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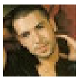

Products Google Talk for Developers

Google Talk for Developers

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Overview

Open Communications

libjingle

Developer Guide

Changelist

Important Concepts

How libjingle Applications Work

Creating a libjingle Application

Signing In to a Server

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Reference

BasicPortAllocator Class

Call Class

Codec Struct

ChannelManager

MediaEngine Class

MediaEngine is the lowest libjingle wrapper class around the third-party package that controls the render/capture hardware on the computer. **MediaEngine** is a virtual class that must be subclassed to work with specific third party applications (such as Linphone and GIPS). libjingle defines two subclasses: **GipsLiteMediaEngine** to work with GIPS, and **LinphoneMediaEngine** to work with Linphone. **MediaEngine** handles audio settings and creation of **MediaChannels**. You can create your own subclass if you have another media engine to use. **MediaEngine** is specialized for audio data, but you could use it as a model to support other media types. The methods shown are not thread-safe, and can be called on any thread, but you should call them from the signaling thread.

MediaEngine is created by **ChannelManager** when that object is instantiated. There is only one **MediaEngine** instance per libjingle application. No destructor is defined for this base class.

Syntax

```
class MediaEngine
```

Methods

Name	Description
std::vector<Codec>& **codecs**() = 0	Retrieves a vector of **Codec** structs representing the codecs supported by the **MediaEngine**.
MediaChannel* **CreateChannel**() = 0	Creates a new **MediaChannel** subclass, representing the media stream for one session (peer-to-peer connection).
bool **FindCodec**(Codec &*codec*) = 0	Returns True if the submitted codec is supported by the underlying **MediaEngine** subclass. *codec* is the name of the codec to search for.
int **GetCodecPreference**(Codec *codec*)	Returns an integer preference for a codec, where the higher the number is, the higher the preference.
virtual int **GetInputLevel**() = 0	Returns a volume level, specific to the implementation.
virtual bool **Init**() = 0	Initializes the media library and populates the engine's list of supported codecs. This is called by **ChannelManager** when **ChannelManager** is instantiated.

Class

Connection Class

FileStream Class

HttpPortAllocator Class

MediaChannel Class

MediaEngine Class

MemoryStream Class

P2PTransportCha…

Port Class

PresenceOutTask Class

PresencePushTask Class

Session Class

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SessionSendTask Class

StreamEvent Enumeration

StreamInterface Class

StreamResult Enumeration

StreamState Enumeration

Task Class

VoiceChannel Class

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XmppPump

XmppTask Class

License

Google Talk XMPP Extensions

User Settings

MediaEngine()	Constructor. It performs no actions, and should be overridden by subclasses.
virtual **SetAudioOptions**(int *options*) = 0	Sets audio options found in the **MediaEngineOptions** enumeration. This isn't used by libjingle, but can be used by your application. *options* should be a MediaEngineOptions enumerated value described in the table below.
virtual int **SetSoundDevices**(int *wave_in_device*, int *wave_out_device*) = 0	Sets the sound hardware to use. This is specific to the implementation. • *wave_in_device* Pointer to an audio capture device. • *wave_out_device* Pointer to an audio rendering device.
virtual int **Terminate**()=0	Performs the opposite actions to **Init**, and releases resources used by **MediaEngine**. This is called by **ChannelManager** before destroying a **MediaChannel** object.

Enumerations

Name	Description
MediaEngineOptions	Used by **SetAudioOptions** to specify various audio options. The following values are specified: • AUTO_GAIN_CONTROL Enable auto gain control.

Attributes: public

Declaration file: libjingle-0.3.0/talk/session/phone/mediaengine.h

Off the Record Chats

Jingle Server Discovery

Gmail Notifications

Shared Status Messages

Extended Contact Attributes

JID Domain Discovery

Voicemail

OAuth 2.0 Authorization

Additional Resources

Other IM Clients

Accessories

Google Talk Blog

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