BWSip

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Chapter 1

Class Index

1.1 Class List

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

com.bandwidth.bwsip.BWAccount
com.bandwidth.bwsip.delegates.BWAccountDelegate
com.bandwidth.bwsip.BWCall
com.bandwidth.bwsip.delegates.BWCallDelegate
com.bandwidth.bwsip.constants.BWCallState
com.bandwidth.bwsip.BWCodec
com.bandwidth.bwsip.BWGps
com.bandwidth.bwsip.delegates.BWGpsDelegate
com.bandwidth.bwsip.constants.BWOutputRoute
com.bandwidth.bwsip.BWPhone
com.bandwidth.bwsip.constants.BWSipResponse
com.bandwidth.bwsip.BWTone
com.bandwidth.bwsip.constants.BWTransport
com.bandwidth.bwsip.models.CallStats
com.bandwidth.bwsip.receivers.ConnectivityChangeReceiver
com.bandwidth.bwsip.models.EndpointInfo
com.bandwidth.bwsip.receivers.KeepAliveReceiver
com.bandwidth.bwsip.services.KeepAliveService
com.bandwidth.bwsip.BWAccount.MyAccount

2 Class Index

Chapter 2

Class Documentation

2.1 com.bandwidth.bwsip.BWAccount Class Reference

Classes

class MyAccount

Public Member Functions

- BWAccount (BWPhone phone)
- boolean equals (Object o)
- BWAccountDelegate getDelegate ()
- void setDelegate (BWAccountDelegate delegate)
- void connect ()
- void close ()
- boolean islceEnabled ()
- void setIceEnabled (boolean iceEnabled)
- boolean isRegistrationActive ()
- void updateRegistration (boolean renew)
- int getRegistrationInterval ()
- void setRegistrationInterval (int interval)
- int getRegistrationRegistrarInterval ()
- int getRegistrationFirstRetryInterval ()
- void setRegistrationFirstRetryInterval (int interval)
- int getRegistrationRetryInterval ()
- void setRegistrationRetryInterval (int interval)
- BWSipResponse getLastState ()
- String getIdUri ()
- void setIdUri (String idUri)
- String getDisplayName ()
- void setDisplayName (String displayName)

- String getRegistrar ()
- void setRegistrar (String registrar)
- String getUsername ()
- String getPassword ()
- void setCredentials (String username, String password)
- long getServerPort ()
- void setServerPort (long serverPort)

Protected Member Functions

- void addCall (BWCall call)
- void removeCall (BWCall call)

Protected Attributes

- MyAccount myAccount
- List< BWCall > calls

2.1.1 Detailed Description

BWAccount is the class used to connect to the SIP server.

2.1.2 Constructor & Destructor Documentation

2.1.2.1 com.bandwidth.bwsip.BWAccount.BWAccount (BWPhone phone)

Constructor: when a BWAccount object is initialized it checks if the BWPhone used as a parameter in the constructor is already initialized (i.e. the PJSUA2 library is already loaded and Endpoint is not null).

Parameters

phone BWPhone

2.1.3 Member Function Documentation

2.1.3.1 void com.bandwidth.bwsip.BWAccount.addCall (BWCall call)

[protected]

Add a BWCall to the call list.

Parameters

call

2.1.3.2 void com.bandwidth.bwsip.BWAccount.close ()
Closes all connections for that account.
2.1.3.3 void com.bandwidth.bwsip.BWAccount.connect()
Establish a connection with the SIP server. This method must be called after a BW-Account object is created and the developer has already set all the connection parameters like registrar, user credentials, etc. Any change in the BWAccount object only has affect when a new connection is done.
2.1.3.4 boolean com.bandwidth.bwsip.BWAccount.equals (Object o)
Compare two BWAccount objects.
Parameters
0
Returns
2.1.3.5 BWAccountDelegate com.bandwidth.bwsip.BWAccount.getDelegate ()
Get the delegated class.
Returns
BWAccountDelegate
2.1.3.6 String com.bandwidth.bwsip.BWAccount.getDisplayName()
Get the display name.
Returns
the displayName
2.1.3.7 String com.bandwidth.bwsip.BWAccount.getIdUri()
Get the myAccount ID.
Returns
String

Account.getLastState ()
tPassword()
etRegistrar()
egistrationFirstRetryInterval(
he first time.
egistrationInterval ()

