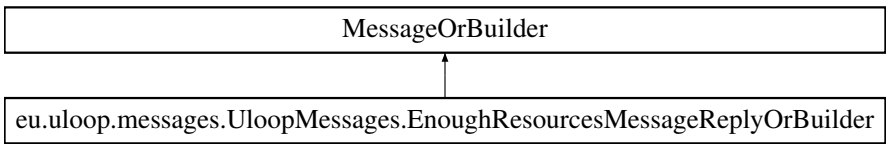
6.5.1.6 boolean eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder.hasToken ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.6 eu.uloop.messages.UloopMessages.EnoughResourcesMessageReplyOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.EnoughResourcesMessageReplyOrBuilder:



Public Member Functions

- boolean hasRes ()
- boolean getRes ()

6.6.1 Member Function Documentation

6.6.1.1 boolean eu.uloop.messages.UloopMessages.EnoughResourcesMessageReplyOrBuilder.getRes ( )

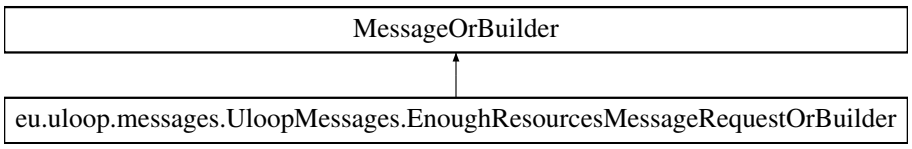
6.6.1.2 boolean eu.uloop.messages.UloopMessages.EnoughResourcesMessageReplyOrBuilder.hasRes ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.7 eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder:



Public Member Functions

- boolean hasCryptoid ()
- com.google.protobuf.ByteString getCryptoid ()
- boolean hasToken ()
- double getToken ()
- boolean hasMacaddress ()
- com.google.protobuf.ByteString getMacaddress ()

6.7.1 Member Function Documentation

6.7.1.1 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder.↩ getCryptoid ( )

6.7.1.2 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder.↩ getMacaddress ( )

6.7.1.3 double eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder.getToken ( )

6.7.1.4 boolean eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder.hasCryptoid ( )

6.7.1.5 boolean eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder.hasMacaddress ( )

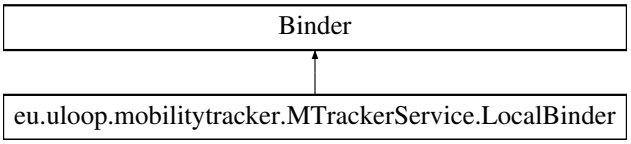
6.7.1.6 boolean eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder.hasToken ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.8 eu.uloop.mobilitytracker.MTrackerService.LocalBinder Class Reference

Inheritance diagram for eu.uloop.mobilitytracker.MTrackerService.LocalBinder:



The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerService.java

6.9 lib.api.MessageDigest Class Reference

Static Public Member Functions

- static byte[] hashPublicKey (PublicKey pk)
- static byte[] hashPublicKeyMAC (PublicKey pk, byte[]mac)
- static byte[] hashPublicKeyMACAlt (PublicKey pk, byte[]mac)
- static byte[] SHA256Bytes (byte[]key)

6.9.1 Member Function Documentation

6.9.1.1 static byte [] lib.api.MessageDigest.hashPublicKey (PublicKey *pk*) [static]

6.9.1.2 static byte [] lib.api.MessageDigest.hashPublicKeyMAC (PublicKey *pk,* byte[] *mac*) [static]

6.9.1.3 static byte [] lib.api.MessageDigest.hashPublicKeyMACAlt (PublicKey *pk,* byte[] *mac*) [static]

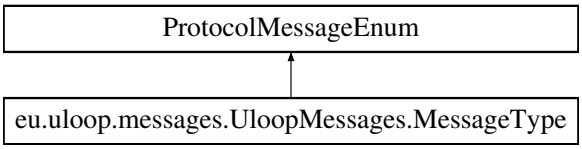
6.9.1.4 static byte [] lib.api.MessageDigest.SHA256Bytes (byte[] *key*) [static]

The documentation for this class was generated from the following file:

- src/lib/api/MessageDigest.java

6.10 eu.uloop.messages.UloopMessages.MessageType Enum Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.MessageType:



Public Member Functions

- final int getNumber ()
- final com.google.protobuf.Descriptors.EnumValueDescriptor getValueDescriptor ()
- final com.google.protobuf.Descriptors.EnumDescriptor getDescriptorForType ()

Static Public Member Functions

- static MessageType valueOf (int value)
- static com.google.protobuf.Internal.EnumLiteMap < MessageType > internalGetValueMap ()
- static final com.google.protobuf.Descriptors.EnumDescriptor getDescriptor ()
- static MessageType valueOf (com.google.protobuf.Descriptors.EnumValueDescriptor desc)

Public Attributes

- UNSPEC =(0, 0)
- TRUST_MESSAGE =(1, 1)
- TRUST_INFORMATION_REQUEST =(2, 2)
- TRUST_INFORMATION_REPLY =(3, 3)
- RESOURCE_MESSAGE =(4, 4)
- NETWORKSTATUS_MESSAGE =(5, 5)
- NEWUSERDETAILS_MESSAGE =(6, 6)
- MEASUREMENT_MESSAGE =(7, 7)

Static Public Attributes

- staticfinal int UNSPEC_VALUE = 0
- staticfinal int TRUST_MESSAGE_VALUE = 1
- staticfinal int TRUST_INFORMATION_REQUEST_VALUE = 2
- staticfinal int TRUST_INFORMATION_REPLY_VALUE = 3

- staticfinal int RESOURCE_MESSAGE_VALUE = 4
- staticfinal int NETWORKSTATUS_MESSAGE_VALUE = 5
- staticfinal int NEWUSERDETAILS_MESSAGE_VALUE = 6
- staticfinal int MEASUREMENT_MESSAGE_VALUE = 7

Private Member Functions

- MessageType (int index, int value)

Private Attributes

- final int index
- final int value

Static Private Attributes

- staticcom.google.protobuf.Internal.EnumLiteMap < MessageType > internalValueMap
- staticfinal MessageType[] VALUES

6.10.1 Constructor & Destructor Documentation

6.10.1.1 eu.uloop.messages.UloopMessages.MessageType.MessageType (int *index*, int *value*) [private]

6.10.2 Member Function Documentation

6.10.2.1 static final com.google.protobuf.Descriptors.EnumDescriptor eu.uloop.messages.UloopMessages.MessageType.getDescriptor ( ) [static]

6.10.2.2 final com.google.protobuf.Descriptors.EnumDescriptor eu.uloop.messages.UloopMessages.MessageType.getDescriptorForType ( )

6.10.2.3 final int eu.uloop.messages.UloopMessages.MessageType.getNumber ( )

6.10.2.4 final com.google.protobuf.Descriptors.EnumValueDescriptor eu.uloop.messages.UloopMessages.MessageType.getValueDescriptor ( )

6.10.2.5 static com.google.protobuf.Internal.EnumLiteMap<MessageType> eu.uloop.messages.UloopMessages.MessageType.internalGetValueMap ( ) [static]

6.10.2.6 static MessageType eu.uloop.messages.UloopMessages.MessageType.valueOf (int *value*) [static]

6.10.2.7 static MessageType eu.uloop.messages.UloopMessages.MessageType.valueOf (com.google.protobuf.Descriptors.EnumValueDescriptor *desc*) [static]

6.10.3 Member Data Documentation

6.10.3.1 final int eu.uloop.messages.UloopMessages.MessageType.index [private]

6.10.3.2 static com.google.protobuf.Internal.EnumLiteMap<MessageType> eu.uloop.messages.UloopMessages.MessageType.internalValueMap [static], [private]

Initial value:

```
=
          new com.google.protobuf.Internal.EnumLiteMap<MessageType>() {
            public MessageType findValueByNumber(int number) {
              return MessageType.valueOf(number);
            }
          }
```

6.10.3.3 eu.uloop.messages.UloopMessages.MessageType.MEASUREMENT_MESSAGE =(7, 7)

6.10.3.4 static final int eu.uloop.messages.UloopMessages.MessageType.MEASUREMENT_MESSAGE_VALUE = 7 [static]

6.10.3.5 eu.uloop.messages.UloopMessages.MessageType.NETWORKSTATUS_MESSAGE =(5, 5)

6.10.3.6 static final int eu.uloop.messages.UloopMessages.MessageType.NETWORKSTATUS_MESSAGE_VALUE = 5 [static]

6.10.3.7 eu.uloop.messages.UloopMessages.MessageType.NEWUSERDETAILS_MESSAGE =(6, 6)

6.10.3.8 static final int eu.uloop.messages.UloopMessages.MessageType.NEWUSERDETAILS_MESSAGE_VALUE = 6 [static]

6.10.3.9 eu.uloop.messages.UloopMessages.MessageType.RESOURCE_MESSAGE =(4, 4)

6.10.3.10 static final int eu.uloop.messages.UloopMessages.MessageType.RESOURCE_MESSAGE_VALUE = 4 [static]

6.10.3.11 eu.uloop.messages.UloopMessages.MessageType.TRUST_INFORMATION_REPLY =(3, 3)

6.10.3.12 static final int eu.uloop.messages.UloopMessages.MessageType.TRUST_INFORMATION_REPLY_VALUE = 3 [static]

6.10.3.13 eu.uloop.messages.UloopMessages.MessageType.TRUST_INFORMATION_REQUEST =(2, 2)

6.10.3.14 static final int eu.uloop.messages.UloopMessages.MessageType.TRUST_INFORMATION_REQUEST_VALUE = 2 [static]

6.10.3.15 eu.uloop.messages.UloopMessages.MessageType.TRUST_MESSAGE =(1, 1)

6.10.3.16 static final int eu.uloop.messages.UloopMessages.MessageType.TRUST_MESSAGE_VALUE = 1 [static]

6.10.3.17 eu.uloop.messages.UloopMessages.MessageType.UNSPEC =(0, 0)

6.10.3.18 static final int eu.uloop.messages.UloopMessages.MessageType.UNSPEC_VALUE = 0 [static]

6.10.3.19 final int eu.uloop.messages.UloopMessages.MessageType.value [private]

6.10.3.20 static final MessageType [] eu.uloop.messages.UloopMessages.MessageType.VALUES [static], [private]

Initial value:

```
= {
      UNSPEC, TRUST_MESSAGE, TRUST_INFORMATION_REQUEST,
      TRUST_INFORMATION_REPLY, RESOURCE_MESSAGE,
      NETWORKSTATUS_MESSAGE, NEWUSERDETAILS_MESSAGE,
      MEASUREMENT_MESSAGE,
    }
```

The documentation for this enum was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.11 eu.uloop.mobilitytracker.MTrackerAP Class Reference

Public Member Functions

- String getSSID ()
- String getBSSID ()
- double getAttractiveness ()
- String getLastGatewayIp ()
- void setSSID (String sSID)
- void setBSSID (String bSSID)
- void setAttractiveness (double attractiveness)
- void setLastGatewayIp (String lastGatewayIp)
- void setLastGatewayIp (int lastGatewayIp)
- MTrackerAP ()
- void setToDefault (double uloopDispositionalTrust)
- String toString ()

Private Attributes

- String SSID
- String BSSID
- double attractiveness
- String lastGatewayIp

6.11.1 Detailed Description

This class represents what MTracker considers an AP. The information kept in this object are SSID, BSSID, attractiveness, and last IP.

Author

Jonnahtan Saltarin (ULHT)
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Christian da Silva Pereira (ULHT)
Luis Amaral Lopes (ULHT)

Version

3.0

6.11.2 Constructor & Destructor Documentation

6.11.2.1 eu.uloop.mobilitytracker.MTrackerAP.MTrackerAP ( )

MTracker AP Constructor

6.11.3 Member Function Documentation

6.11.3.1 double eu.uloop.mobilitytracker.MTrackerAP.getAttractiveness ( )

Get the attractiveness of this AP

Returns

the attractiveness

6.11.3.2 String eu.uloop.mobilitytracker.MTrackerAP.getBSSID ( )

Get the BSSID of this AP

Returns

the bSSID

6.11.3.3 String eu.uloop.mobilitytracker.MTrackerAP.getLastGatewayIp ( )

Get the last IP shown by this AP

Returns

the lastGatewayIp

6.11.3.4 String eu.uloop.mobilitytracker.MTrackerAP.getSSID ( )

Get the SSID of this AP

Returns

the sSID

6.11.3.5 void eu.uloop.mobilitytracker.MTrackerAP.setAttractiveness (double *attractiveness*)

Set the attractiveness of this AP

Parameters

attractiveness	the attractiveness to set

6.11.3.6 void eu.uloop.mobilitytracker.MTrackerAP.setBSSID (String *bSSID*)

Set the BSSID of this AP

Parameters

bSSID	the bSSID to set

6.11.3.7 void eu.uloop.mobilitytracker.MTrackerAP.setLastGatewayIp (String *lastGatewayIp*)

Set the last IP shown by this AP

Parameters

lastGatewayIp	String representing the last gateway IP to set

6.11.3.8 void eu.uloop.mobilitytracker.MTrackerAP.setLastGatewayIp (int *lastGatewayIp*)

Set the last IP shown by this AP

Parameters

lastGatewayIp	Integer representing the last gateway IP to set

6.11.3.9 void eu.uloop.mobilitytracker.MTrackerAP.setSSID (String *sSID*)

Set the SSID of this AP

Parameters

sSID	the sSID to set

6.11.3.10 void eu.uloop.mobilitytracker.MTrackerAP.setToDefault (double *uloopDispositionalTrust*)

Set some parameters to default

6.11.3.11 String eu.uloop.mobilitytracker.MTrackerAP.toString ( )

Return a string containing the SSID, BSSID and the Attractiveness.

6.11.4 Member Data Documentation

6.11.4.1 double eu.uloop.mobilitytracker.MTrackerAP.attractiveness [private]

6.11.4.2 String eu.uloop.mobilitytracker.MTrackerAP.BSSID [private]

6.11.4.3 String eu.uloop.mobilitytracker.MTrackerAP.lastGatewayIp [private]

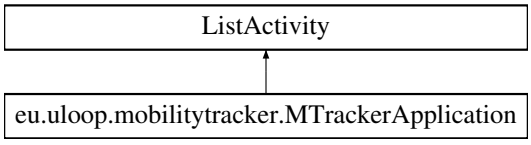
6.11.4.4 String eu.uloop.mobilitytracker.MTrackerAP.SSID [private]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerAP.java

6.12 eu.uloop.mobilitytracker.MTrackerApplication Class Reference

Inheritance diagram for eu.uloop.mobilitytracker.MTrackerApplication:



Public Member Functions

- boolean onCreateOptionsMenu (Menu menu)
- boolean onOptionsItemSelected (MenuItem item)

Protected Member Functions

- void onCreate (Bundle savedInstanceState)
- void onStart ()
- void onStop ()
- void onDestroy ()

Private Member Functions

- void updateListView (List< MTrackerAP > apEntries)

Private Attributes

- MTrackerService mBoundService
- boolean mIsServiceBound = false
- ServiceConnection mConnection

6.12.1 Detailed Description

The Class MTrackerApplication is the front-end of the android application. It extends ListActivity to show the list of visited access points as a ListView. It starts the MTracker server, if not running already.

