
exosip2ctypes Documentation

Release 1.2.4

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1.1 exosip2ctypes package

1.1.1 Submodules

<code>exosip2ctypes.call</code>	eXosip call API
<code>exosip2ctypes.context</code>	eXosip2 context API
<code>exosip2ctypes.error</code>	Error definitions
<code>exosip2ctypes.event</code>	eXosip2 event API
<code>exosip2ctypes.message</code>	
<code>exosip2ctypes.register</code>	eXosip2 REGISTER and Registration Management
<code>exosip2ctypes.sdp</code>	eXosip2 SDP helper API.
<code>exosip2ctypes.utils</code>	Some helper functions
<code>exosip2ctypes.version</code>	version information

exosip2ctypes.call

eXosip call API

This file provide the API needed to control calls. You can use it to:

- build initial invite.
- send initial invite.
- build request within the call.
- send request within the call.

This API can be used to build the following messages: INVITE, INFO, OPTIONS, REFER, UPDATE, NOTIFY

Classes

Ack(context, did)	default ACK for a 200ok received.
Answer(context, tid, status)	default Answer for request.
InitInvite(context, to_url, from_url[, ...])	default INVITE message for a create call.

exosip2ctypes.context

eXosip2 context API

Classes

BaseContext	
Context([event_callback])	Allocate and Initiate an eXosip context.
ContextLock(context)	A helper class for eXosip Context lock

exosip2ctypes.error

Error definitions

see *osip/include/osipparser2/osip_port.h*

Functions

raise_if_osip_error(error_code[, message])	raise an OsipError exception if <i>error_code</i> is not OSIP_SUCCESS
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Exceptions

MallocError	Failed to allocate an <i>eXosip</i> context.
OsipApiNotInitialized	
OsipBadParameter	
OsipDiskFull	
OsipError	Base <i>Osip</i> error Exception Class
OsipFileNotExists	
OsipNoCommonCodec	
OsipNoMem	
OsipNoNetwork	
OsipNoRights	
OsipNotFound	
OsipPortBusy	
OsipSyntaxError	
OsipTimeout	
OsipTooMuchCall	
OsipUndefinedError	
OsipUnknownError	Osip error, but don't know the error code

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OsipUnknownHost
OsipWrongFormat
OsipWrongState

exosip2ctypes.event

eXosip2 event API

see: http://www.antisip.com/doc/exosip2/group__eXosip2__event.html

Classes

Event(ptr, context)	Class for event description
EventType	Enumeration of event types

exosip2ctypes.message

Classes

ExosipMessage(ptr, context)	class for eXosip2 message API
OsipMessage(ptr)	class for osip2 message API

exosip2ctypes.register

eXosip2 REGISTER and Registration Management

Classes

InitialRegister(context, from_, proxy[, ...])	initial REGISTER request.
Register(context, rid[, expires])	REGISTER request for an existing registration.

exosip2ctypes.sdp

eXosip2 SDP helper API.

Classes

SdpMessage(ptr)	SDP body
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exosip2ctypes.utils

Some helper functions

Functions

<code>to_bytes(s[, encoding])</code>	Convert to <i>bytes</i> string.
<code>to_str(s[, encoding])</code>	Convert to <i>str</i> string.
<code>to_unicode(s[, encoding])</code>	Convert to <i>unicode</i> string.

Classes

<code>LoggerMixin</code>	Mixin Class provide a logger property
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exosip2ctypes.version

version infomation

Functions

<code>get_library_version()</code>	return eXosip library (C library) version string
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1.1.2 Module contents

eXosip API

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eXosip is a high layer library for rfc3261: the SIP protocol. It offers a simple API to make it easy to use. eXosip2 offers great flexibility for implementing SIP endpoint like:

- SIP User-Agents
- SIP Voicemail or IVR
- SIP B2BUA
- any SIP server acting as an endpoint (music server...)

If you need to implement proxy or complex SIP applications, you should consider using osip instead.

Here are the eXosip capabilities:

- REGISTER to `rpc_handler` registration.
- INVITE/BYE to start/stop VoIP sessions.
- INFO to send DTMF within a VoIP sessions.
- OPTIONS to simulate VoIP sessions.
- re-INVITE to modify VoIP sessions
- REFER/NOTIFY to transfer calls.
- MESSAGE to send Instant Message.

- SUBSCRIBE/NOTIFY to rpc_handler presence capabilities.
- any other request to rpc_handler what you want!

Constants

`exosip2ctypes.DLL_NAME`

Default so/dll name, value is `exosip2`

Functions

`exosip2ctypes.initialize` (*path: str=None*) → None:

Load *libeXosip2* into this Python library

Parameters `path` (*str*) – *libeXosip2* SO/DLL path, *default* is *None*. When *None* or empty string, the function will try to find and load so/dll by `DLL_NAME`

Raises `RuntimeError` – When failed loading so/dll

Attention: You MUST call this function FIRST to initialize <i>libeXosip2</i> , before any other actions!

CHAPTER 2

Indices and tables

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- `modindex`
- `search`

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