2.1.3.13 int com.bandwidth.bwsip.BWAccount.getRegistrationRegistrarInterval ()
Get the registration interval returned by the registrar; it might be different than the registration interval set by the client.
Returns
int the registration interval, in seconds.
2.1.3.14 int com.bandwidth.bwsip.BWAccount.getRegistrationRetryInterval()
Get the interval that will redo the registration.
Returns int the re-registration interval, in seconds.
int the re-registration interval, in seconds.
2.1.3.15 long com.bandwidth.bwsip.BWAccount.getServerPort ()
Get the port number.
Returns
the clientPort
2.1.3.16 String com.bandwidth.bwsip.BWAccount.getUsername ()
Get the user name.
Returns
String
2.1.3.17 boolean com.bandwidth.bwsip.BWAccount.islceEnabled ()
Check if ICE (Interactive Connectivity Establishment) is enabled when doing the SIF connection.
Returns
true if it's enabled

2.1.3.18 boolean com.bandwidth.bwsip.BWAccount.isRegistrationActive ()

Flag to tell if the account is currently registered.

Returns

boolean true if the account is currently registered; false if it's not.

2.1.3.19 void com.bandwidth.bwsip.BWAccount.removeCall (BWCall \it{call}) [protected]

Remove a BWCall from the call list.

Parameters

call

2.1.3.20 void com.bandwidth.bwsip.BWAccount.setCredentials (String *username*, String *password*)

Set the credentials (username & password) to connect to the myAccount.

Parameters

username	String
password	String

2.1.3.21 void com.bandwidth.bwsip.BWAccount.setDelegate (
BWAccountDelegate delegate)

Set the delegated class.

Parameters

delegate	BWAccountDelegate class

2.1.3.22 void com.bandwidth.bwsip.BWAccount.setDisplayName (String displayName)

The name that will be displayed with the phone number when you make calls.

Parameters

displayName	the displayName to set

2.1.3.23 void com.bandwidth.bwsip.BWAccount.setIceEnabled (boolean *iceEnabled*)

Enable or disable ICE (Interactive Connectivity Establishment) connections.

Parameters

iceEnabled true if you want to enable ICE connection

2.1.3.24 void com.bandwidth.bwsip.BWAccount.setIdUri (String idUri)

Set the myAccount ID.

• Example: "12223334444@bwsip.io"

Parameters

idUri | String

2.1.3.25 void com.bandwidth.bwsip.BWAccount.setRegistrar (String registrar)

Set the registrar URI that will get connected.

• Example: "bwsip.io"

Parameters

registrar String

2.1.3.26 void com.bandwidth.bwsip.BWAccount.setRegistrationFirstRetryInterval (int interval)

The interval, in seconds, when we will try to do the registration again after it fails for the first time.

Parameters

interval

2.1.3.27 void com.bandwidth.bwsip.BWAccount.setRegistrationInterval (int interval)

Set the registration interval.

Parameters

interval the interval, in seconds, when the registration will be sent again.

2.1.3.28 void com.bandwidth.bwsip.BWAccount.setRegistrationRetryInterval (int interval)

The interval, in seconds, when we will try to do the registration again after it fails for the second time.

Parameters

interval

2.1.3.29 void com.bandwidth.bwsip.BWAccount.setServerPort (long serverPort)

Set the port number. (default = 5060)

Parameters

serverPort the clientPort to set

2.1.3.30 void com.bandwidth.bwsip.BWAccount.updateRegistration (boolean renew)

Update registration or perform un-registration.

Parameters

renew true to renew the registration, false to cancel the registration.

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

· BWAccount.java

2.2 com.bandwidth.bwsip.delegates.BWAccountDelegate Interface Reference

Public Member Functions

- void onRegStateChanged (BWAccount account)
- void onIncomingCall (BWCall call)

2.2.1 Detailed Description

Interface with methods used by the Delegation Pattern.

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

• BWAccountDelegate.java

2.3 com.bandwidth.bwsip.BWCall Class Reference

Classes

· class MyCall

Public Member Functions

- BWCall (BWAccount bwAccount)
- BWCall (BWAccount bwAccount, int callId)
- BWAccount getParentAccount ()
- boolean equals (Object o)
- BWCallDelegate getDelegate ()
- · void setDelegate (BWCallDelegate delegate)
- void close ()
- void makeCall ()
- void answerCall (BWSipResponse answerType)
- void hangupCall ()
- void addSipHeader (String name, String value)
- BWCallState getLastState ()
- BWSipResponse getLastStatusCode ()
- void addGeolocation (BWGps gps)
- void setMute (boolean enabled)
- void diaIDTMF (String digits)
- String getLocalUri ()
- String getRemoteUri ()
- · void setRemoteUri (String remoteUri)
- CallStats getStats ()
- boolean isIncoming ()
- void setIncoming (boolean incoming)
- boolean isOnHold ()
- void setOnHold (boolean enabled)
- boolean isMuted ()
- int getDuration ()

Protected Attributes

MyCall myCall

Package Attributes

• String remoteUri

2.3.1 Detailed Description

Class used to receive and make phone calls.