Author

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Christian da Silva Pereira (ULHT)
Luis Amaral Lopes (ULHT)

Version

3.0

6.12.2 Member Function Documentation

6.12.2.1 void eu.uloop.mobilitytracker.MTrackerApplication.onCreate (Bundle *savedInstanceState*) [protected]

6.12.2.2 boolean eu.uloop.mobilitytracker.MTrackerApplication.onCreateOptionsMenu (Menu *menu*)

6.12.2.3 void eu.uloop.mobilitytracker.MTrackerApplication.onDestroy ( ) [protected]

6.12.2.4 boolean eu.uloop.mobilitytracker.MTrackerApplication.onOptionsItemSelected (MenuItem *item*)

6.12.2.5 void eu.uloop.mobilitytracker.MTrackerApplication.onStart ( ) [protected]

6.12.2.6 void eu.uloop.mobilitytracker.MTrackerApplication.onStop ( ) [protected]

6.12.2.7 void eu.uloop.mobilitytracker.MTrackerApplication.updateListView (List< MTrackerAP > *apEntries*) [private]

Update the ListView, cleaning the actual values and populating it with the values on apEntries.

Parameters

apEntries	the new access point entries to be shown.

6.12.3 Member Data Documentation

6.12.3.1 MTrackerService eu.uloop.mobilitytracker.MTrackerApplication.mBoundService [private]

The MTracker service to be bounded.

6.12.3.2 ServiceConnection eu.uloop.mobilitytracker.MTrackerApplication.mConnection [private]

Initial value:

```
= new ServiceConnection() {
            public void onServiceConnected(ComponentName className, IBinder service) {
                mBoundService = ((MTrackerService.LocalBinder)service).getService();
                        mIsServiceBound = true;
                        updateListView (mBoundService.
      getData());
                        mBoundService.setOnStateChangeListener(
                            new DataBaseChangeListener() {
                                public void onDataBaseChange(List<MTrackerAP> apEntries) {
                                        updateListView (apEntries);
                                }
                                public void onStatusMessageChange(String newMessage)  {
                                        ((TextView)findViewById(R.id.infoText)).setText(newMessage);
                                }
                                }
                        );
            }

            public void onServiceDisconnected(ComponentName className) {
                mBoundService.clearOnStateChangeListeners ();
                mBoundService = null;
                mIsServiceBound = false;
            }
        }
```

The Connection to the MTracker service. When the service is successfully connected, it loads the ListView with the initial data and creates a listener on the MTracker service that re-populates the data on the ListView any tame the DataBase changes

6.12.3.3 boolean eu.uloop.mobilitytracker.MTrackerApplication.mIsServiceBound = false [private]

Indicates if the MTracker service has been bounded successfully.

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerApplication.java

6.13 eu.uloop.mobilitytracker.MTrackerDataSource Class Reference

Public Member Functions

- MTrackerDataSource (Context context)
- void openDB (boolean writable) throws SQLException
- void closeDB ()
- long getNumAP ()
- long registerNewAP (MTrackerAP ap)
- boolean updateAP (MTrackerAP ap)
- MTrackerAP getAP (String bssid)

- boolean hasAP (String bssid)
- Map< String, MTrackerAP > getAllAP ()
- Map< String, MTrackerAP > getAllAP (List< ScanResult > availableAP)
- MTrackerAP getBestAP ()
- MTrackerAP getBestAP (List< ScanResult > availableAP)
- void writeAPListToFile ()
- long getStationaryTime (MTrackerAP ap)
- long getStationaryTimeByMoment (MTrackerAP ap, int dayOfTheWeek)
- long countVisits (MTrackerAP ap)
- double getRank (MTrackerAP ap)
- double getInstantaneousRank (MTrackerAP ap, Long currentDuration)
- long registerNewVisit (String SSID, String BSSID, Long startTime, Long endTime)
- boolean updateVisit (long _id, String SSID, String BSSID, Long startTime, Long endTime)
- List< MTrackerVisit > getAllVisits ()
- List< String > getAllVisitsString (MTrackerAP ap)
- long getNumVisits ()
- void writeVisitListToFile ()

Private Member Functions

- MTrackerAP cursorToAP (Cursor cursor)
- MTrackerVisit cursorToVisit (Cursor cursor)

Private Attributes

- SQLiteDatabase db
- MTrackerSQLiteHelper dbHelper
- boolean isDbOpen
- GregorianCalendar cal
- String[] allColumnsAccessPoint
- String[] allColumnsVisit

6.13.1 Detailed Description

This class provides methods to insert, update and query the application database. It also provide methods to compute certain values, like the Rank and the Stationary Time, among others.

Author

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Rute Sofia (ULHT)
Christian da Silva Pereira (ULHT)
Luis Amaral Lopes (ULHT)

Version

3.0

6.13.2 Constructor & Destructor Documentation

6.13.2.1 eu.uloop.mobilitytracker.MTrackerDataSource.MTrackerDataSource (Context *context*)

Constructor that takes Android Context as input.

Parameters

context	

6.13.3 Member Function Documentation

6.13.3.1 void eu.uloop.mobilitytracker.MTrackerDataSource.closeDB ( )

Close the predefined MTracker database.

6.13.3.2 long eu.uloop.mobilitytracker.MTrackerDataSource.countVisits (**MTrackerAP** *ap*)

Computes the Number of visits that the node has done to a given AP.

Parameters

ap	The MTrackerAP whose Stationary Time is to be computed.

Returns

The number of visits.

6.13.3.3 **MTrackerAP** eu.uloop.mobilitytracker.MTrackerDataSource.cursorToAP (Cursor *cursor*) [private]

Converts a cursor pointing to a record in the ACCESS_POINTS table to a MTrackerAP object.

Parameters

cursor	Cursor pointing to a record of the ACESS_POINTS table.

Returns

the MTrackerAP object

6.13.3.4 **MTrackerVisit** eu.uloop.mobilitytracker.MTrackerDataSource.cursorToVisit (Cursor *cursor*) [private]

6.13.3.5 Map<String, **MTrackerAP**> eu.uloop.mobilitytracker.MTrackerDataSource.getAllAP ( )

Gets the all the AP recorded by the application on the ACCESS_POINTS table.

Returns

A map with the AP objects, and the bssid as key.

6.13.3.6 Map<String, **MTrackerAP**> eu.uloop.mobilitytracker.MTrackerDataSource.getAllAP (List< ScanResult > *availableAP*)

Gets the all the AP recorded by the application on the ACCESS_POINTS table, and the return only the ones that are also available in the List of ScanResult.

Returns

A map with the AP objects, and the bssid as key.

6.13.3.7 List<MTrackerVisit> eu.uloop.mobilitytracker.MTrackerDataSource.getAllVisits ( )

Get a List with all the visit objects stored in the database.

6.13.3.8 List<String> eu.uloop.mobilitytracker.MTrackerDataSource.getAllVisitsString (MTrackerAP *ap*)

6.13.3.9 MTrackerAP eu.uloop.mobilitytracker.MTrackerDataSource.getAP (String *bssid*)

Gets an AP already registered by the application.

Parameters

bssid	The ssid of the AP which information should be returned

Returns

the MTrackerAP object, null if not found.

6.13.3.10 MTrackerAP eu.uloop.mobilitytracker.MTrackerDataSource.getBestAP ( )

Checks all the AP registered by the application and return the one with the highest Rank.

Returns

the best AP registered by the application.

6.13.3.11 MTrackerAP eu.uloop.mobilitytracker.MTrackerDataSource.getBestAP (List< ScanResult > *availableAP*)

Checks the APs registered by the application and available in the List of ScanResult, and the return the one with the highest rank.

Returns

the best AP registered by the application.

6.13.3.12 double eu.uloop.mobilitytracker.MTrackerDataSource.getInstantaneousRank (MTrackerAP *ap*, Long *currentDuration*)

Test Method to compute the Rank of this node towards a given AP, taking into consideration the current visit time.

Parameters

ap	The MTrackerAP whose Stationary Time is to be computed.
currentDuration	current connection time.

Returns

The number of visits.

6.13.3.13 long eu.uloop.mobilitytracker.MTrackerDataSource.getNumAP ( )

Gets the number of records in the ACCESS_POINTS table. This is, the number of AP registered on the application.

Returns

the number of AP registered by the application.

6.13.3.14 long eu.uloop.mobilitytracker.MTrackerDataSource.getNumVisits ( )

Get the number of visits registered in the database.

6.13.3.15 double eu.uloop.mobilitytracker.MTrackerDataSource.getRank (MTrackerAP *ap*)

Computes the Rank of this node towards a given AP. The Rank is computed as

Parameters

ap	The MTrackerAP whose Stationary Time is to be computed.

Returns

The number of visits.

6.13.3.16 long eu.uloop.mobilitytracker.MTrackerDataSource.getStationaryTime (MTrackerAP *ap*)

Computes the Stationary Time for a given AP.

Parameters

ap	The MTrackerAP whose Stationary Time is to be computed.

Returns

The stationary time for the given AP.

6.13.3.17 long eu.uloop.mobilitytracker.MTrackerDataSource.getStationaryTimeByMoment (MTrackerAP *ap*, int *dayOfTheWeek*)

Computes the Stationary Time for a given AP, only taking into consideration records for a given Day of the Week.

Parameters

ap	The MTrackerAP whose Stationary Time is to be computed.
dayOfTheWeek	Day of the week that will restrict the computation of the stationary time.

Returns

The stationary time for the given AP.

6.13.3.18 boolean eu.uloop.mobilitytracker.MTrackerDataSource.hasAP (String *bssid*)

Checks if a given AP has already been registered by the application.

Parameters

bssid	The ssid of the AP

Returns

true, if AP has already been registered by the application, false otherwise.

6.13.3.19 void eu.uloop.mobilitytracker.MTrackerDataSource.openDB (boolean *writable*) throws SQLException

Opens the predefined MTracker database.

Parameters

writable	

Exceptions

SQLException	

6.13.3.20 long eu.uloop.mobilitytracker.MTrackerDataSource.registerNewAP (MTrackerAP *ap*)

Register a new AP in the application. It creates a new record on the ACCESS_POINTS table, with the information passed as MTrackerAP.

Parameters

ap	Access point information.

Returns

the row ID of the newly inserted row, or -1 if an error occurred.

6.13.3.21 long eu.uloop.mobilitytracker.MTrackerDataSource.registerNewVisit (String *SSID,* String *BSSID,* Long *startTime,* Long *endTime*)

Register a new visit into the database.

Parameters

SSID	SSID
BSSID	BSSID
startTime	Time at which the connection started.
endTime	Time at which the connection ended.

Returns

id of the created record, -1 if an error occurs.

6.13.3.22 boolean eu.uloop.mobilitytracker.MTrackerDataSource.updateAP (MTrackerAP *ap*)

Update an AP already registered by the application. This modifies the corresponding record to the AP in the ACCESS_POINTS table.

Parameters

ap	Access point information.

Returns

true, if successful.

6.13.3.23 boolean eu.uloop.mobilitytracker.MTrackerDataSource.updateVisit (long *_id,* String *SSID,* String *BSSID,* Long *startTime,* Long *endTime*)

Updates an existing visit in the database.

Parameters

_id	id of the record to update
SSID	SSID
BSSID	BSSID
startTime	Time at which the connection started.
endTime	Time at which the connection ended.

Returns

id of the created record, -1 if an error occurs.

6.13.3.24 void eu.uloop.mobilitytracker.MTrackerDataSource.writeAPListToFile ( )

Write all the AP registered by the application into a text file (MTracker.txt), located in the root of the directory.

6.13.3.25 void eu.uloop.mobilitytracker.MTrackerDataSource.writeVisitListToFile ( )

Writes the Visit List to the file MTrackerVisits.txt.

6.13.4 Member Data Documentation

6.13.4.1 String [] eu.uloop.mobilitytracker.MTrackerDataSource.allColumnsAccessPoint [private]

Initial value:

```
= {
                        MTrackerSQLiteHelper.COLUMN_BSSID,
                        MTrackerSQLiteHelper.COLUMN_SSID,
                        MTrackerSQLiteHelper.COLUMN_ATTRACTIVENESS,
                        MTrackerSQLiteHelper.COLUMN_LASTGATEWAYIP
        }
```

List of all columns on the ACCESS_POINTS table.

6.13.4.2 String [] eu.uloop.mobilitytracker.MTrackerDataSource.allColumnsVisit [private]

Initial value:

```
= {
                        MTrackerSQLiteHelper.COLUMN_SSID,
                        MTrackerSQLiteHelper.COLUMN_BSSID,
                        MTrackerSQLiteHelper.COLUMN_TIMEON,
                        MTrackerSQLiteHelper.COLUMN_TIMEOUT,
                        MTrackerSQLiteHelper.COLUMN_DAYOFTHEWEEK,
                        MTrackerSQLiteHelper.COLUMN_HOUR
        }
```

6.13.4.3 GregorianCalendar eu.uloop.mobilitytracker.MTrackerDataSource.cal [private]

6.13.4.4 SQLiteDatabase eu.uloop.mobilitytracker.MTrackerDataSource.db [private]

6.13.4.5 MTrackerSQLiteHelper eu.uloop.mobilitytracker.MTrackerDataSource.dbHelper [private]

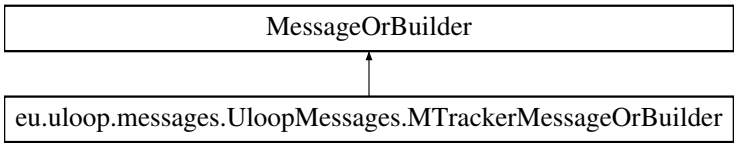
6.13.4.6 boolean eu.uloop.mobilitytracker.MTrackerDataSource.isDbOpen [private]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerDataSource.java

6.14 eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder:



Public Member Functions

- boolean hasTimeForNextMove ()
- long getTimeForNextMove ()
- boolean hasCurrentStationaryTime ()
- long getCurrentStationaryTime ()
- java.util.List < eu.uloop.messages.UloopMessages.MTrackerPredictedMove > getNextGatewayListList ()
- eu.uloop.messages.UloopMessages.MTrackerPredictedMove getNextGatewayList (int index)
- int getNextGatewayListCount ()
- java.util.List<?extends eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder > getNextGatewayListOrBuilderList ()
- eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder getNextGatewayListOrBuilder (int index)

6.14.1 Member Function Documentation

6.14.1.1 long eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.getCurrentStationaryTime ( )

6.14.1.2 eu.uloop.messages.UloopMessages.MTrackerPredictedMove eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.getNextGatewayList (int *index*)

6.14.1.3 int eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.getNextGatewayListCount ( )

6.14.1.4 java.util.List<eu.uloop.messages.UloopMessages.MTrackerPredictedMove> eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.getNextGatewayListList ( )

6.14.1.5 eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.getNextGatewayListOrBuilder (int *index*)

6.14.1.6 java.util.List<? extends eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder> eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.getNextGatewayListOrBuilderList ( )

6.14.1.7 long eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.getTimeForNextMove ( )

6.14.1.8 boolean eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.hasCurrentStationaryTime ( )

6.14.1.9 boolean eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder.hasTimeForNextMove ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.15 lib.api.UloopMTrackerMessage.MTrackerPredictedM Class Reference

