

eXosip2 INVITE and Call Management

SIP messages and call control API

Functions

int	eXosip_call_set_reference	(struct eXosip_t *excontext, int id, void *reference)
void *	eXosip_call_get_reference	(struct eXosip_t *excontext, int cid)
int	eXosip_call_build_initial_invite	(struct eXosip_t *excontext, osip_message_t **invite, const char *to, const char *from, const char *route, const char *subject)
int	eXosip_call_send_initial_invite	(struct eXosip_t *excontext, osip_message_t *invite)
int	eXosip_call_build_request	(struct eXosip_t *excontext, int did, const char *method, osip_message_t **request)
int	eXosip_call_build_ack	(struct eXosip_t *excontext, int did, osip_message_t **ack)
int	eXosip_call_send_ack	(struct eXosip_t *excontext, int did, osip_message_t *ack)
int	eXosip_call_build_refer	(struct eXosip_t *excontext, int did, const char *refer_to, osip_message_t **request)
int	eXosip_call_build_info	(struct eXosip_t *excontext, int did, osip_message_t **request)
int	eXosip_call_build_options	(struct eXosip_t *excontext, int did, osip_message_t **request)
int	eXosip_call_build_update	(struct eXosip_t *excontext, int did, osip_message_t **request)
int	eXosip_call_build_notify	(struct eXosip_t *excontext, int did, int subscription_status, osip_message_t **request)
int	eXosip_call_send_request	(struct eXosip_t *excontext, int did, osip_message_t *request)
int	eXosip_call_build_answer	(struct eXosip_t *excontext, int tid, int status, osip_message_t **answer)
int	eXosip_call_send_answer	(struct eXosip_t *excontext, int tid, int status, osip_message_t *answer)
int	eXosip_call_terminate	(struct eXosip_t *excontext, int cid, int did)
int	eXosip_call_terminate_with_reason	(struct eXosip_t *excontext, int cid, int did, const char *reason)
int	eXosip_call_build_prack	(struct eXosip_t *excontext, int tid, osip_message_t **prack)
int	eXosip_call_send_prack	(struct eXosip_t *excontext, int tid, osip_message_t *prack)
int	eXosip_call_get_referto	(struct eXosip_t *excontext, int did, char *refer_to, size_t refer_to_len)
int	eXosip_call_find_by_replaces	(struct eXosip_t *excontext, char *replaces)

Detailed Description

Function Documentation

```
int eXosip_call_set_reference ( struct eXosip_t * excontext,
                               int id,
                               void * reference
                               )
```

Set a new application context for an existing call

Parameters

excontext eXosip_t instance.
id call-id or dialog-id of call
reference New application context.

```
void* eXosip_call_get_reference ( struct eXosip_t * excontext,
                                  int cid
                                  )
```

Get the application context pointer for an existing call.

Parameters

excontext eXosip_t instance.
cid id of the call.

Returns

Application context reference

```
int eXosip_call_build_initial_invite ( struct eXosip_t * excontext,
                                       osip_message_t ** invite,
                                       const char * to,
                                       const char * from,
                                       const char * route,
                                       const char * subject
                                       )
```

Build a default INVITE message for a new call.

Parameters

excontext eXosip_t instance.
invite Pointer for the SIP element to hold.
to SIP url for callee.
from SIP url for caller.
route Route header for INVITE. (optional)
subject Subject for the call.

```
int eXosip_call_send_initial_invite ( struct eXosip_t *  excontext,  
                                     osip_message_t *  invite  
                                     )
```

Initiate a call.

Parameters

excontext eXosip_t instance.

invite SIP INVITE message to send.

```
int eXosip_call_build_request ( struct eXosip_t *  excontext,  
                               int                did,  
                               const char *       method,  
                               osip_message_t ** request  
                               )
```

Build a default request within a call. (INVITE, OPTIONS, INFO, REFER)

Parameters

excontext eXosip_t instance.

did dialog id of call.

method request type to build.

request The sip request to build.

```
int eXosip_call_build_ack ( struct eXosip_t *  excontext,  
                           int                did,  
                           osip_message_t ** ack  
                           )
```

Build a default ACK for a 200ok received.

Parameters

excontext eXosip_t instance.

did dialog id of call.

ack The sip request to build.

```
int eXosip_call_send_ack ( struct eXosip_t * excontext,
                           int did,
                           osip_message_t * ack
                           )
```

Send the ACK for the 200ok received..