2.3.2 Constructor & Destructor Documentation

2.3.2.1 com.bandwidth.bwsip.BWCall.BWCall (BWAccount bwAccount)

Constructor.

Parameters

2.3.2.2 com.bandwidth.bwsip.BWCall.BWCall (BWAccount bwAccount, int callId)

Constructor.

Parameters

bwAccount	BWAccount - the account that will generate the call.
callld	int - the call Id.

2.3.3 Member Function Documentation

2.3.3.1 void com.bandwidth.bwsip.BWCall.addGeolocation (BWGps gps)

Add the Geolocation header to the call.

Parameters

gps BWGps - the BWGps object with the coordinates set.	
--	--

2.3.3.2 void com.bandwidth.bwsip.BWCall.addSipHeader (String name, String value)

Add a header to the SIP INVITE.

Parameters

name	String the header name.
value	String the header value.

2.3.3.3	void com.bandwidth.bwsip.BWCall.answerCall (BWSipResponse	
	answerType)		

Answers the call

Parameters

answerType int - the answer type (available in BWConsts).

2.3.3.4 void com.bandwidth.bwsip.BWCall.close ()

Closes a BWCall object and removes if from the call list in the parent BWAccount object.

2.3.3.5 void com.bandwidth.bwsip.BWCall.dialDTMF (String digits)

Send DTMF digits using RFC 2833 payload formats.

Parameters

digits String - the digits that will be sent to the other party.

2.3.3.6 boolean com.bandwidth.bwsip.BWCall.equals (Object o)

Compare two BWCall objects.

Parameters

 BWCall - the object that will be compared with the current instance of BWCall.

Returns

boolean - true if the objects have the same call Id; false if they are different.

2.3.3.7 BWCallDelegate com.bandwidth.bwsip.BWCall.getDelegate ()

Get the delegated class.

Returns

BWCallDelegate

2.3.3.8 int com.bandwidth.bwsip.BWCall.getDuration ()

Return the call duration.

```
Returns
    int - the call duration, in seconds.
2.3.3.9 BWCallState com.bandwidth.bwsip.BWCall.getLastState ( )
Get the call's last state.
Returns
    BWCallState the call state.
2.3.3.10 BWSipResponse com.bandwidth.bwsip.BWCall.getLastStatusCode ( )
Get the call's last status code.
Returns
    the call's last status code.
2.3.3.11 String com.bandwidth.bwsip.BWCall.getLocalUri ( )
Get the Local URI.
Returns
    String - the local URI.
2.3.3.12 BWAccount com.bandwidth.bwsip.BWCall.getParentAccount ( )
Get the call's parent account.
Returns
    BWAccount - the BWAccount that generated this call object.
2.3.3.13 String com.bandwidth.bwsip.BWCall.getRemoteUri()
Get the Remote URI.
Returns
    String - the remote URI.
```

```
2.3.3.14 CallStats com.bandwidth.bwsip.BWCall.getStats ( )
Get the call stats.
Returns
    CallStats - the key value representation of the call stats.
2.3.3.15 void com.bandwidth.bwsip.BWCall.hangupCall()
Hangs-up the call.
2.3.3.16 boolean com.bandwidth.bwsip.BWCall.isIncoming ( )
Check if it's an incoming call.
Returns
    boolean - true if it's an incoming call; false if it's an outgoing call.
2.3.3.17 boolean com.bandwidth.bwsip.BWCall.isMuted ( )
Check if the call is muted.
Returns
    boolean - true if the call is muted; false if it's not muted.
2.3.3.18 boolean com.bandwidth.bwsip.BWCall.isOnHold ( )
Check if the call is on hold.
Returns
    boolean - true if the call is on hold; false if it's not on hold.
2.3.3.19 void com.bandwidth.bwsip.BWCall.makeCall()
Calls the URI previously set in the method setRemoteUri.
2.3.3.20 void com.bandwidth.bwsip.BWCall.setDelegate ( BWCallDelegate delegate
Set the delegated class.
```

Parameters

delegate B	BWCallDelegate class
------------	----------------------

2.3.3.21 void com.bandwidth.bwsip.BWCall.setIncoming (boolean incoming)

Set the call property to incoming or outgoing.

Parameters

incoming	ng boolean	

2.3.3.22 void com.bandwidth.bwsip.BWCall.setMute (boolean enabled)

Mute or un-mute a call.

Parameters

enabled boolean - true to mute the call; false to un-mute.
--

2.3.3.23 void com.bandwidth.bwsip.BWCall.setOnHold (boolean enabled)

Put a call on hold or release the hold.