Public Member Functions

- void setBSSID (String bssid)
- void setstationaryTime (long time)
- void setLastGatewatIP (String gateip)

Private Attributes

- String BSSID
- long stationaryTime
- String lastGatewayIP

6.15.1 Member Function Documentation

6.15.1.1 void lib.api.UloopMTrackerMessage.MTrackerPredictedM.setBSSID (String *bssid*)

6.15.1.2 void lib.api.UloopMTrackerMessage.MTrackerPredictedM.setLastGatewatIP (String *gateip*)

6.15.1.3 void lib.api.UloopMTrackerMessage.MTrackerPredictedM.setstationaryTime (long *time*)

6.15.2 Member Data Documentation

6.15.2.1 String lib.api.UloopMTrackerMessage.MTrackerPredictedM.BSSID [private]

6.15.2.2 String lib.api.UloopMTrackerMessage.MTrackerPredictedM.lastGatewayIP [private]

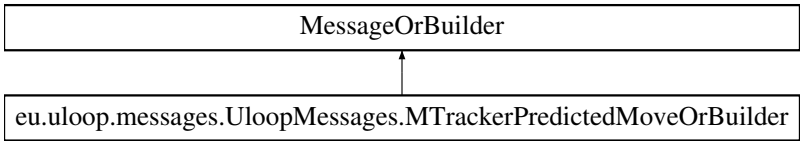
6.15.2.3 long lib.api.UloopMTrackerMessage.MTrackerPredictedM.stationaryTime [private]

The documentation for this class was generated from the following file:

- src/lib/api/UloopMTrackerMessage.java

6.16 eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder:



Public Member Functions

- boolean hasBSSID ()
- String getBSSID ()
- boolean hasStationaryTime ()
- long getStationaryTime ()

- boolean hasLastGatewayIP ()
- String getLastGatewayIP ()

6.16.1 Member Function Documentation

6.16.1.1 String eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder.getBSSID ( )

6.16.1.2 String eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder.getLastGatewayIP ( )

6.16.1.3 long eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder.getStationaryTime ( )

6.16.1.4 boolean eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder.hasBSSID ( )

6.16.1.5 boolean eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder.hasLastGatewayIP ( )

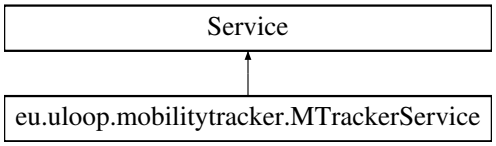
6.16.1.6 boolean eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder.hasStationaryTime ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.17 eu.uloop.mobilitytracker.MTrackerService Class Reference

Inheritance diagram for eu.uloop.mobilitytracker.MTrackerService:



Classes

- class LocalBinder
- class **MTrackerServiceWifiListener**
- class SendInformationWithGatewayTask

Public Member Functions

- void startPeriodicScanning ()
- void stopPeriodicScanning ()
- void onCreate ()
- int onStartCommand (Intent intent, int flags, int startId)
- void onDestroy ()
- IBinder onBind (Intent intent)
- void setOnStateChangeListener (DataBaseChangeListener listener)
- void clearOnStateChangeListeners ()
- void writeAPListToFile ()
- void writeVisitListToFile ()
- boolean setUloopDispositionalTrust (double uloopDT)

Protected Member Functions

- List< MTrackerAP > getData ()

Private Member Functions

- void notifyDataBaseChange ()
- void notifyPredictedMoveChange (String newMessage)
- void announcePossibleHandover (String nextBssid, String nextLastGatewayIp, long nextStationaryTime, long timetoMove, long currentStationaryTime)

Private Attributes

- double uloopDispositionalTrust = 1.0
- MTrackerWifiManager wifiManager
- MTrackerServiceWifiListener wifiListener
- ArrayList< DataBaseChangeListener > listeners = new ArrayList<DataBaseChangeListener> ()
- final IBinder mBinder = new LocalBinder()

6.17.1 Detailed Description

This class is contains the core functionalities of the application. The MTrackerService will run in background, getting WI-FI parameters and storing the required information in the database.

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Version

3.0

6.17.2 Member Function Documentation

6.17.2.1 void eu.uloop.mobilitytracker.MTrackerService.announcePossibleHandover (String *nextBssid,* String *nextLastGatewayIp,* long *nextStationaryTime,* long *timetoMove,* long *currentStationaryTime*) [private]

Sends a message to the Access Point with information about sverage stationary time in this AP, if this is the best AP available for this device, if a change is expected soon and to which AP.

The message is sent using Protobuffers, and the proto definition is shown below:

message MTrackerMessage {

```
message MTrackerPredictedMove {
required string BSSID = 1;
optional uint64 stationaryTime = 2;
optional string lastGatewayIP = 3;
}

required uint64 timeForNextMove = 1;
required uint64 currentStationaryTime = 2;
repeated MTrackerPredictedMove = 3 [packed=true];
```

}

Parameters

nextBssid	BSSID of the next AP (The best ranked AP available). If the best AP is the current one, this will be the string "this".
nextLastGatewayIp	Last IP used by the predicted next AP.
nextStationaryTime	Average connection time (Stationary Time) in the predicted next AP.
timetoMove	Expected time to change AP. When the message is sent at the beginning of the connection, it is equal to the currentStationaryTime.
currentStationaryTime	Average connection time (Stationary Time) in the current AP.

6.17.2.2 void eu.uloop.mobilitytracker.MTrackerService.clearOnStateChangeListeners ( )

6.17.2.3 List<MTrackerAP> eu.uloop.mobilitytracker.MTrackerService.getData ( ) [protected]

6.17.2.4 void eu.uloop.mobilitytracker.MTrackerService.notifyDataBaseChange ( ) [private]

Notifies a database change to the listeners.

6.17.2.5 void eu.uloop.mobilitytracker.MTrackerService.notifyPredictedMoveChange (String *newMessage*) [private]

Notifies a new message to the listeners.

Parameters

newMessage	The message to be notified.

6.17.2.6 IBinder eu.uloop.mobilitytracker.MTrackerService.onBind (Intent *intent*)

6.17.2.7 void eu.uloop.mobilitytracker.MTrackerService.onCreate ( )

6.17.2.8 void eu.uloop.mobilitytracker.MTrackerService.onDestroy ( )

6.17.2.9 int eu.uloop.mobilitytracker.MTrackerService.onStartCommand (Intent *intent*, int *flags*, int *startId*)

6.17.2.10 void eu.uloop.mobilitytracker.MTrackerService.setOnStateChangeListener (DataBaseChangeListener *listener*)

6.17.2.11 boolean eu.uloop.mobilitytracker.MTrackerService.setUloopDispositionalTrust (double *uloopDT*)

Sets the ULOOP Dispositional Trust, which is the default attractiveness.

Parameters

uloopDT	Uloop dispositional trust.

Returns

true if uloopDT is valid [0-1], false otherwise

6.17.2.12 void eu.uloop.mobilitytracker.MTrackerService.startPeriodicScanning ( )

Starts the periodic scanning. This will call the adequate function in the MTrackerWifiManager, which will start a scan periodically. The time between each scan is defined in the MTrackerWifiManager class.

6.17.2.13 void eu.uloop.mobilitytracker.MTrackerService.stopPeriodicScanning ( )

Stops the periodic scanning.

6.17.2.14 void eu.uloop.mobilitytracker.MTrackerService.writeAPListToFile ( )

Writes the AP list to a text file.

6.17.2.15 void eu.uloop.mobilitytracker.MTrackerService.writeVisitListToFile ( )

Write visits to File

6.17.3 Member Data Documentation

6.17.3.1 ArrayList<DataBaseChangeListener> eu.uloop.mobilitytracker.MTrackerService.listeners = new ArrayList<DataBaseChangeListener> () [private]

6.17.3.2 final IBinder eu.uloop.mobilitytracker.MTrackerService.mBinder = new LocalBinder() [private]

6.17.3.3 double eu.uloop.mobilitytracker.MTrackerService.uloopDispositionalTrust = 1.0 [private]

6.17.3.4 MTrackerServiceWifiListener eu.uloop.mobilitytracker.MTrackerService.wifiListener [private]

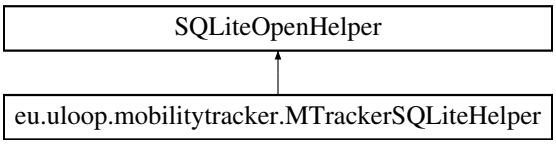
6.17.3.5 MTrackerWifiManager eu.uloop.mobilitytracker.MTrackerService.wifiManager [private]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerService.java

6.18 eu.uloop.mobilitytracker.MTrackerSQLiteHelper Class Reference

Inheritance diagram for eu.uloop.mobilitytracker.MTrackerSQLiteHelper:



Public Member Functions

- MTrackerSQLiteHelper (Context context)
- void onCreate (SQLiteDatabase dataBase)
- void onUpgrade (SQLiteDatabase dataBase, int oldVersion, int newVersion)

Static Public Attributes

- static final String TABLE_ACCESSPOINTS = "accesspoints"
- static final String TABLE_VISITS = "visits"
- static final String TABLE_CONTEXT = "context"
- static final String COLUMN_ID = "_id"

- static final String COLUMN_SSID = "ssid"
- static final String COLUMN_BSSID = "bssid"
- static final String COLUMN_GROUPID = "groupid"
- static final String COLUMN_ATTRACTIVENESS = "attractiveness"
- static final String COLUMN_LASTGATEWAYIP = "lastgatewayip"
- static final String COLUMN_TIMEON = "timeon"
- static final String COLUMN_TIMEOUT = "timeout"
- static final String COLUMN_DAYOFTHEWEEK = "dayoftheweek"
- static final String COLUMN_HOUR = "hour"

Static Private Attributes

- static final String DATABASE_NAME = "mtracker.db"
- static final int DATABASE_VERSION = 1
- static final String CREATE_ACCESSPOINTS_TABLE
- static final String CREATE_VISITS_TABLE

6.18.1 Detailed Description

This class extends the SQLiteOpenHelper android class.

Author

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Luis Amaral Lopes (ULHT)

Version

3.0

6.18.2 Constructor & Destructor Documentation

6.18.2.1 eu.uloop.mobilitytracker.MTrackerSQLiteHelper.MTrackerSQLiteHelper (Context *context*)

6.18.3 Member Function Documentation

6.18.3.1 void eu.uloop.mobilitytracker.MTrackerSQLiteHelper.onCreate (SQLiteDatabase *dataBase*)

6.18.3.2 void eu.uloop.mobilitytracker.MTrackerSQLiteHelper.onUpgrade (SQLiteDatabase *dataBase,* int *oldVersion,* int *newVersion*)

6.18.4 Member Data Documentation

6.18.4.1 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_ATTRACTIVENESS = "attractiveness" [static]

6.18.4.2 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_BSSID = "bssid" [static]

6.18.4.3 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_DAYOFTHEWEEK = "dayoftheweek" [static]

6.18.4.4 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_GROUPID = "groupid" [static]

6.18.4.5 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_HOUR = "hour" [static]

6.18.4.6 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_ID = "_id" [static]

6.18.4.7 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_LASTGATEWAYIP = "lastgatewayip" [static]

6.18.4.8 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_SSID = "ssid" [static]

6.18.4.9 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_TIMEON = "timeon" [static]

6.18.4.10 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.COLUMN_TIMEOUT = "timeout" [static]

6.18.4.11 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.CREATE_ACCESSPOINTS_TABLE [static], [private]

Initial value:

```
= "create table "
                    + TABLE_ACCESSPOINTS + "("
                    + COLUMN_ID + " integer primary key autoincrement, "
                    + COLUMN_BSSID + " text not null unique, "
                    + COLUMN_SSID + " text not null unique, "
                    + COLUMN_ATTRACTIVENESS + " integer not null, "
                    + COLUMN_LASTGATEWAYIP + " text"
                    + ");"
```

6.18.4.12 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.CREATE_VISITS_TABLE [static], [private]

Initial value:

```
= "create table "
                    + TABLE_VISITS + "("
                    + COLUMN_ID + " integer primary key autoincrement, "
                    + COLUMN_SSID + " text not null, "
                    + COLUMN_BSSID + " text not null, "
                    + COLUMN_TIMEON + " integer, "
                    + COLUMN_TIMEOUT + " integer, "
                    + COLUMN_DAYOFTHEWEEK + " integer, "
                    + COLUMN_HOUR + " integer"
                    + ");"
```

6.18.4.13 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.DATABASE_NAME = "mtracker.db" [static], [private]

6.18.4.14 final int eu.uloop.mobilitytracker.MTrackerSQLiteHelper.DATABASE_VERSION = 1 [static], [private]

6.18.4.15 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.TABLE_ACCESSPOINTS = "accesspoints" [static]

6.18.4.16 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.TABLE_CONTEXT = "context" [static]

6.18.4.17 final String eu.uloop.mobilitytracker.MTrackerSQLiteHelper.TABLE_VISITS = "visits" [static]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerSQLiteHelper.java

6.19 eu.uloop.mobilitytracker.MTrackerVisit Class Reference

Public Member Functions

- String getSSID ()
- String getBSSID ()
- long getStartTime ()
- long getEndTime ()
- int getDayOfTheWeek ()
- int getHourOfTheDay ()
- void setSSID (String sSID)
- void setBSSID (String bSSID)
- void setStartTime (long startTime)
- void setEndTime (long endTime)
- void setDayOfTheWeek (int dayOfTheWeek)
- void setHourOfTheDay (int hourOfTheDay)
- MTrackerVisit ()
- void setToDefault ()
- void update (String SSID, String BSSID, Long startTime, Long endTime)
- String toString ()

Private Attributes

- String SSID
- String BSSID
- Long startTime
- Long endTime
- int dayOfTheWeek
- int hourOfTheDay
- SimpleDateFormat dataFormat = new SimpleDateFormat("yyyy.MM.dd 'at' HH:mm:ss")
- SimpleDateFormat periodFormat = new SimpleDateFormat("HH:mm:ss")

6.19.1 Detailed Description

This class represents what MTracker considers a Visit. The information kept in this object are SSID, BSSID, start and end time of the connection, the day of the week, and the hour of the day.