Parameters

excontext eXosip_t instance.
did dialog id of call.
ack SIP ACK message to send.

```
int eXosip_call_build_refer ( struct eXosip_t * excontext,
                              int did,
                              const char * refer_to,
                              osip_message_t ** request
                              )
```

Build a default REFER for a call transfer.

Parameters

excontext eXosip_t instance.
did dialog id of call.
refer_to url for call transfer (Refer-To header).
request The sip request to build.

```
int eXosip_call_build_info ( struct eXosip_t * excontext,
                             int did,
                             osip_message_t ** request
                             )
```

Build a default INFO within a call.

Parameters

excontext eXosip_t instance.
did dialog id of call.
request The sip request to build.

```
int eXosip_call_build_options ( struct eXosip_t *   excontext,
                               int                 did,
                               osip_message_t **  request
                               )
```

Build a default OPTIONS within a call.

Parameters

excontext eXosip_t instance.
did dialog id of call.
request The sip request to build.

```
int eXosip_call_build_update ( struct eXosip_t *   excontext,
                               int                 did,
                               osip_message_t **  request
                               )
```

Build a default UPDATE within a call.

Parameters

excontext eXosip_t instance.
did dialog id of call.
request The sip request to build.

```
int eXosip_call_build_notify ( struct eXosip_t *   excontext,
                               int                 did,
                               int                 subscription_status,
                               osip_message_t **  request
                               )
```

Build a default NOTIFY within a call.

Parameters

excontext eXosip_t instance.
did dialog id of call.
subscription_status Subscription status of the request.
request The sip request to build.

```
int eXosip_call_send_request ( struct eXosip_t * excontext,
                             int did,
                             osip_message_t * request
                             )
```

send the request within call. (INVITE, OPTIONS, INFO, REFER, UPDATE)

Parameters

excontext eXosip_t instance.
did dialog id of call.
request The sip request to send.

```
int eXosip_call_build_answer ( struct eXosip_t * excontext,
                              int tid,
                              int status,
                              osip_message_t ** answer
                              )
```

Build default Answer for request.

Parameters

excontext eXosip_t instance.
tid id of transaction to answer.
status Status code to use.
answer The sip answer to build.

```
int eXosip_call_send_answer ( struct eXosip_t * excontext,
                              int tid,
                              int status,
                              osip_message_t * answer
                              )
```

Send Answer for invite.

Parameters

excontext eXosip_t instance.
tid id of transaction to answer.
status response status if answer is NULL. (not allowed for 2XX)
answer The sip answer to send.

```
int eXosip_call_terminate ( struct eXosip_t * excontext,
                           int             cid,
                           int             did
                           )
```

Terminate a call. send CANCEL, BYE or 603 Decline.

Parameters

excontext eXosip_t instance.
cid call id of call.
did dialog id of call.

```
int eXosip_call_terminate_with_reason ( struct eXosip_t * excontext,
                                        int             cid,
                                        int             did,
                                        const char *     reason
                                        )
```

Terminate a call and add a Reason header. send CANCEL, BYE or 603 Decline.

Parameters

excontext eXosip_t instance.
cid call id of call.
did dialog id of call.
reason Reason header.

```
int eXosip_call_build_prack ( struct eXosip_t * excontext,
                              int             tid,
                              osip_message_t ** prack
                              )
```

Build a PRACK for invite.

Parameters

excontext eXosip_t instance.
tid id of the invite transaction.
prack The sip prack to build.

```
int eXosip_call_send_prack ( struct eXosip_t * excontext,
                           int tid,
                           osip_message_t * prack
                           )
```

Send a PRACK for invite.

Parameters

excontext eXosip_t instance.
tid id of the invite transaction.
prack The sip prack to send.

```
int eXosip_call_get_referto ( struct eXosip_t * excontext,
                             int did,
                             char * refer_to,
                             size_t refer_to_len
                             )
```

Get Refer-To header with Replace parameter from dialog.

Parameters

excontext eXosip_t instance.
did id of the dialog.
refer_to buffer to be filled with refer-to info.
refer_to_len size of refer_to buffer.

```
int eXosip_call_find_by_replaces ( struct eXosip_t * excontext,
                                  char * replaces
                                  )
```

Return did (or cid) for the replace header.

Parameters

excontext eXosip_t instance.
replaces buffer to be filled with refer-to info.