Parameters

enabled	boolean - true to put a call on hold; false to release the hold.	
---------	--	--

2.3.3.24 void com.bandwidth.bwsip.BWCall.setRemoteUri (String remoteUri)

Set the URI that is making the phone call.

Parameters

remoteUri	String the remote URI.

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

· BWCall.java

2.4 com.bandwidth.bwsip.delegates.BWCallDelegate Interface - Reference

Public Member Functions

- · void onCallStateChanged (BWCall call)
- void onlncomingDTMF (BWCall call, String digits)

2.4.1 Detailed Description

Interface with methods used by the Delegation Pattern.

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

· BWCallDelegate.java

2.5 com.bandwidth.bwsip.constants.BWCallState Enum Reference

Public Member Functions

• int getValue ()

Static Public Member Functions

- · [static initializer]
- static BWCallState get (int value)

Public Attributes

- **NULL** = (0)
- **CALLING** = (1)
- INCOMING = (2)
- **EARLY** = (3)
- CONNECTING = (4)
- CONFIRMED = (5)
- **DISCONNECTED** = (6)

2.5.1 Detailed Description

Created by vegidio on 3/19/15.

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

• BWCallState.java

2.6 com.bandwidth.bwsip.BWCodec Class Reference

Public Member Functions

- String getId ()
- void setId (String id)
- short getPriority ()
- void **setPriority** (short priority)

Static Public Member Functions

- static List< BWCodec > listAvailable ()
- static void setPriority (List< BWCodec > codecs)

2.6.1 Detailed Description

Class used to create and set codec priorities.

2.6.2 Member Function Documentation

List the available codecs.

2.6.2.2 static void com.bandwidth.bwsip.BWCodec.setPriority (List< BWCodec > codecs) [static]

Set the codec priorities.

Parameters

codecs

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

· BWCodec.java

2.7 com.bandwidth.bwsip.BWGps Class Reference

Inherits LocationListener.

Public Member Functions

- void updateCoordinates (Activity activity)
- String generatePIDFLOXml ()
- void onLocationChanged (Location location)
- void onProviderDisabled (String provider)
- void **onProviderEnabled** (String provider)
- · void onStatusChanged (String provider, int status, Bundle extras)
- double getLatitude ()
- void setLatitude (double latitude)
- double getLongitude ()
- void setLongitude (double longitude)
- Date getTime ()
- void setTime (Date time)
- boolean isSuccess ()
- BWGpsDelegate getDelegate ()
- void setDelegate (BWGpsDelegate delegate)

2.7.1 Detailed Description

Class used the get GPS coordinates.

2.7.2 Member Function Documentation

2.7.2.1 String com.bandwidth.bwsip.BWGps.generatePIDFLOXmI ()

Generate a XML in the PIDF-LO format representing the GPS coordinates.

Returns

2.7.2.2 double com.bandwidth.bwsip.BWGps.getLatitude ()

Returns

the latitude

2.7.2.3 double com.bandwidth.bwsip.BWGps.getLongitude ()

Returns

the longitude

2.7.2.4 Date com.bandwidth.bwsip.BWGps.getTime()

Returns

the time

2.7.2.5 void com.bandwidth.bwsip.BWGps.onLocationChanged (Location location)

Location Manager Listeners

2.7.2.6 void com.bandwidth.bwsip.BWGps.setLatitude (double latitude)

Parameters

latitude	the latitude to set

2.7.2.7 void com.bandwidth.bwsip.BWGps.setLongitude (double longitude)

Parameters

longitude	the longitude to set

2.7.2.8 void com.bandwidth.bwsip.BWGps.setTime (Date time)

Parameters

time the to set

2.7.2.9 void com.bandwidth.bwsip.BWGps.updateCoordinates (Activity activity)

Update the GPS coordinates. Delegated method: BWGpsDelegate#onCoordinates-Updated(BWGps)

Parameters

activity

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

• BWGps.java

2.8 com.bandwidth.bwsip.delegates.BWGpsDelegate Interface - Reference

Public Member Functions

• void onCoordinatesUpdated (BWGps gps)

2.8.1 Detailed Description

Interface with methods used by the Delegation Pattern.

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

· BWGpsDelegate.java

2.9 com.bandwidth.bwsip.constants.BWOutputRoute Enum - Reference

Public Member Functions

• int getValue ()

Static Public Member Functions

- · [static initializer]
- static BWOutputRoute get (int value)

Public Attributes

- **EARPIECE** = (0)
- LOUDSPEAKER = (1)

2.9.1 Detailed Description

Created by vegidio on 3/19/15.