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Version

3.0

6.19.2 Constructor & Destructor Documentation

6.19.2.1 eu.uloop.mobilitytracker.MTrackerVisit.MTrackerVisit ( )

6.19.3 Member Function Documentation

6.19.3.1 String eu.uloop.mobilitytracker.MTrackerVisit.getBSSID ( )

Returns

the bSSID

6.19.3.2 int eu.uloop.mobilitytracker.MTrackerVisit.getDayOfTheWeek ( )

Returns

the dayOfTheWeek

6.19.3.3 long eu.uloop.mobilitytracker.MTrackerVisit.getEndTime ( )

Returns

the endTime

6.19.3.4 int eu.uloop.mobilitytracker.MTrackerVisit.getHourOfTheDay ( )

Returns

the hourOfTheDay

6.19.3.5 String eu.uloop.mobilitytracker.MTrackerVisit.getSSID ( )

Returns

the sSID

6.19.3.6 long eu.uloop.mobilitytracker.MTrackerVisit.getStartTime ( )

Returns

the startTime

6.19.3.7 void eu.uloop.mobilitytracker.MTrackerVisit.setBSSID (String *bSSID*)

Parameters

bSSID	the bSSID to set

6.19.3.8 void eu.uloop.mobilitytracker.MTrackerVisit.setDayOfTheWeek (int *dayOfTheWeek*)

Parameters

dayOfTheWeek	the dayOfTheWeek to set

6.19.3.9 void eu.uloop.mobilitytracker.MTrackerVisit.setEndTime (long *endTime*)

Parameters

endTime	the endTime to set

6.19.3.10 void eu.uloop.mobilitytracker.MTrackerVisit.setHourOfTheDay (int *hourOfTheDay*)

Parameters

hourOfTheDay	the hourOfTheDay to set

6.19.3.11 void eu.uloop.mobilitytracker.MTrackerVisit.setSSID (String *sSID*)

Parameters

sSID	the sSID to set

6.19.3.12 void eu.uloop.mobilitytracker.MTrackerVisit.setStartTime (long *startTime*)

Parameters

startTime	the startTime to set

6.19.3.13 void eu.uloop.mobilitytracker.MTrackerVisit.setToDefault ( )

6.19.3.14 String eu.uloop.mobilitytracker.MTrackerVisit.toString ( )

6.19.3.15 void eu.uloop.mobilitytracker.MTrackerVisit.update (String *SSID,* String *BSSID,* Long *startTime,* Long *endTime*)

6.19.4 Member Data Documentation

6.19.4.1 String eu.uloop.mobilitytracker.MTrackerVisit.BSSID [private]

6.19.4.2 SimpleDateFormat eu.uloop.mobilitytracker.MTrackerVisit.dataFormat = new SimpleDateFormat("yyyy.MM.dd 'at' HH:mm:ss") [private]

6.19.4.3 int eu.uloop.mobilitytracker.MTrackerVisit.dayOfTheWeek [private]

6.19.4.4 Long eu.uloop.mobilitytracker.MTrackerVisit.endTime [private]

6.19.4.5 int eu.uloop.mobilitytracker.MTrackerVisit.hourOfTheDay [private]

6.19.4.6 SimpleDateFormat eu.uloop.mobilitytracker.MTrackerVisit.periodFormat = new SimpleDateFormat("HH:mm:ss") [private]

6.19.4.7 String eu.uloop.mobilitytracker.MTrackerVisit.SSID [private]

6.19.4.8 Long eu.uloop.mobilitytracker.MTrackerVisit.startTime [private]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerVisit.java

6.20 eu.uloop.mobilitytracker.MTrackerWifiManager Class Reference

Classes

- class **WifiAvailableNetworksChange**
- class **WifiConnectionChange**
- class **WifiStateChange**

Public Member Functions

- void close (Context c)
- void startPeriodicScanning ()
- void stopPeriodicScanning ()
- void setOnWifiChangeListener (WifiChangeListener listener)
- void clearOnWifiChangeListener ()
- void setWifiManager (WifiManager wm)
- void setWifiManager (Context c)
- boolean isWifiEnabled ()
- boolean startScan ()
- List< ScanResult > getLastScanResults ()
- int getGatewayIp ()
- void noteOngoingConnection ()

Public Attributes

- boolean isScanningActive = false
- boolean isWaitingScanResults = false

Static Public Attributes

- static long MINIMUM_CONNEXION_TIME = 10
- static int SCANNING_INTERVAL = 20000

Protected Attributes

- long wifiCurrentAPStart

Private Attributes

- WifiManager androidWifiManager
- long wifiCurrentVisitId
- WifiStateChange wifiStateReceiver
- WifiConnectionChange wifiConnReceiver
- WifiAvailableNetworksChange wifiScanReceiver
- WifiChangeListener listener
- Handler mHandler = new Handler()
- Runnable runScan

6.20.1 Detailed Description

This class provides some methods to provide extended functionality to the android WifiManager.

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Version

3.0

6.20.2 Member Function Documentation

6.20.2.1 void eu.uloop.mobilitytracker.MTrackerWifiManager.clearOnWifiChangeListener ( )

6.20.2.2 void eu.uloop.mobilitytracker.MTrackerWifiManager.close (Context *c*)

6.20.2.3 int eu.uloop.mobilitytracker.MTrackerWifiManager.getGatewayIp ( )

6.20.2.4 List<ScanResult> eu.uloop.mobilitytracker.MTrackerWifiManager.getLastScanResults ( )

6.20.2.5 boolean eu.uloop.mobilitytracker.MTrackerWifiManager.isWifiEnabled ( )

6.20.2.6 void eu.uloop.mobilitytracker.MTrackerWifiManager.noteOngoingConnection ( )

6.20.2.7 void eu.uloop.mobilitytracker.MTrackerWifiManager.setOnWifiChangeListener (WifiChangeListener *listener*)

6.20.2.8 void eu.uloop.mobilitytracker.MTrackerWifiManager.setWifiManager (WifiManager *wm*)

6.20.2.9 void eu.uloop.mobilitytracker.MTrackerWifiManager.setWifiManager (Context *c*)

6.20.2.10 void eu.uloop.mobilitytracker.MTrackerWifiManager.startPeriodicScanning ( )

6.20.2.11 boolean eu.uloop.mobilitytracker.MTrackerWifiManager.startScan ( )

6.20.2.12 void eu.uloop.mobilitytracker.MTrackerWifiManager.stopPeriodicScanning ( )

6.20.3 Member Data Documentation

6.20.3.1 WifiManager eu.uloop.mobilitytracker.MTrackerWifiManager.androidWifiManager `[private]`

6.20.3.2 boolean eu.uloop.mobilitytracker.MTrackerWifiManager.isScanningActive = false

6.20.3.3 boolean eu.uloop.mobilitytracker.MTrackerWifiManager.isWaitingScanResults = false

6.20.3.4 WifiChangeListener eu.uloop.mobilitytracker.MTrackerWifiManager.listener `[private]`

6.20.3.5 Handler eu.uloop.mobilitytracker.MTrackerWifiManager.mHandler = new Handler() `[private]`

6.20.3.6 long eu.uloop.mobilitytracker.MTrackerWifiManager.MINIMUM_CONNEXION_TIME = 10 `[static]`

6.20.3.7 Runnable eu.uloop.mobilitytracker.MTrackerWifiManager.runScan [private]

Initial value:

```
= new Runnable() {
                public void run() {
                        if (isScanningActive) {
                                if (!isWaitingScanResults &&
      isWifiEnabled()) {
                                        if (startScan()) {
                                                isWaitingScanResults = true;
                                        }
                                        else {

                                        }

                                        mHandler.postDelayed(runScan,
      SCANNING_INTERVAL);
                                }
                                else if (isWaitingScanResults) {

                                mHandler.postDelayed(runScan,
      SCANNING_INTERVAL);
                                isWaitingScanResults = false;
                                }
                                else {

                                }
                        }
                        else {

                        }
                }

        }
```

6.20.3.8 int eu.uloop.mobilitytracker.MTrackerWifiManager.SCANNING_INTERVAL = 20000 [static]

6.20.3.9 WifiConnectionChange eu.uloop.mobilitytracker.MTrackerWifiManager.wifiConnReceiver [private]

6.20.3.10 long eu.uloop.mobilitytracker.MTrackerWifiManager.wifiCurrentAPStart [protected]

6.20.3.11 long eu.uloop.mobilitytracker.MTrackerWifiManager.wifiCurrentVisitId [private]

6.20.3.12 WifiAvailableNetworksChange eu.uloop.mobilitytracker.MTrackerWifiManager.wifiScanReceiver [private]

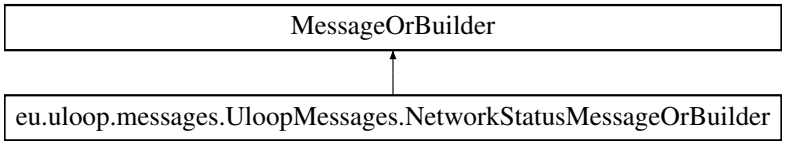
6.20.3.13 WifiStateChange eu.uloop.mobilitytracker.MTrackerWifiManager.wifiStateReceiver [private]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerWifiManager.java

6.21 eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder:



Public Member Functions

- boolean hasNsrep ()
- eu.uloop.messages.UloopMessages.NetworkStatusMessageReply getNsrep ()
- eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder getNsrepOrBuilder ()

6.21.1 Member Function Documentation

6.21.1.1 eu.uloop.messages.UloopMessages.NetworkStatusMessageReply eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder.getNsrep ( )

6.21.1.2 eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder.getNsrepOrBuilder ( )

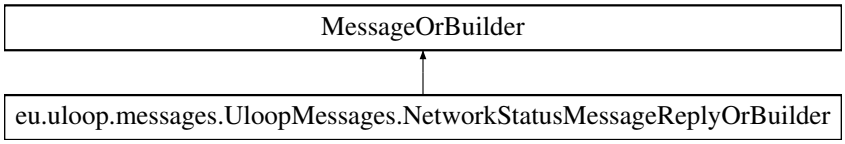
6.21.1.3 boolean eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder.hasNsrep ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.22 eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder:



Public Member Functions

- boolean hasUplink ()
- long getUplink ()
- boolean hasAvailable ()
- long getAvailable ()

6.22.1 Member Function Documentation

6.22.1.1 long eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder.getAvailable ( )

6.22.1.2 long eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder.getUplink ( )

6.22.1.3 boolean eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder.hasAvailable ( )

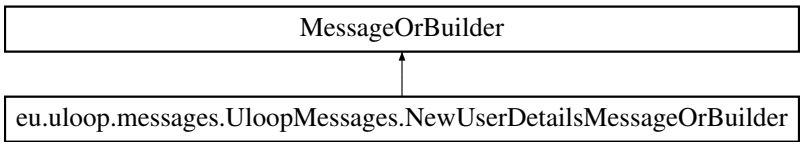
6.22.1.4 boolean eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder.hasUplink ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.23 eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder:



Public Member Functions

- boolean hasCryptoid ()
- com.google.protobuf.ByteString getCryptoid ()
- boolean hasToken ()
- double getToken ()

6.23.1 Member Function Documentation

6.23.1.1 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder.getCryptoid ( )

6.23.1.2 double eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder.getToken ( )

6.23.1.3 boolean eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder.hasCryptoid ( )

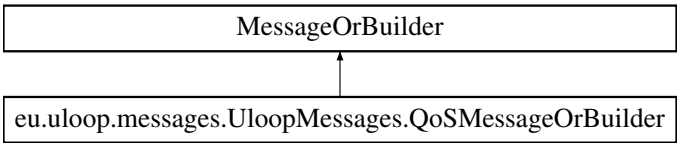
6.23.1.4 boolean eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder.hasToken ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.24 eu.uloop.messages.UloopMessages.QoSMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.QoSMessageOrBuilder:



Public Member Functions

- boolean hasTuple ()
- eu.uloop.messages.UloopMessages.QoSTuple getTuple ()
- eu.uloop.messages.UloopMessages.QoSTupleOrBuilder getTupleOrBuilder ()
- boolean hasReq ()
- eu.uloop.messages.UloopMessages.QosRequest getReq ()
- eu.uloop.messages.UloopMessages.QosRequestOrBuilder getReqOrBuilder ()

6.24.1 Member Function Documentation

6.24.1.1 eu.uloop.messages.UloopMessages.QosRequest eu.uloop.messages.UloopMessages.QoSMessageOrBuilder.getReq ( )

6.24.1.2 eu.uloop.messages.UloopMessages.QosRequestOrBuilder eu.uloop.messages.UloopMessages.QoS↩ MessageOrBuilder.getReqOrBuilder ( )

6.24.1.3 eu.uloop.messages.UloopMessages.QoSTuple eu.uloop.messages.UloopMessages.QoSMessageOrBuilder.getTuple ( )

6.24.1.4 eu.uloop.messages.UloopMessages.QoSTupleOrBuilder eu.uloop.messages.UloopMessages.QoS↩ MessageOrBuilder.getTupleOrBuilder ( )

6.24.1.5 boolean eu.uloop.messages.UloopMessages.QoSMessageOrBuilder.hasReq ( )

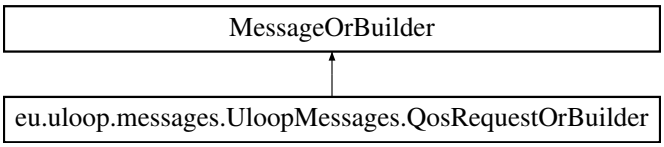
6.24.1.6 boolean eu.uloop.messages.UloopMessages.QoSMessageOrBuilder.hasTuple ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.25 eu.uloop.messages.UloopMessages.QosRequestOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.QosRequestOrBuilder:



Public Member Functions

- boolean hasRequest ()
- String getRequest ()

6.25.1 Member Function Documentation

6.25.1.1 String eu.uloop.messages.UloopMessages.QosRequestOrBuilder.getRequest ( )

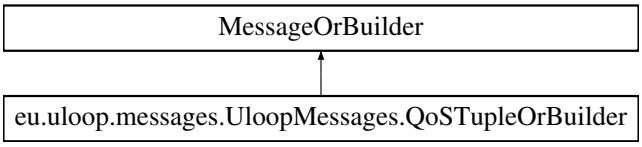
6.25.1.2 boolean eu.uloop.messages.UloopMessages.QosRequestOrBuilder.hasRequest ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.26 eu.uloop.messages.UloopMessages.QoSTupleOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.QoSTupleOrBuilder:



Public Member Functions

- boolean hasClientIP ()
- String getClientIP ()
- boolean hasAvgdelay ()
- String getAvgdelay ()
- boolean hasAvgbitrate ()
- String getAvgbitrate ()
- boolean hasAvgpktloss ()
- String getAvgpktloss ()
- boolean hasAvgjitter ()
- String getAvgjitter ()

6.26.1 Member Function Documentation

6.26.1.1 String eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.getAvgbitrate ( )

6.26.1.2 String eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.getAvgdelay ( )

6.26.1.3 String eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.getAvgjitter ( )

6.26.1.4 String eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.getAvgpktloss ( )

6.26.1.5 String eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.getClientIP ( )

6.26.1.6 boolean eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.hasAvgbitrate ( )

6.26.1.7 boolean eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.hasAvgdelay ( )

6.26.1.8 boolean eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.hasAvgjitter ( )

6.26.1.9 boolean eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.hasAvgpktloss ( )

6.26.1.10 boolean eu.uloop.messages.UloopMessages.QoSTupleOrBuilder.hasClientIP ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.27 eu.uloop.mobilitytracker.R Class Reference

Classes

- class **attr**
- class **dimen**
- class **drawable**

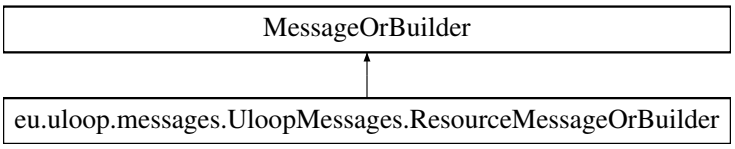
- class **id**
- class **layout**
- class **menu**
- class **string**
- class **style**

The documentation for this class was generated from the following file:

- gen/eu/uloop/mobilitytracker/R.java

6.28 eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder:



Public Member Functions

- boolean hasRreq ()
- eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequest getRreq ()
- eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder getRreqOrBuilder ()
- boolean hasRep ()
- eu.uloop.messages.UloopMessages.EnoughResourcesMessageReply getRep ()
- eu.uloop.messages.UloopMessages.EnoughResourcesMessageReplyOrBuilder getRepOrBuilder ()
- boolean hasCac ()
- eu.uloop.messages.UloopMessages.EnoughResourcesCACReply getCac ()
- eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder getCacOrBuilder ()

6.28.1 Member Function Documentation

6.28.1.1 eu.uloop.messages.UloopMessages.EnoughResourcesCACReply eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.getCac ( )

6.28.1.2 eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.getCacOrBuilder ( )

6.28.1.3 eu.uloop.messages.UloopMessages.EnoughResourcesMessageReply eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.getRep ( )

6.28.1.4 eu.uloop.messages.UloopMessages.EnoughResourcesMessageReplyOrBuilder eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.getRepOrBuilder ( )

6.28.1.5 eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequest eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.getRreq ( )

6.28.1.6 eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.getRreqOrBuilder ( )

6.28.1.7 boolean eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.hasCac ( )

6.28.1.8 boolean eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.hasRep ( )

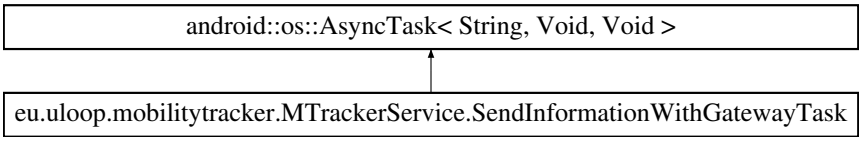
6.28.1.9 boolean eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder.hasRreq ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.29 eu.uloop.mobilitytracker.MTrackerService.SendInformationWithGatewayTask Class Reference

Inheritance diagram for eu.uloop.mobilitytracker.MTrackerService.SendInformationWithGatewayTask:



Protected Member Functions

- Void doInBackground (String...parameters)

6.29.1 Member Function Documentation

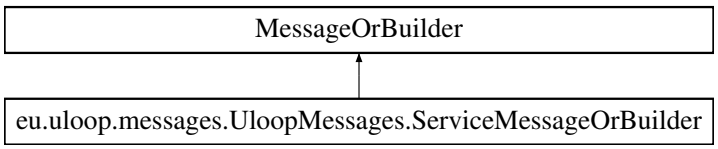
6.29.1.1 Void eu.uloop.mobilitytracker.MTrackerService.SendInformationWithGatewayTask.doInBackground (String... *parameters*) [protected]

The documentation for this class was generated from the following file:

- src/eu/uloop/mobilitytracker/MTrackerService.java

6.30 eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder:



Public Member Functions

- boolean hasServreq ()
- eu.uloop.messages.UloopMessages.ServiceRequest getServreq ()
- eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder getServreqOrBuilder ()
- boolean hasServrep ()

- eu.uloop.messages.UloopMessages.ServiceReply getServrep ()
- eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder getServrepOrBuilder ()
- boolean hasServup ()
- eu.uloop.messages.UloopMessages.ServiceUpdate getServup ()
- eu.uloop.messages.UloopMessages.ServiceUpdateOrBuilder getServupOrBuilder ()

6.30.1 Member Function Documentation

6.30.1.1 eu.uloop.messages.UloopMessages.ServiceReply eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.getServrep ( )

6.30.1.2 eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.getServrepOrBuilder ( )

6.30.1.3 eu.uloop.messages.UloopMessages.ServiceRequest eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.getServreq ( )

6.30.1.4 eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.getServreqOrBuilder ( )

6.30.1.5 eu.uloop.messages.UloopMessages.ServiceUpdate eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.getServup ( )

6.30.1.6 eu.uloop.messages.UloopMessages.ServiceUpdateOrBuilder eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.getServupOrBuilder ( )

6.30.1.7 boolean eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.hasServrep ( )

6.30.1.8 boolean eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.hasServreq ( )

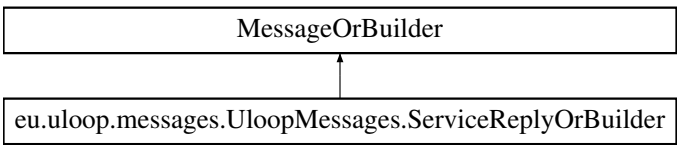
6.30.1.9 boolean eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder.hasServup ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.31 eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder:



Public Member Functions

- boolean hasCryptoid ()
- com.google.protobuf.ByteString getCryptoid ()
- boolean hasTrust ()
- double getTrust ()
- boolean hasAuthorization ()
- boolean getAuthorization ()

6.31.1 Member Function Documentation

6.31.1.1 boolean eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder.getAuthorization ( )

6.31.1.2 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder.getCryptoid ( )

6.31.1.3 double eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder.getTrust ( )

6.31.1.4 boolean eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder.hasAuthorization ( )

6.31.1.5 boolean eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder.hasCryptoid ( )

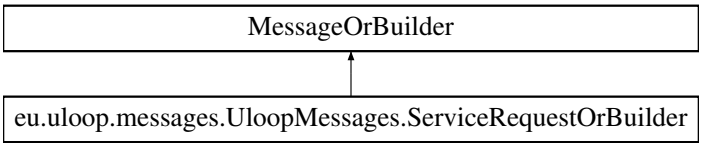
6.31.1.6 boolean eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder.hasTrust ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.32 eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder:



Public Member Functions

- boolean hasCryptoid ()
- com.google.protobuf.ByteString getCryptoid ()
- boolean hasUsername ()
- com.google.protobuf.ByteString getUsername ()
- boolean hasPassword ()
- com.google.protobuf.ByteString getPassword ()
- boolean hasTokens ()
- double getTokens ()
- boolean hasPromiseOfPayment ()
- com.google.protobuf.ByteString getPromiseOfPayment ()

6.32.1 Member Function Documentation

6.32.1.1 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.getCryptoid ( )

6.32.1.2 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.getPassword ( )

6.32.1.3 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.getPromiseOfPayment ( )

6.32.1.4 double eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.getTokens ( )

6.32.1.5 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.getUsername ( )

6.32.1.6 boolean eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.hasCryptoid ( )

6.32.1.7 boolean eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.hasPassword ( )

6.32.1.8 boolean eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.hasPromiseOfPayment ( )

6.32.1.9 boolean eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.hasTokens ( )

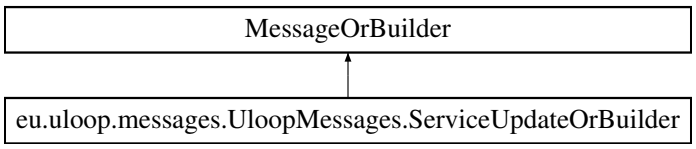
6.32.1.10 boolean eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder.hasUsername ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.33 eu.uloop.messages.UloopMessages.ServiceUpdateOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.ServiceUpdateOrBuilder:



Public Member Functions

- boolean hasCryptoid ()
- com.google.protobuf.ByteString getCryptoid ()

6.33.1 Member Function Documentation

6.33.1.1 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.ServiceUpdateOrBuilder.getCryptoid ( )

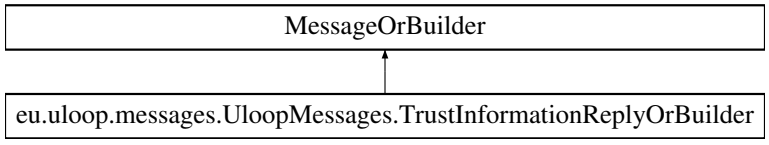
6.33.1.2 boolean eu.uloop.messages.UloopMessages.ServiceUpdateOrBuilder.hasCryptoid ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.34 eu.uloop.messages.UloopMessages.TrustInformationReplyOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.TrustInformationReplyOrBuilder:



Public Member Functions

- boolean hasToken ()
- double getToken ()

6.34.1 Member Function Documentation

6.34.1.1 double eu.uloop.messages.UloopMessages.TrustInformationReplyOrBuilder.getToken ( )

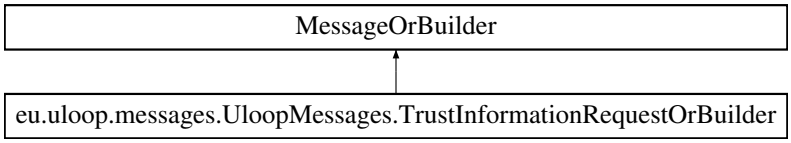
6.34.1.2 boolean eu.uloop.messages.UloopMessages.TrustInformationReplyOrBuilder.hasToken ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.35 eu.uloop.messages.UloopMessages.TrustInformationRequestOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.TrustInformationRequestOrBuilder:



Public Member Functions

- boolean hasMap ()
- com.google.protobuf.ByteString getMap ()

6.35.1 Member Function Documentation

6.35.1.1 com.google.protobuf.ByteString eu.uloop.messages.UloopMessages.TrustInformationRequestOrBuilder.getMap ( )

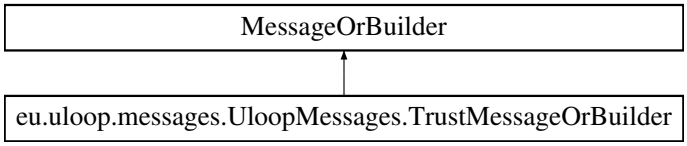
6.35.1.2 boolean eu.uloop.messages.UloopMessages.TrustInformationRequestOrBuilder.hasMap ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.36 eu.uloop.messages.UloopMessages.TrustMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.TrustMessageOrBuilder:



Public Member Functions

- boolean hasTreq ()
- eu.uloop.messages.UloopMessages.TrustInformationRequest getTreq ()
- eu.uloop.messages.UloopMessages.TrustInformationRequestOrBuilder getTreqOrBuilder ()
- boolean hasTrep ()
- eu.uloop.messages.UloopMessages.TrustInformationReply getTrep ()
- eu.uloop.messages.UloopMessages.TrustInformationReplyOrBuilder getTrepOrBuilder ()

6.36.1 Member Function Documentation

6.36.1.1 eu.uloop.messages.UloopMessages.TrustInformationReply eu.uloop.messages.UloopMessages.TrustMessageOr↩ Builder.getTrep ( )

6.36.1.2 eu.uloop.messages.UloopMessages.TrustInformationReplyOrBuilder eu.uloop.messages.UloopMessages.TrustMessageOrBuilder.getTrepOrBuilder ( )

6.36.1.3 eu.uloop.messages.UloopMessages.TrustInformationRequest eu.uloop.messages.UloopMessages.TrustMessageOr↩ Builder.getTreq ( )

6.36.1.4 eu.uloop.messages.UloopMessages.TrustInformationRequestOrBuilder eu.uloop.messages.UloopMessages.TrustMessageOrBuilder.getTreqOrBuilder ( )

6.36.1.5 boolean eu.uloop.messages.UloopMessages.TrustMessageOrBuilder.hasTrep ( )

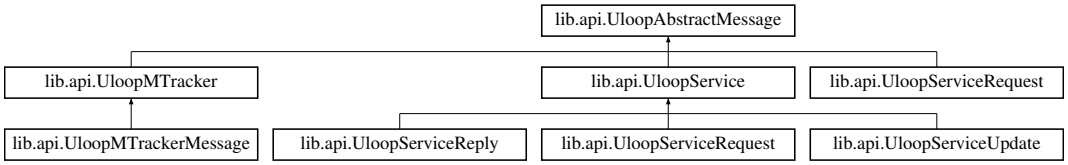
6.36.1.6 boolean eu.uloop.messages.UloopMessages.TrustMessageOrBuilder.hasTreq ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.37 lib.api.UloopAbstractMessage Interface Reference

Inheritance diagram for lib.api.UloopAbstractMessage:



Public Member Functions

- UloopAbstractMessage decode (UloopMessage ulm) throws RuntimeException
- UloopMessage.Builder encode ()
- void print ()

6.37.1 Member Function Documentation

6.37.1.1 UloopAbstractMessage lib.api.UloopAbstractMessage.decode (UloopMessage *ulm*) throws RuntimeException

Implemented in lib.api.UloopMTrackerMessage, lib.api.UloopServiceRequest, lib.api.UloopServiceReply, and lib.↩ api.UloopServiceUpdate.

6.37.1.2 UloopMessage.Builder lib.api.UloopAbstractMessage.encode ( )

Implemented in lib.api.UloopMTrackerMessage, lib.api.UloopServiceRequest, lib.api.UloopServiceReply, and lib.↩ api.UloopServiceUpdate.

6.37.1.3 void lib.api.UloopAbstractMessage.print ( )

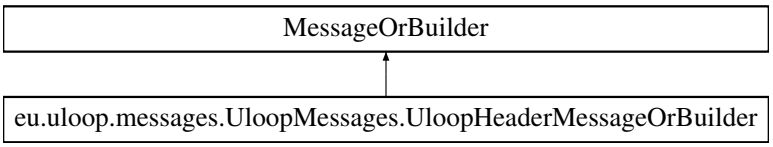
Implemented in lib.api.UloopServiceRequest, lib.api.UloopMTrackerMessage, lib.api.UloopServiceReply, and lib.↩ api.UloopServiceUpdate.

The documentation for this interface was generated from the following file:

- src/lib/api/UloopAbstractMessage.java

6.38 eu.uloop.messages.UloopMessages.UloopHeaderMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.UloopHeaderMessageOrBuilder:



Public Member Functions

- boolean hasLength ()
- int getLength ()

6.38.1 Member Function Documentation

6.38.1.1 int eu.uloop.messages.UloopMessages.UloopHeaderMessageOrBuilder.getLength ( )

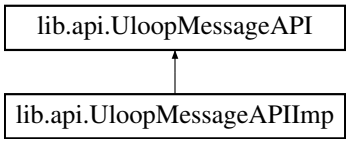
6.38.1.2 boolean eu.uloop.messages.UloopMessages.UloopHeaderMessageOrBuilder.hasLength ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.39 lib.api.UloopMessageAPI Interface Reference

Inheritance diagram for lib.api.UloopMessageAPI:



Public Member Functions

- void send_service_request (UloopService ulservice)
- UloopService recv_service_request ()
- void send_service_reply (UloopService ulservice)
- UloopService recv_service_reply ()
- void send_service_update (UloopService ulservice)
- UloopService recv_service_update ()
- void send_mtracker_message (UloopMTracker ulmr)
- UloopMTracker recv_mtracker_message ()
- UloopMessage recv_message ()

6.39.1 Member Function Documentation

6.39.1.1 UloopMessage lib.api.UloopMessageAPI.recv_message ( )

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.2 UloopMTracker lib.api.UloopMessageAPI.recv_mtracker_message ( )

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.3 UloopService lib.api.UloopMessageAPI.recv_service_reply ( )

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.4 UloopService lib.api.UloopMessageAPI.recv_service_request ( )

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.5 UloopService lib.api.UloopMessageAPI.recv_service_update ( )

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.6 void lib.api.UloopMessageAPI.send_mtracker_message (UloopMTracker *ulmr*)

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.7 void lib.api.UloopMessageAPI.send_service_reply (UloopService *ulservice*)

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.8 void lib.api.UloopMessageAPI.send_service_request (UloopService *ulservice*)

Implemented in lib.api.UloopMessageAPIImp.