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

• BWOutputRoute.java

2.10 com.bandwidth.bwsip.BWPhone Class Reference

Classes

· class BWLogWriter

Public Member Functions

- synchronized void initialize ()
- void updateNameServers ()
- synchronized boolean isInitialized ()
- void createTransport () throws Exception
- void close ()
- void setAudioOutputRoute (Context context, BWOutputRoute outputRoute)
- EndpointInfo getEndpointInfo (Context context)
- int getLogLevel ()
- void setLogLevel (int logLevel)
- long getClientPort ()
- void setClientPort (long clientPort)
- BWTransport getTransportType ()
- void setTransportType (BWTransport transportType)
- String getTransportTag ()
- String getUserAgent ()
- · void setUserAgent (String userAgent)
- boolean hasSrvResolution ()
- void setSrvResolution (boolean srvResolution)
- boolean isKeepAliveActive ()
- void setKeepAlive (Context context)
- float getInputVolume ()
- void setInputVolume (float volume)
- float getOutputVolume ()
- void setOutputVolume (float volume)
- · void playWavFile (String filepath)

Static Public Member Functions

• static BWPhone getInstance ()

Public Attributes

- StringVector **stunServers** = new StringVector()
- StringVector **nameServers** = new StringVector()
- Context context = null
- List < BWAccount > accounts

Protected Member Functions

- · void addAccount (BWAccount account)
- · void removeAccount (BWAccount account)

Protected Attributes

- Endpoint endpoint
- String remotelpAddress = ""

Static Package Functions

• [static initializer]

2.10.1 Detailed Description

Main class of the framework. You must initialize and configure this class before you use any other class in the framework.

2.10.2 Member Function Documentation

2.10.2.1 void com.bandwidth.bwsip.BWPhone.close ()

Deletes any PJSUA2 object. You must call this function when SIP connection is no longer used.

2.10.2.2 void com.bandwidth.bwsip.BWPhone.createTransport () throws Exception

Configure the transport for the current endpoint.

Exceptions

Exception

2.10.2.3 long com.bandwidth.bwsip.BWPhone.getClientPort ()

Get the port number.

Returns

the clientPort

2.10.2.4 EndpointInfo com.bandwidth.bwsip.BWPhone.getEndpointInfo (Context context)

Get the local/remote IPs, name servers and the Wifi SSID (if used).

```
Parameters
```

```
context the Application context.
```

Returns

EndpointInfo

2.10.2.5 float com.bandwidth.bwsip.BWPhone.getInputVolume ()

Get the input volume.

Returns

int input the volume value.

2.10.2.6 static BWPhone com.bandwidth.bwsip.BWPhone.getInstance () [static]

Get the **BWPhone** instance.

Returns

BWPhone object

 ${\it 2.10.2.7} \quad \text{int com.bandwidth.bwsip.BWPhone.getLogLevel (} \quad {\it)}$

Get the log level.

Returns

the logLevel

2.10.2.8 String com.bandwidth.bwsip.BWPhone.getTransportTag ()

Returns

the transportTag

2.10.2.9 BWTransport com.bandwidth.bwsip.BWPhone.getTransportType ()

Returns

the transportType

```
2.10.2.10 String com.bandwidth.bwsip.BWPhone.getUserAgent ( )
Get the user agent.
Returns
    the userAgent
2.10.2.11 boolean com.bandwidth.bwsip.BWPhone.hasSrvResolution()
Check if the SRV Resolution is enabled.
Returns
    true if SRV Resolution is enabled; false if it's disabled.
2.10.2.12 synchronized void com.bandwidth.bwsip.BWPhone.initialize ( )
Initialize the BWPhone object.
2.10.2.13 synchronized boolean com.bandwidth.bwsip.BWPhone.isInitialized ( )
Check if PJSUA2 native library is loaded and the Endpoint is initialized.
Returns
    true if it's loaded
2.10.2.14 boolean com.bandwidth.bwsip.BWPhone.isKeepAliveActive ( )
Check if the Keep Alive is active or not.
Returns
    boolean true if the Keep Alive is active; false if it's not.
2.10.2.15 void com.bandwidth.bwsip.BWPhone.playWavFile (String filepath)
Plays a given WAV file WAV file MUST be formatted as 16bit PCM mono/single channel
Parameters
      filepath The path to the file to be played
```

2.10.2.16 void com.bandwidth.bwsip.BWPhone.setAudioOutputRoute (Context context, BWOutputRoute outputRoute)

Selects the device's audio output (Earpiece, Loudspeaker or Bluetooth)

Parameters

context	the Application context.
outputRoute	the output route constant.

2.10.2.17 void com.bandwidth.bwsip.BWPhone.setClientPort (long *clientPort*)

Set the port number. (default = 0)

Parameters

clientPort	the clientPort to set

2.10.2.18 void com.bandwidth.bwsip.BWPhone.setInputVolume (float volume)

Update the input volume (usually the device's mic).