6.39.1.9 void lib.api.UloopMessageAPI.send_service_update (UloopService *ulservice*)

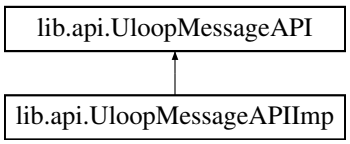
Implemented in lib.api.UloopMessageAPIImp.

The documentation for this interface was generated from the following file:

- src/lib/api/UloopMessageAPI.java

6.40 lib.api.UloopMessageAPIImp Class Reference

Inheritance diagram for lib.api.UloopMessageAPIImp:



Public Member Functions

- UloopMessageAPIImp (InetSocketAddress address)
- UloopMessageAPIImp (Socket s)
- UloopMessage recv_message ()
- void send_service_request (UloopService ulservice)
- UloopServiceRequest recv_service_request ()
- void send_service_reply (UloopService ulservice)
- UloopServiceReply recv_service_reply ()
- void send_mtracker_message (UloopMTracker ulmr)
- UloopMTracker recv_mtracker_message ()
- void send_service_update (UloopService ulservice)
- UloopService recv_service_update ()

Protected Attributes

- Socket s

Private Member Functions

- void send_data (UloopMessage ulm)

6.40.1 Constructor & Destructor Documentation

6.40.1.1 lib.api.UloopMessageAPIImp.UloopMessageAPIImp (InetSocketAddress *address*)

6.40.1.2 lib.api.UloopMessageAPIImp.UloopMessageAPIImp (Socket *s*)

6.40.2 Member Function Documentation

6.40.2.1 UloopMessage lib.api.UloopMessageAPIImp.recv_message ( )

Implements lib.api.UloopMessageAPI.

6.40.2.2 UloopMTracker lib.api.UloopMessageAPIImp.recv_mtracker_message ( )

Implements lib.api.UloopMessageAPI.

6.40.2.3 UloopServiceReply lib.api.UloopMessageAPIImp.recv_service_reply ( )

Implements lib.api.UloopMessageAPI.

6.40.2.4 UloopServiceRequest lib.api.UloopMessageAPIImp.recv_service_request ( )

Implements lib.api.UloopMessageAPI.

6.40.2.5 UloopService lib.api.UloopMessageAPIImp.recv_service_update ( )

Implements lib.api.UloopMessageAPI.

6.40.2.6 void lib.api.UloopMessageAPIImp.send_data (UloopMessage *ulm*) [private]

6.40.2.7 void lib.api.UloopMessageAPIImp.send_mtracker_message (UloopMTracker *ulmr*)

Implements lib.api.UloopMessageAPI.

6.40.2.8 void lib.api.UloopMessageAPIImp.send_service_reply (UloopService *ulservice*)

Implements lib.api.UloopMessageAPI.

6.40.2.9 void lib.api.UloopMessageAPIImp.send_service_request (UloopService *ulservice*)

Implements lib.api.UloopMessageAPI.

6.40.2.10 void lib.api.UloopMessageAPIImp.send_service_update (UloopService *ulservice*)

Implements lib.api.UloopMessageAPI.

6.40.3 Member Data Documentation

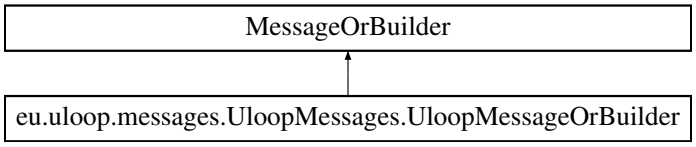
6.40.3.1 Socket lib.api.UloopMessageAPIImp.s [protected]

The documentation for this class was generated from the following file:

- src/lib/api/UloopMessageAPIImp.java

6.41 eu.uloop.messages.UloopMessages.UloopMessageOrBuilder Interface Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.UloopMessageOrBuilder:



Public Member Functions

- boolean hasTm ()
- eu.uloop.messages.UloopMessages.TrustMessage getTm ()
- eu.uloop.messages.UloopMessages.TrustMessageOrBuilder getTmOrBuilder ()
- boolean hasRm ()
- eu.uloop.messages.UloopMessages.ResourceMessage getRm ()
- eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder getRmOrBuilder ()
- boolean hasNsm ()
- eu.uloop.messages.UloopMessages.NetworkStatusMessage getNsm ()
- eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder getNsmOrBuilder ()
- boolean hasUdm ()
- eu.uloop.messages.UloopMessages.NewUserDetailsMessage getUdm ()
- eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder getUdmOrBuilder ()
- boolean hasQos ()
- eu.uloop.messages.UloopMessages.QoSMessage getQos ()
- eu.uloop.messages.UloopMessages.QoSMessageOrBuilder getQosOrBuilder ()
- boolean hasUlt ()
- eu.uloop.messages.UloopMessages.UloopMessageType getUlt ()
- boolean hasServm ()
- eu.uloop.messages.UloopMessages.ServiceMessage getServm ()
- eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder getServmOrBuilder ()
- boolean hasMtracker ()
- eu.uloop.messages.UloopMessages.MTrackerMessage getMtracker ()
- eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder getMtrackerOrBuilder ()

6.41.1 Member Function Documentation

6.41.1.1 eu.uloop.messages.UloopMessages.MTrackerMessage eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getMtracker ( )

6.41.1.2 eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getMtrackerOrBuilder ( )

6.41.1.3 eu.uloop.messages.UloopMessages.NetworkStatusMessage eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getNsm ( )

6.41.1.4 eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getNsmOrBuilder ( )

6.41.1.5 eu.uloop.messages.UloopMessages.QoSMessage eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getQos ( )

6.41.1.6 eu.uloop.messages.UloopMessages.QoSMessageOrBuilder eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getQosOrBuilder ( )

6.41.1.7 eu.uloop.messages.UloopMessages.ResourceMessage eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getRm ( )

6.41.1.8 **eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder** eu.uloop.messages.UloopMessages.↩ UloopMessageOrBuilder.getRmOrBuilder ( )

6.41.1.9 eu.uloop.messages.UloopMessages.ServiceMessage eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.↩ getServm ( )

6.41.1.10 **eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder** eu.uloop.messages.UloopMessages.↩ UloopMessageOrBuilder.getServmOrBuilder ( )

6.41.1.11 eu.uloop.messages.UloopMessages.TrustMessage eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.get↩ Tm ( )

6.41.1.12 **eu.uloop.messages.UloopMessages.TrustMessageOrBuilder** eu.uloop.messages.UloopMessages.↩ UloopMessageOrBuilder.getTmOrBuilder ( )

6.41.1.13 eu.uloop.messages.UloopMessages.NewUserDetailsMessage eu.uloop.messages.UloopMessages.UloopMessageOr↩ Builder.getUdm ( )

6.41.1.14 **eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder** eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.getUdmOrBuilder ( )

6.41.1.15 **eu.uloop.messages.UloopMessages.UloopMessageType** eu.uloop.messages.UloopMessages.Uloop↩ MessageOrBuilder.getUlt ( )

6.41.1.16 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasMtracker ( )

6.41.1.17 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasNsm ( )

6.41.1.18 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasQos ( )

6.41.1.19 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasRm ( )

6.41.1.20 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasServm ( )

6.41.1.21 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasTm ( )

6.41.1.22 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasUdm ( )

6.41.1.23 boolean eu.uloop.messages.UloopMessages.UloopMessageOrBuilder.hasUlt ( )

The documentation for this interface was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.42 eu.uloop.messages.UloopMessages Class Reference

Classes

- class **EnoughResourcesCACReply**
- interface EnoughResourcesCACReplyOrBuilder
- class **EnoughResourcesMessageReply**
- interface EnoughResourcesMessageReplyOrBuilder
- class **EnoughResourcesMessageRequest**
- interface EnoughResourcesMessageRequestOrBuilder
- enum MessageType

- class **MTrackerMessage**
- interface MTrackerMessageOrBuilder
- class **MTrackerPredictedMove**
- interface MTrackerPredictedMoveOrBuilder
- class **NetworkStatusMessage**
- interface NetworkStatusMessageOrBuilder
- class **NetworkStatusMessageReply**
- interface NetworkStatusMessageReplyOrBuilder
- class **NewUserDetailsMessage**
- interface NewUserDetailsMessageOrBuilder
- class **QoSMessage**
- interface QoSMessageOrBuilder
- class **QosRequest**
- interface QosRequestOrBuilder
- class **QoSTuple**
- interface QoSTupleOrBuilder
- class **ResourceMessage**
- interface ResourceMessageOrBuilder
- class **ServiceMessage**
- interface ServiceMessageOrBuilder
- class **ServiceReply**
- interface ServiceReplyOrBuilder
- class **ServiceRequest**
- interface ServiceRequestOrBuilder
- class **ServiceUpdate**
- interface ServiceUpdateOrBuilder
- class **TrustInformationReply**
- interface TrustInformationReplyOrBuilder
- class **TrustInformationRequest**
- interface TrustInformationRequestOrBuilder
- class **TrustMessage**
- interface TrustMessageOrBuilder
- class **UloopHeaderMessage**
- interface UloopHeaderMessageOrBuilder
- class **UloopMessage**
- interface UloopMessageOrBuilder
- enum UloopMessageType

Static Public Member Functions

- static void registerAllExtensions (com.google.protobuf.ExtensionRegistry registry)
- static com.google.protobuf.Descriptors.FileDescriptor getDescriptor ()

Private Member Functions

- UloopMessages ()

Static Private Attributes

- static com.google.protobuf.Descriptors.Descriptor internal_static_UloopHeaderMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_UloopHeaderMessage_field↩ AccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_UloopMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_UloopMessage_fieldAccessor↩ Table
- static com.google.protobuf.Descriptors.Descriptor internal_static_TrustMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_TrustMessage_fieldAccessor↩ Table
- static com.google.protobuf.Descriptors.Descriptor internal_static_TrustInformationRequest_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_TrustInformationRequest_↩ fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_TrustInformationReply_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_TrustInformationReply_field↩ AccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_ResourceMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_ResourceMessage_field↩ AccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_EnoughResourcesMessageRequest_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_EnoughResourcesMessage↩ Request_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_EnoughResourcesMessageReply_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_EnoughResourcesMessage↩ Reply_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_NetworkStatusMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_NetworkStatusMessage_field↩ AccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_NetworkStatusMessageReply_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_NetworkStatusMessage↩ Reply_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_NewUserDetailsMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_NewUserDetailsMessage_↩ fieldAccessorTable

- static com.google.protobuf.Descriptors.Descriptor internal_static_EnoughResourcesCACReply_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_EnoughResourcesCACReply_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_QoSTuple_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_QoSTuple_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_QosRequest_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_QosRequest_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_QoSMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_QoSMessage_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_ServiceMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_ServiceMessage_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_ServiceRequest_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_ServiceRequest_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_ServiceReply_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_ServiceReply_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_ServiceUpdate_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_ServiceUpdate_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_MTrackerPredictedMove_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_MTrackerPredictedMove_fieldAccessorTable
- static com.google.protobuf.Descriptors.Descriptor internal_static_MTrackerMessage_descriptor
- static com.google.protobuf.GeneratedMessage.FieldAccessorTable internal_static_MTrackerMessage_fieldAccessorTable
- static com.google.protobuf.Descriptors.FileDescriptor descriptor

6.42.1 Constructor & Destructor Documentation

6.42.1.1 eu.uloop.messages.UloopMessages.UloopMessages ( ) [private]

6.42.2 Member Function Documentation

6.42.2.1 static com.google.protobuf.Descriptors.FileDescriptor eu.uloop.messages.UloopMessages.getDescriptor ( ) [static]

6.42.2.2 static void eu.uloop.messages.UloopMessages.registerAllExtensions (com.google.protobuf.ExtensionRegistry *registry*) [static]

6.42.3 Member Data Documentation

6.42.3.1 com.google.protobuf.Descriptors.FileDescriptor eu.uloop.messages.UloopMessages.descriptor [static], [private]

6.42.3.2 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_EnoughResourcesCACReply_descriptor [static], [private]

6.42.3.3 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_EnoughResourcesCACReply_fieldAccessorTable [static], [private]

6.42.3.4 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_EnoughResourcesMessageReply_descriptor [static], [private]

6.42.3.5 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_EnoughResourcesMessageReply_fieldAccessorTable [static], [private]

6.42.3.6 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_EnoughResourcesMessageRequest_descriptor [static], [private]

6.42.3.7 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_EnoughResourcesMessageRequest_fieldAccessorTable [static], [private]

6.42.3.8 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_MTrackerMessage_descriptor [static], [private]

6.42.3.9 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_MTrackerMessage_fieldAccessorTable [static], [private]

6.42.3.10 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_MTrackerPredictedMove_descriptor [static], [private]

6.42.3.11 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_MTrackerPredictedMove_fieldAccessorTable [static], [private]

6.42.3.12 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_NetworkStatusMessage_descriptor [static], [private]

6.42.3.13 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_NetworkStatusMessage_fieldAccessorTable [static], [private]

6.42.3.14 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_NetworkStatusMessageReply_descriptor [static], [private]

6.42.3.15 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.Uloop↩ Messages.internal_static_NetworkStatusMessageReply_fieldAccessorTable [static], [private]

6.42.3.16 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_NewUserDetails↩ Message_descriptor [static], [private]

6.42.3.17 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.Uloop↩ Messages.internal_static_NewUserDetailsMessage_fieldAccessorTable [static], [private]

6.42.3.18 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_QoSMessage_↩ descriptor [static], [private]

6.42.3.19 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_↩ QoSMessage_fieldAccessorTable [static], [private]

6.42.3.20 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_QosRequest_↩ descriptor [static], [private]

6.42.3.21 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_↩ QosRequest_fieldAccessorTable [static], [private]

6.42.3.22 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_QoSTuple_descriptor [static], [private]

6.42.3.23 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_↩ QoSTuple_fieldAccessorTable [static], [private]

6.42.3.24 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_ResourceMessage↩ _descriptor [static], [private]

6.42.3.25 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_↩ ResourceMessage_fieldAccessorTable [static], [private]

6.42.3.26 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_ServiceMessage_↩ descriptor [static], [private]

6.42.3.27 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_↩ ServiceMessage_fieldAccessorTable [static], [private]

6.42.3.28 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_ServiceReply_↩ descriptor [static], [private]

6.42.3.29 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_↩ ServiceReply_fieldAccessorTable [static], [private]

6.42.3.30 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_ServiceRequest_↩ descriptor [static], [private]

6.42.3.31 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_↩ ServiceRequest_fieldAccessorTable [static], [private]

6.42.3.32 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_ServiceUpdate_↩ descriptor [static], [private]

6.42.3.33 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_ServiceUpdate_fieldAccessorTable [static], [private]

6.42.3.34 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_TrustInformationReply_descriptor [static], [private]

6.42.3.35 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_TrustInformationReply_fieldAccessorTable [static], [private]

6.42.3.36 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_TrustInformationRequest_descriptor [static], [private]

6.42.3.37 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_TrustInformationRequest_fieldAccessorTable [static], [private]

6.42.3.38 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_TrustMessage_descriptor [static], [private]

6.42.3.39 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_TrustMessage_fieldAccessorTable [static], [private]

6.42.3.40 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_UloopHeaderMessage_descriptor [static], [private]

6.42.3.41 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_UloopHeaderMessage_fieldAccessorTable [static], [private]

6.42.3.42 com.google.protobuf.Descriptors.Descriptor eu.uloop.messages.UloopMessages.internal_static_UloopMessage_descriptor [static], [private]

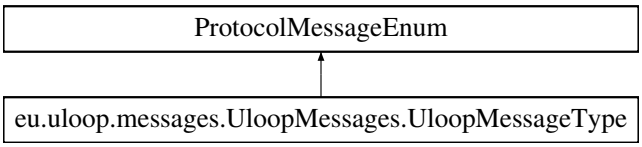
6.42.3.43 com.google.protobuf.GeneratedMessage.FieldAccessorTable eu.uloop.messages.UloopMessages.internal_static_UloopMessage_fieldAccessorTable [static], [private]

The documentation for this class was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.43 eu.uloop.messages.UloopMessages.UloopMessageType Enum Reference

Inheritance diagram for eu.uloop.messages.UloopMessages.UloopMessageType:



Public Member Functions

- final int getNumber ()
- final com.google.protobuf.Descriptors.EnumValueDescriptor getValueDescriptor ()
- final com.google.protobuf.Descriptors.EnumDescriptor getDescriptorForType ()

Static Public Member Functions

- static UloopMessageType valueOf (int value)
- static com.google.protobuf.Internal.EnumLiteMap < UloopMessageType > internalGetValueMap ()
- static final com.google.protobuf.Descriptors.EnumDescriptor getDescriptor ()
- static UloopMessageType valueOf (com.google.protobuf.Descriptors.EnumValueDescriptor desc)

Public Attributes

- ULOOP_UNSPEC =(0, 0)
- ULOOP_ENOUGH_RESOURCES =(1, 1)
- ULOOP_CAC_MESSAGE =(2, 2)
- ULOOP_MOBILITY_RM =(3, 3)
- ULOOP_MEM_RESOURCES =(4, 4)
- ULOOP_NEWUSERDETAILS =(5, 5)
- ULOOP_NETWORKSTATUS =(6, 6)
- ULOOP_TRUSTMESSAGE =(7, 7)
- ULOOP_QOSMESSAGE =(8, 8)
- ULOOP_EXTERNAL_SERVICE =(9, 9)
- ULOOP_EXTERNAL_MTRACKER =(10, 10)

Static Public Attributes

- staticfinal int ULOOP_UNSPEC_VALUE = 0
- staticfinal int ULOOP_ENOUGH_RESOURCES_VALUE = 1
- staticfinal int ULOOP_CAC_MESSAGE_VALUE = 2
- staticfinal int ULOOP_MOBILITY_RM_VALUE = 3
- staticfinal int ULOOP_MEM_RESOURCES_VALUE = 4
- staticfinal int ULOOP_NEWUSERDETAILS_VALUE = 5
- staticfinal int ULOOP_NETWORKSTATUS_VALUE = 6
- staticfinal int ULOOP_TRUSTMESSAGE_VALUE = 7
- staticfinal int ULOOP_QOSMESSAGE_VALUE = 8
- staticfinal int ULOOP_EXTERNAL_SERVICE_VALUE = 9
- staticfinal int ULOOP_EXTERNAL_MTRACKER_VALUE = 10

Private Member Functions

- UloopMessageType (int index, int value)

Private Attributes

- final int index
- final int value

Static Private Attributes

- staticcom.google.protobuf.Internal.EnumLiteMap < UloopMessageType > internalValueMap
- staticfinal UloopMessageType[] VALUES

6.43.1 Constructor & Destructor Documentation

6.43.1.1 eu.uloop.messages.UloopMessages.UloopMessageType.UloopMessageType (int *index*, int *value*) [private]

6.43.2 Member Function Documentation

6.43.2.1 static final com.google.protobuf.Descriptors.EnumDescriptor eu.uloop.messages.UloopMessages.UloopMessageType.getDescriptor ( ) [static]

6.43.2.2 final com.google.protobuf.Descriptors.EnumDescriptor eu.uloop.messages.UloopMessages.UloopMessageType.getDescriptorForType ( )

6.43.2.3 final int eu.uloop.messages.UloopMessages.UloopMessageType.getNumber ( )

6.43.2.4 final com.google.protobuf.Descriptors.EnumValueDescriptor eu.uloop.messages.UloopMessages.UloopMessageType.getValueDescriptor ( )

6.43.2.5 static com.google.protobuf.Internal.EnumLiteMap<**UloopMessageType**> eu.uloop.messages.UloopMessages.UloopMessageType.internalGetValueMap ( ) [static]

6.43.2.6 static **UloopMessageType** eu.uloop.messages.UloopMessages.UloopMessageType.valueOf (int *value*) [static]

6.43.2.7 static **UloopMessageType** eu.uloop.messages.UloopMessages.UloopMessageType.valueOf (com.google.protobuf.Descriptors.EnumValueDescriptor *desc*) [static]

6.43.3 Member Data Documentation

6.43.3.1 final int eu.uloop.messages.UloopMessages.UloopMessageType.index [private]

6.43.3.2 static com.google.protobuf.Internal.EnumLiteMap<**UloopMessageType**> eu.uloop.messages.UloopMessages.UloopMessageType.internalValueMap [static], [private]

Initial value:

```
=
          new com.google.protobuf.Internal.EnumLiteMap<UloopMessageType>() {
            public UloopMessageType findValueByNumber(int number) {
              return UloopMessageType.valueOf(number);
            }
          }
```

6.43.3.3 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_CAC_MESSAGE =(2, 2)

6.43.3.4 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_CAC_MESSAGE_VALUE = 2 [static]

6.43.3.5 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_ENOUGH_RESOURCES =(1, 1)

6.43.3.6 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_ENOUGH_RESOURCES_VALUE = 1 [static]

6.43.3.7 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_EXTERNAL_MTRACKER =(10, 10)

6.43.3.8 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_EXTERNAL_MTRACKER_VALUE = 10 [static]

6.43.3.9 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_EXTERNAL_SERVICE =(9, 9)

6.43.3.10 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_EXTERNAL_SERVICE_VALUE = 9 [static]

6.43.3.11 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_MEM_RESOURCES =(4, 4)

6.43.3.12 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_MEM_RESOURCES_VALUE = 4 [static]

6.43.3.13 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_MOBILITY_RM =(3, 3)

6.43.3.14 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_MOBILITY_RM_VALUE = 3 [static]

6.43.3.15 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_NETWORKSTATUS =(6, 6)

6.43.3.16 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_NETWORKSTATUS_VALUE = 6 [static]

6.43.3.17 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_NEWUSERDETAILS =(5, 5)

6.43.3.18 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_NEWUSERDETAILS_VALUE = 5 [static]

6.43.3.19 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_QOSMESSAGE =(8, 8)

6.43.3.20 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_QOSMESSAGE_VALUE = 8 [static]

6.43.3.21 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_TRUSTMESSAGE =(7, 7)

6.43.3.22 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_TRUSTMESSAGE_VALUE = 7 [static]

6.43.3.23 eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_UNSPEC =(0, 0)

6.43.3.24 static final int eu.uloop.messages.UloopMessages.UloopMessageType.ULOOP_UNSPEC_VALUE = 0 [static]

6.43.3.25 final int eu.uloop.messages.UloopMessages.UloopMessageType.value [private]

6.43.3.26 static final **UloopMessageType** [] eu.uloop.messages.UloopMessages.UloopMessageType.VALUES [static], [private]

Initial value:

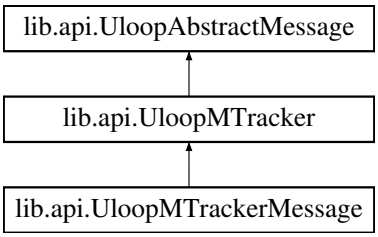
```
= {
      ULOOP_UNSPEC, ULOOP_ENOUGH_RESOURCES,
      ULOOP_CAC_MESSAGE, ULOOP_MOBILITY_RM,
      ULOOP_MEM_RESOURCES, ULOOP_NEWUSERDETAILS,
      ULOOP_NETWORKSTATUS, ULOOP_TRUSTMESSAGE,
      ULOOP_QOSMESSAGE, ULOOP_EXTERNAL_SERVICE,
      ULOOP_EXTERNAL_MTRACKER,
    }
```

The documentation for this enum was generated from the following file:

- src/eu/uloop/messages/UloopMessages.java

6.44 lib.api.UloopMTracker Class Reference

Inheritance diagram for lib.api.UloopMTracker:



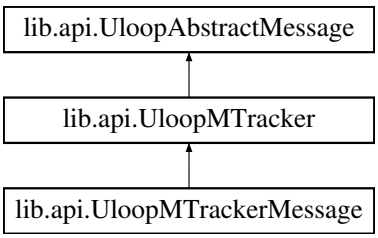
Additional Inherited Members

The documentation for this class was generated from the following file:

- src/lib/api/UloopMTracker.java

6.45 lib.api.UloopMTrackerMessage Class Reference

Inheritance diagram for lib.api.UloopMTrackerMessage:



Classes

- class MTrackerPredictedM

Public Member Functions

- UloopMTrackerMessage ()
- void setTimeForNextMove (long time)
- void setCurrentStationaryTime (long time)
- void addNextGateway (MTrackerPredictedM next)
- UloopAbstractMessage decode (UloopMessage ulm) throws RuntimeException
- Builder encode ()
- void print ()

Private Attributes

- long timeForNextMove
- long currentStationaryTime
- List< MTrackerPredictedM > NextGatewayList

6.45.1 Constructor & Destructor Documentation

6.45.1.1 lib.api.UloopMTrackerMessage.UloopMTrackerMessage ( )

6.45.2 Member Function Documentation

6.45.2.1 void lib.api.UloopMTrackerMessage.addNextGateway (**MTrackerPredictedM** *next*)

6.45.2.2 **UloopAbstractMessage** lib.api.UloopMTrackerMessage.decode (UloopMessage *ulm*) throws RuntimeException

Implements lib.api.UloopAbstractMessage.

6.45.2.3 Builder lib.api.UloopMTrackerMessage.encode ( )

Implements lib.api.UloopAbstractMessage.

6.45.2.4 void lib.api.UloopMTrackerMessage.print ( )

Implements lib.api.UloopAbstractMessage.

6.45.2.5 void lib.api.UloopMTrackerMessage.setCurrentStationaryTime (long *time*)

6.45.2.6 void lib.api.UloopMTrackerMessage.setTimeForNextMove (long *time*)

6.45.3 Member Data Documentation

6.45.3.1 long lib.api.UloopMTrackerMessage.currentStationaryTime [private]

6.45.3.2 List<**MTrackerPredictedM**> lib.api.UloopMTrackerMessage.NextGatewayList [private]

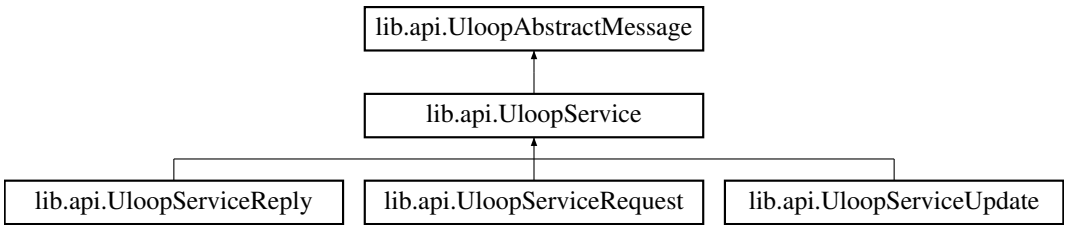
6.45.3.3 long lib.api.UloopMTrackerMessage.timeForNextMove [private]

The documentation for this class was generated from the following file:

- src/lib/api/UloopMTrackerMessage.java

6.46 lib.api.UloopService Class Reference

Inheritance diagram for lib.api.UloopService:



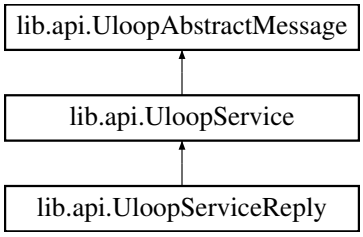
Additional Inherited Members

The documentation for this class was generated from the following file:

- src/lib/api/UloopService.java

6.47 lib.api.UloopServiceReply Class Reference

Inheritance diagram for lib.api.UloopServiceReply:



Public Member Functions

- UloopServiceReply ()
- UloopServiceReply (boolean authorization, double trust)
- void setAuthorization (boolean authorization)
- void setCryptoID (CryptoID cid)
- void setTrust (double trust)
- UloopAbstractMessage decode (UloopMessage ulm) throws RuntimeException
- Builder encode ()
- void print ()

Private Attributes

- boolean authorization
- double trust
- CryptoID cryptoid

6.47.1 Constructor & Destructor Documentation

6.47.1.1 lib.api.UloopServiceReply.UloopServiceReply ( )

6.47.1.2 lib.api.UloopServiceReply.UloopServiceReply (boolean *authorization,* double *trust*)

6.47.2 Member Function Documentation

6.47.2.1 UloopAbstractMessage lib.api.UloopServiceReply.decode (UloopMessage *ulm*) throws RuntimeException

Implements lib.api.UloopAbstractMessage.

6.47.2.2 Builder lib.api.UloopServiceReply.encode ( )

Implements lib.api.UloopAbstractMessage.

6.47.2.3 void lib.api.UloopServiceReply.print ( )

Implements lib.api.UloopAbstractMessage.

6.47.2.4 void lib.api.UloopServiceReply.setAuthorization (boolean *authorization*)

6.47.2.5 void lib.api.UloopServiceReply.setCryptoID (CryptoID *cid*)

6.47.2.6 void lib.api.UloopServiceReply.setTrust (double *trust*)

6.47.3 Member Data Documentation

6.47.3.1 boolean lib.api.UloopServiceReply.authorization [private]

6.47.3.2 CryptoID lib.api.UloopServiceReply.cryptoid [private]

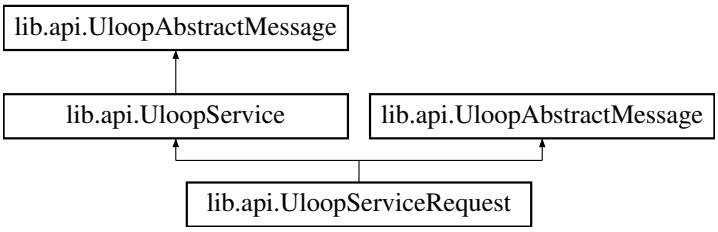
6.47.3.3 double lib.api.UloopServiceReply.trust [private]

The documentation for this class was generated from the following file:

- src/lib/api/UloopServiceReply.java

6.48 lib.api.UloopServiceRequest Class Reference

Inheritance diagram for lib.api.UloopServiceRequest:



Public Member Functions

- UloopServiceRequest ()
- UloopServiceRequest (CryptoID cryptoid)
- void setUsername (byte[]username)
- void setPassword (byte[]password)
- void setPromiseOfPayment (byte[]promise_of_payment)
- void setTokens (double tokens)
- void setCryptoID (CryptoID cryptoid)
- UloopAbstractMessage decode (UloopMessage ulm) throws RuntimeException
- UloopMessage.Builder encode ()
- CryptoID getCryptoid ()
- void print ()

Private Attributes

- CryptoID cryptoid
- byte[] username
- byte[] password
- double tokens
- byte[] promise_of_payment

6.48.1 Constructor & Destructor Documentation

6.48.1.1 lib.api.UloopServiceRequest.UloopServiceRequest ( )

6.48.1.2 lib.api.UloopServiceRequest.UloopServiceRequest (CryptoID *cryptoid*)

6.48.2 Member Function Documentation

6.48.2.1 UloopAbstractMessage lib.api.UloopServiceRequest.decode (UloopMessage *ulm*) throws RuntimeException

Implements lib.api.UloopAbstractMessage.