Parameters

volume the volume level (0 - mute, 1 - normal, > 1 - louder than normal)	
--	--

2.10.2.19 void com.bandwidth.bwsip.BWPhone.setKeepAlive (Context context)

Set up the Keep Alive feature. With Keep Alive active, every successful BWAccount connection will be automatically renewed. When the registration reaches half of its time, the framework will wake up the device and renew all active registrations.

Parameters

context the application context.

2.10.2.20 void com.bandwidth.bwsip.BWPhone.setLogLevel (int logLevel)

Set the log level. (default = 0)

Parameters

logLevel	el the logLevel to set	

2.10.2.21 void com.bandwidth.bwsip.BWPhone.setOutputVolume (float volume)

Update the output volume (usually the device's speaker).

Parameters

volume the volume level (0 - mute, 1 - normal, > 1 - louder than normal)

2.10.2.22 void com.bandwidth.bwsip.BWPhone.setSrvResolution (boolean srvResolution)

Enable of disable the SRV Resolution.

Parameters

srv-	true to enable the SRV Resolution; false to disable it.
Resolution	

The transport type (UDP, TCP or TLS).

Parameters

transport-	the transportType to set
Type	
.,,,,,	

2.10.2.24 void com.bandwidth.bwsip.BWPhone.setUserAgent (String userAgent)

Set the user agent. (default = 'BWSip Framework v1.0')

Parameters

aramotoro		
userAgent	the userAgent to set	

2.10.2.25 void com.bandwidth.bwsip.BWPhone.updateNameServers ()

Update the name servers used by the endpoint.

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

· BWPhone.java

2.11 com.bandwidth.bwsip.constants.BWSipResponse Enum - Reference

Public Member Functions

- BWSipResponse (int value)
- int getValue ()
- boolean isProvisional ()
- boolean isSuccessful ()
- boolean isRedirection ()
- boolean isClientFailure ()
- boolean isServerFailure ()
- boolean isGlobalFailure ()
- boolean isFailure ()

Static Public Member Functions

- · [static initializer]
- static BWSipResponse get (int value)

Public Attributes

- **TRYING** = (100)
- **RINGING** = (180)
- CALL BEING FORWARDED = (181)
- **QUEUED** = (182)
- **PROGRESS** = (183)
- OK = (200)
- **ACCEPTED** = (202)
- MULTIPLE CHOICES = (300)
- MOVED_PERMANENTLY = (301)
- MOVED_TEMPORARILY = (302)
- **USE_PROXY** = (305)
- ALTERNATIVE SERVICE = (380)
- **BAD_REQUEST** = (400)
- **UNAUTHORIZED** = (401)
- PAYMENT_REQUIRED = (402)
- **FORBIDDEN** = (403)
- **NOT_FOUND** = (404)
- METHOD_NOT_ALLOWED = (405)
- NOT_ACCEPTABLE = (406)
- PROXY_AUTHENTICATION_REQUIRED = (407)
- **REQUEST_TIMEOUT** = (408)
- **GONE** = (410)
- REQUEST_ENTITY_TOO_LARGE = (413)

- REQUEST URI TOO LONG = (414)
- UNSUPPORTED_MEDIA_TYPE = (415)
- UNSUPPORTED URI SCHEME = (416)
- **BAD EXTENSION** = (420)
- EXTENSION_REQUIRED = (421)
- SESSION TIMER TOO SMALL = (422)
- INTERVAL_TOO_BRIEF = (423)
- TEMPORARILY_UNAVAILABLE = (480)
- CALL_TSX_DOES_NOT_EXIST = (481)
- **LOOP DETECTED** = (482)
- **TOO MANY HOPS** = (483)
- ADDRESS INCOMPLETE = (484)
- **AMBIGUOUS** = (485)
- **BUSY_HERE** = (486)
- REQUEST_TERMINATED = (487)
- NOT_ACCEPTABLE_HERE = (488)
- **BAD EVENT** = (489)
- REQUEST_UPDATED = (490)
- **REQUEST_PENDING** = (491)
- UNDECIPHERABLE = (493)
- INTERNAL SERVER ERROR = (500)
- NOT IMPLEMENTED = (501)
- **BAD GATEWAY** = (502)
- SERVICE_UNAVAILABLE = (503)
- SERVER_TIMEOUT = (504)
- VERSION_NOT_SUPPORTED = (505)
- MESSAGE_TOO_LARGE = (513)
- PRECONDITION_FAILURE = (580)
- BUSY_EVERYWHERE = (600)
- **DECLINE** = (603)
- DOES_NOT_EXIST_ANYWHERE = (604)
- NOT_ACCEPTABLE_ANYWHERE = (606)

2.11.1 Detailed Description

Enumeration of the SIP status codes.

2.11.2 Member Function Documentation

2.11.2.1 static BWSipResponse com.bandwidth.bwsip.constants.BWSip-Response.get(int value) [static]

Get the enumeration for the given integer status code.

Parameters

value the integer status code. Returns the enumeration value for the given integer or null if not found. 2.11.2.2 int com.bandwidth.bwsip.constants.BWSipResponse.getValue () Returns the integer value of this status code. 2.11.2.3 boolean com.bandwidth.bwsip.constants.BWSipResponse.isClientFailure () Returns whether this is a client failure status code or not. 2.11.2.4 boolean com.bandwidth.bwsip.constants.BWSipResponse.isFailure () Returns whether this is a client, server or global failure status code or not. 2.11.2.5 boolean com.bandwidth.bwsip.constants.BWSipResponse.isGlobal-Failure () Returns whether this is a global failure status code or not. 2.11.2.6 boolean com.bandwidth.bwsip.constants.BWSipResponse.isProvisional () Returns whether this is a provisional status code or not. 2.11.2.7 boolean com.bandwidth.bwsip.constants.BWSipResponse.isRedirection () Returns whether this is a redirection status code or not.

2.11.2.8 boolean com.bandwidth.bwsip.constants.BWSipResponse.isServer-Failure ()

Returns

whether this is a server failure status code or not.

2.11.2.9 boolean com.bandwidth.bwsip.constants.BWSipResponse.isSuccessful (

Returns

whether this is a successful status code or not.

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

· BWSipResponse.java

2.12 com.bandwidth.bwsip.BWTone Class Reference

Public Member Functions

- void startRingback ()
- void stopRingback ()
- boolean isRingbackPlaying ()
- void startDigit (String digit)
- void startDigit (String digit, float volume)
- void stopDigit ()
- void playDigit (String digit)
- void playDigit (String digit, float volume)
- void playDigit (String digit, int duration)
- void playDigit (String digit, int duration, float volume)

2.12.1 Detailed Description

Class used to generate tones in the device.

2.12.2 Member Function Documentation

2.12.2.1 boolean com.bandwidth.bwsip.BWTone.isRingbackPlaying ()

Return true if the ringback tone is playing; false if it's not playing.

Returns

ringbackPlaying boolean

2.12.2.2 void com.bandwidth.bwsip.BWTone.playDigit (String digit)

Plays a DTMF tone (default duration = 200 ms)

Parameters

digit	String - the DTMF digit to be played.

2.12.2.3 void com.bandwidth.bwsip.BWTone.playDigit (String digit, float volume)

Plays a DTMF tone (default duration = 200 ms)

Parameters

di	<i>git</i> Stri	ng - the DTMF digit to be played.
volun	ne floa	t - the tone volume [0 - mute; 1 - full volume].

2.12.2.4 void com.bandwidth.bwsip.BWTone.playDigit (String digit, int duration)

Plays a DTMF tone for X miliseconds.

Parameters

digit	String - the DTMF digit to be played.
duration	int - the number of milliseconds to play the tone.

2.12.2.5 void com.bandwidth.bwsip.BWTone.playDigit (String digit, int duration, float volume)

Plays a DTMF tone for X miliseconds.

Parameters

digit	String - the DTMF digit to be played.
duration	int - the number of milliseconds to play the tone.
volume	float - the tone volume [0 - mute; 1 - full volume].

2.12.2.6 void com.bandwidth.bwsip.BWTone.startDigit (String digit)

Starts a tone with an indefinite duration.

Parameters

digit String - the DTMF digit to be played.	

2.12.2.7 void com.bandwidth.bwsip.BWTone.startDigit (String digit, float volume)

Starts a tone with an indefinite duration.

Parameters

digit	String - the DTMF digit to be played.
volume	float - the tone volume [0 - mute; 1 - full volume].

2.12.2.8 void com.bandwidth.bwsip.BWTone.startRingback ()

Starts the ringback tone. You must have the BWPhone initialized to call this method.

2.12.2.9 void com.bandwidth.bwsip.BWTone.stopDigit ()

Stops any tone currently playing.

2.12.2.10 void com.bandwidth.bwsip.BWTone.stopRingback ()

Stops the ringback tone. You must have the BWPhone initialized to call this method.

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

• BWTone.java

2.13 com.bandwidth.bwsip.constants.BWTransport Enum Reference

Public Member Functions

• int getValue ()

Static Public Member Functions

- · [static initializer]
- static BWTransport get (int value)

Public Attributes

- **UDP** = (0)
- TCP = (1)
- TLS = (2)

2.13.1 Detailed Description

Created by vegidio on 3/19/15.