6.48.2.2 UloopMessage.Builder lib.api.UloopServiceRequest.encode ( )

Implements lib.api.UloopAbstractMessage.

6.48.2.3 CryptoID lib.api.UloopServiceRequest.getCryptoid ( )

6.48.2.4 void lib.api.UloopServiceRequest.print ( )

Implements lib.api.UloopAbstractMessage.

6.48.2.5 void lib.api.UloopServiceRequest.setCryptoID (CryptoID *cryptoid*)

6.48.2.6 void lib.api.UloopServiceRequest.setPassword (byte[ ] *password*)

6.48.2.7 void lib.api.UloopServiceRequest.setPromiseOfPayment (byte[ ] *promise_of_payment*)

6.48.2.8 void lib.api.UloopServiceRequest.setTokens (double *tokens*)

6.48.2.9 void lib.api.UloopServiceRequest.setUsername (byte[ ] *username*)

6.48.3 Member Data Documentation

6.48.3.1 CryptoID lib.api.UloopServiceRequest.cryptoid [private]

6.48.3.2 byte [ ] lib.api.UloopServiceRequest.password [private]

6.48.3.3 byte [ ] lib.api.UloopServiceRequest.promise_of_payment [private]

6.48.3.4 double lib.api.UloopServiceRequest.tokens [private]

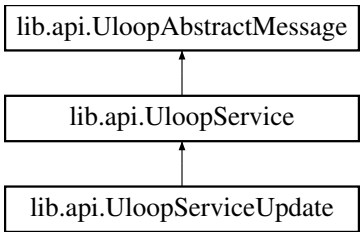
6.48.3.5 byte [ ] lib.api.UloopServiceRequest.username [private]

The documentation for this class was generated from the following file:

- src/lib/api/UloopServiceRequest.java

6.49 lib.api.UloopServiceUpdate Class Reference

Inheritance diagram for lib.api.UloopServiceUpdate:



Public Member Functions

- void setCryptoID (CryptoID cid)
- UloopAbstractMessage decode (UloopMessage ulm) throws RuntimeException
- Builder encode ()
- void print ()

Private Attributes

- CryptoID cryptoid

6.49.1 Member Function Documentation

6.49.1.1 UloopAbstractMessage lib.api.UloopServiceUpdate.decode (UloopMessage *ulm*) throws RuntimeException

Implements lib.api.UloopAbstractMessage.

6.49.1.2 Builder lib.api.UloopServiceUpdate.encode ( )

Implements lib.api.UloopAbstractMessage.

6.49.1.3 void lib.api.UloopServiceUpdate.print ( )

Implements lib.api.UloopAbstractMessage.

6.49.1.4 void lib.api.UloopServiceUpdate.setCryptoID (CryptoID *cid*)

6.49.2 Member Data Documentation

6.49.2.1 CryptoID lib.api.UloopServiceUpdate.cryptoid [private]

The documentation for this class was generated from the following file:

- src/lib/api/UloopServiceUpdate.java

6.50 eu.uloop.mobilitytracker.WifiChangeListener Interface Reference

Inherited by eu.uloop.mobilitytracker.MTrackerService.MTrackerServiceWifiListener.

Public Member Functions

- void onWifiStateDisabled (boolean valid, String bssid, String ssid, long visitId, long connectionStart, long connectionEnd)
- void onWifiStateEnabled ()
- void onWifiConnectionDown (boolean valid, String bssid, String ssid, long visitId, long connectionStart, long connectionEnd)
- long onWifiConnectionUp (String bssid, String ssid, List< ScanResult > lastScanResults)
- void onWifiAvailableNetworksChange (String bssid, List< ScanResult > results)

6.50.1 Member Function Documentation

6.50.1.1 **void eu.uloop.mobilitytracker.WifiChangeListener.onWifiAvailableNetworksChange (String *bssid,* List< ScanResult > *results*)**

6.50.1.2 **void eu.uloop.mobilitytracker.WifiChangeListener.onWifiConnectionDown (boolean *valid,* String *bssid,* String *ssid,* long *visitId,* long *connectionStart,* long *connectionEnd*)**

6.50.1.3 **long eu.uloop.mobilitytracker.WifiChangeListener.onWifiConnectionUp (String *bssid,* String *ssid,* List< ScanResult > *lastScanResults*)**

6.50.1.4 **void eu.uloop.mobilitytracker.WifiChangeListener.onWifiStateDisabled (boolean *valid,* String *bssid,* String *ssid,* long *visitId,* long *connectionStart,* long *connectionEnd*)**

6.50.1.5 **void eu.uloop.mobilitytracker.WifiChangeListener.onWifiStateEnabled ( )**

The documentation for this interface was generated from the following file:

- src/eu/uloop/mobilitytracker/WifiChangeListener.java

Chapter 7

File Documentation

7.1 gen/eu/uloop/mobilitytracker/BuildConfig.java File Reference

Classes

- class eu.uloop.mobilitytracker.BuildConfig

Packages

- package eu.uloop.mobilitytracker

7.2 gen/eu/uloop/mobilitytracker/R.java File Reference

Classes

- class eu.uloop.mobilitytracker.R
- class **eu.uloop.mobilitytracker.R.attr**
- class **eu.uloop.mobilitytracker.R.dimen**
- class **eu.uloop.mobilitytracker.R.drawable**
- class **eu.uloop.mobilitytracker.R.id**
- class **eu.uloop.mobilitytracker.R.layout**
- class **eu.uloop.mobilitytracker.R.menu**
- class **eu.uloop.mobilitytracker.R.string**
- class **eu.uloop.mobilitytracker.R.style**

Packages

- package eu.uloop.mobilitytracker

7.3 src/eu/uloop/messages/UloopMessages.java File Reference

Classes

- class eu.uloop.messages.UloopMessages
- enum eu.uloop.messages.UloopMessages.MessageType
- enum eu.uloop.messages.UloopMessages.UloopMessageType

- interface eu.uloop.messages.UloopMessages.UloopHeaderMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.UloopHeaderMessage**
- class **eu.uloop.messages.UloopMessages.UloopHeaderMessage.Builder**
- interface eu.uloop.messages.UloopMessages.UloopMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.UloopMessage**
- class **eu.uloop.messages.UloopMessages.UloopMessage.Builder**
- interface eu.uloop.messages.UloopMessages.TrustMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.TrustMessage**
- class **eu.uloop.messages.UloopMessages.TrustMessage.Builder**
- interface eu.uloop.messages.UloopMessages.TrustInformationRequestOrBuilder
- class **eu.uloop.messages.UloopMessages.TrustInformationRequest**
- class **eu.uloop.messages.UloopMessages.TrustInformationRequest.Builder**
- interface eu.uloop.messages.UloopMessages.TrustInformationReplyOrBuilder
- class **eu.uloop.messages.UloopMessages.TrustInformationReply**
- class **eu.uloop.messages.UloopMessages.TrustInformationReply.Builder**
- interface eu.uloop.messages.UloopMessages.ResourceMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.ResourceMessage**
- class **eu.uloop.messages.UloopMessages.ResourceMessage.Builder**
- interface eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequestOrBuilder
- class **eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequest**
- class **eu.uloop.messages.UloopMessages.EnoughResourcesMessageRequest.Builder**
- interface eu.uloop.messages.UloopMessages.EnoughResourcesMessageReplyOrBuilder
- class **eu.uloop.messages.UloopMessages.EnoughResourcesMessageReply**
- class **eu.uloop.messages.UloopMessages.EnoughResourcesMessageReply.Builder**
- interface eu.uloop.messages.UloopMessages.NetworkStatusMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.NetworkStatusMessage**
- class **eu.uloop.messages.UloopMessages.NetworkStatusMessage.Builder**
- interface eu.uloop.messages.UloopMessages.NetworkStatusMessageReplyOrBuilder
- class **eu.uloop.messages.UloopMessages.NetworkStatusMessageReply**
- class **eu.uloop.messages.UloopMessages.NetworkStatusMessageReply.Builder**
- interface eu.uloop.messages.UloopMessages.NewUserDetailsMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.NewUserDetailsMessage**
- class **eu.uloop.messages.UloopMessages.NewUserDetailsMessage.Builder**
- interface eu.uloop.messages.UloopMessages.EnoughResourcesCACReplyOrBuilder
- class **eu.uloop.messages.UloopMessages.EnoughResourcesCACReply**
- class **eu.uloop.messages.UloopMessages.EnoughResourcesCACReply.Builder**
- interface eu.uloop.messages.UloopMessages.QoSTupleOrBuilder
- class **eu.uloop.messages.UloopMessages.QoSTuple**
- class **eu.uloop.messages.UloopMessages.QoSTuple.Builder**
- interface eu.uloop.messages.UloopMessages.QosRequestOrBuilder
- class **eu.uloop.messages.UloopMessages.QosRequest**
- class **eu.uloop.messages.UloopMessages.QosRequest.Builder**
- interface eu.uloop.messages.UloopMessages.QoSMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.QoSMessage**
- class **eu.uloop.messages.UloopMessages.QoSMessage.Builder**
- interface eu.uloop.messages.UloopMessages.ServiceMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.ServiceMessage**
- class **eu.uloop.messages.UloopMessages.ServiceMessage.Builder**
- interface eu.uloop.messages.UloopMessages.ServiceRequestOrBuilder
- class **eu.uloop.messages.UloopMessages.ServiceRequest**
- class **eu.uloop.messages.UloopMessages.ServiceRequest.Builder**
- interface eu.uloop.messages.UloopMessages.ServiceReplyOrBuilder
- class **eu.uloop.messages.UloopMessages.ServiceReply**
- class **eu.uloop.messages.UloopMessages.ServiceReply.Builder**
- interface eu.uloop.messages.UloopMessages.ServiceUpdateOrBuilder

- class **eu.uloop.messages.UloopMessages.ServiceUpdate**
- class **eu.uloop.messages.UloopMessages.ServiceUpdate.Builder**
- interface eu.uloop.messages.UloopMessages.MTrackerPredictedMoveOrBuilder
- class **eu.uloop.messages.UloopMessages.MTrackerPredictedMove**
- class **eu.uloop.messages.UloopMessages.MTrackerPredictedMove.Builder**
- interface eu.uloop.messages.UloopMessages.MTrackerMessageOrBuilder
- class **eu.uloop.messages.UloopMessages.MTrackerMessage**
- class **eu.uloop.messages.UloopMessages.MTrackerMessage.Builder**

Packages

- package eu.uloop.messages

7.4 src/eu/uloop/mobilitytracker/DataBaseChangeListener.java File Reference

Classes

- interface eu.uloop.mobilitytracker.DataBaseChangeListener

Packages

- package eu.uloop.mobilitytracker

7.5 src/eu/uloop/mobilitytracker/DetailsActivity.java File Reference

Classes

- class eu.uloop.mobilitytracker.DetailsActivity

Packages

- package eu.uloop.mobilitytracker

7.6 src/eu/uloop/mobilitytracker/MTrackerAP.java File Reference

Classes

- class eu.uloop.mobilitytracker.MTrackerAP

Packages

- package eu.uloop.mobilitytracker

7.7 src/eu/uloop/mobilitytracker/MTrackerApplication.java File Reference

Classes

- class eu.uloop.mobilitytracker.MTrackerApplication

Packages

- package eu.uloop.mobilitytracker

7.8 src/eu/uloop/mobilitytracker/MTrackerDataSource.java File Reference

Classes

- class eu.uloop.mobilitytracker.MTrackerDataSource

Packages

- package eu.uloop.mobilitytracker

7.9 src/eu/uloop/mobilitytracker/MTrackerService.java File Reference

Classes

- class eu.uloop.mobilitytracker.MTrackerService
- class eu.uloop.mobilitytracker.MTrackerService.LocalBinder
- class **eu.uloop.mobilitytracker.MTrackerService.MTrackerServiceWifiListener**
- class eu.uloop.mobilitytracker.MTrackerService.SendInformationWithGatewayTask

Packages

- package eu.uloop.mobilitytracker

7.10 src/eu/uloop/mobilitytracker/MTrackerSQLiteHelper.java File Reference

Classes

- class eu.uloop.mobilitytracker.MTrackerSQLiteHelper

Packages

- package eu.uloop.mobilitytracker

7.11 src/eu/uloop/mobilitytracker/MTrackerVisit.java File Reference

Classes

- class eu.uloop.mobilitytracker.MTrackerVisit

Packages

- package eu.uloop.mobilitytracker

7.12 src/eu/uloop/mobilitytracker/MTrackerWifiManager.java File Reference

Classes

- class eu.uloop.mobilitytracker.MTrackerWifiManager
- class **eu.uloop.mobilitytracker.MTrackerWifiManager.WifiStateChange**
- class **eu.uloop.mobilitytracker.MTrackerWifiManager.WifiConnectionChange**
- class **eu.uloop.mobilitytracker.MTrackerWifiManager.WifiAvailableNetworksChange**

Packages

- package eu.uloop.mobilitytracker

7.13 src/eu/uloop/mobilitytracker/WifiChangeListener.java File Reference

Classes

- interface eu.uloop.mobilitytracker.WifiChangeListener

Packages

- package eu.uloop.mobilitytracker

7.14 src/lib/api/CryptoID.java File Reference

Classes

- class lib.api.CryptoID

Packages

- package lib.api

7.15 src/lib/api/MessageDigest.java File Reference

Classes

- class lib.api.MessageDigest

Packages

- package lib.api

7.16 src/lib/api/UloopAbstractMessage.java File Reference

Classes

- interface lib.api.UloopAbstractMessage

Packages

- package lib.api

7.17 src/lib/api/UloopMessageAPI.java File Reference

Classes

- interface lib.api.UloopMessageAPI

Packages

- package lib.api

7.18 src/lib/api/UloopMessageAPIImp.java File Reference

Classes

- class lib.api.UloopMessageAPIImp

Packages

- package lib.api

7.19 src/lib/api/UloopMTracker.java File Reference

Classes

- class lib.api.UloopMTracker

Packages

- package lib.api

7.20 src/lib/api/UloopMTrackerMessage.java File Reference

Classes

- class lib.api.UloopMTrackerMessage
- class lib.api.UloopMTrackerMessage.MTrackerPredictedM

Packages

- package lib.api

7.21 src/lib/api/UloopService.java File Reference

Classes

- class lib.api.UloopService

Packages

- package lib.api

7.22 src/lib/api/UloopServiceReply.java File Reference

Classes

- class lib.api.UloopServiceReply

Packages

- package lib.api

7.23 src/lib/api/UloopServiceRequest.java File Reference

Classes

- class lib.api.UloopServiceRequest

Packages

- package lib.api

7.24 src/lib/api/UloopServiceUpdate.java File Reference

Classes

- class lib.api.UloopServiceUpdate

Packages

- package lib.api

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