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

BWTransport.java

2.14 com.bandwidth.bwsip.models.CallStats Class Reference

Public Member Functions

- long getCodecClock ()
- void setCodecClock (long codecClock)
- String getCodecName ()
- void setCodecName (String codecName)
- int getRoundTripTimeMean ()
- void setRoundTripTimeMean (int roundTripTimeMean)
- long getRxBytes ()
- void setRxBytes (long rxBytes)
- int getRxJitterMean ()
- void setRxJitterMean (int rxJitterMean)
- int getRxLossPeriodMean ()
- void setRxLossPeriodMean (int rxLossPeriodMean)
- long getRxPackageDiscard ()
- void setRxPackageDiscard (long rxPackageDiscard)
- long getRxPackageDuplicated ()
- void setRxPackageDuplicated (long rxPackageDuplicated)
- long getRxPackageLost ()
- void setRxPackageLost (long rxPackageLost)
- long getRxPackageNumber ()
- void setRxPackageNumber (long rxPackageNumber)
- long getRxPackageReordered ()
- void **setRxPackageReordered** (long rxPackageReordered)
- long getTxBytes ()
- void setTxBytes (long txBytes)
- int getTxJitterMean ()
- void setTxJitterMean (int txJitterMean)
- int getTxLossPeriodMean ()
- void **setTxLossPeriodMean** (int txLossPeriodMean)
- long getTxPackageDiscard ()
- void setTxPackageDiscard (long txPackageDiscard)
- long getTxPackageDuplicated ()
- void setTxPackageDuplicated (long txPackageDuplicated)
- long getTxPackageLost ()
- void setTxPackageLost (long txPackageLost)

- long getTxPackageNumber ()
- void **setTxPackageNumber** (long txPackageNumber)
- long getTxPackageReordered ()
- void setTxPackageReordered (long txPackageReordered)

2.14.1 Detailed Description

Created by vegidio on 5/26/15.

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

· CallStats.java

2.15 com.bandwidth.bwsip.receivers.ConnectivityChangeReceiver Class Reference

Inherits BroadcastReceiver.

Public Member Functions

• void onReceive (Context context, Intent intent)

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

· ConnectivityChangeReceiver.java

2.16 com.bandwidth.bwsip.models.EndpointInfo Class Reference

Public Member Functions

- String getIpLocalAddress ()
- void setIpLocalAddress (String ipLocalAddress)
- String getIpRemoteAddress ()
- void setIpRemoteAddress (String ipRemoteAddress)
- List< String > getNameServers ()
- void setNameServers (List< String > nameServers)
- String getWifiSSID ()
- void setWifiSSID (String wifiSSID)

2.16.1 Detailed Description

Created by vegidio on 5/26/15.

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

· EndpointInfo.java

2.17 com.bandwidth.bwsip.receivers.KeepAliveReceiver Class - Reference

Inherits BroadcastReceiver.

Public Member Functions

• void onReceive (Context context, Intent intent)

2.17.1 Detailed Description

Created by vegidio on 2/25/15.

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

· KeepAliveReceiver.java

2.18 com.bandwidth.bwsip.services.KeepAliveService Class Reference

Inherits Service.

Public Member Functions

- IBinder onBind (Intent intent)
- void onCreate ()
- int onStartCommand (Intent intent, int flags, int startId)

Static Public Member Functions

- static int getShortestRegistrationInterval ()
- static void cancelAlarms ()
- static void scheduleAlarm (int registrationInterval)

2.18.1 Detailed Description

Created by vegidio on 2/25/15.

2.18.2 Member Function Documentation

2.18.2.1 static void com.bandwidth.bwsip.services.KeepAliveService.cancelAlarms
() [static]

Cancel any existing alarm.

2.18.2.2 static int com.bandwidth.bwsip.services.KeepAliveService.getShortest-RegistrationInterval() [static]

Get the shortest registration interval across all accounts.

Returns

int the registration interval, in seconds.

2.18.2.3 static void com.bandwidth.bwsip.services.Keep-AliveService.scheduleAlarm (int registrationInterval) [static]

Schedule an alarm to run X seconds after the current time.

Parameters

registration-	the registration interval, in seconds.
Interval	

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

· KeepAliveService.java

2.19 com.bandwidth.bwsip.BWAccount.MyAccount Class Reference

Inherits Account.

Public Member Functions

- MyAccount (BWAccount bwAccount)
- void **onRegState** (OnRegStateParam prm)
- void onlncomingCall (OnlncomingCallParam prm)

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

• BWAccount.java