Lync - SIP Response Codes

INFORMATION

The following information describes the SIP Response Codes and their meanings. You can find more detail in the following original documents:

IEEE RFC 3261 - SIP: Session Initiation Protocol
Individual Codes Reference

RFC 2543
RFC 3261
RFC 3903
RFC 4412

1xx—Informational Responses

100 Trying

This response indicates that the request has been received by the next-hop server and that some unspecified action is being taken on behalf of this call (for example, a database is being consulted). This response, like all other provisional responses, stops retransmissions of an INVITE by a User Agent Client. The 100 (Trying) response is different from other provisional responses, in that it is never forwarded upstream by a stateful proxy.

180 Ringing

The users agent receiving the INVITE is trying to alert the user. This response MAY be used to initiate local ringback.

181 Call is Being Forwarded

A server MAY use this status code to indicate that the call is being forwarded to a different set of destinations.

182 Queued

The called party is temporarily unavailable, but the server has decided to queue the call rather than reject it. When the callee becomes available, it will return the appropriate final status response. The reason phrase MAY give further details about the status of the call, for example, "5 calls queued; expected waiting time is 15 minutes". The server MAY issue several 182 (Queued) responses to update the caller about the status of the queued call.

183 Session in Progress

The 183 (Session Progress) response is used to convey information about the progress of the call that is not otherwise classified. The Reason-Phrase, header fields, or message body MAY be used to convey more details about the call progress.

199 Early Dialog Terminated

Can used by User Agent Server to indicate to upstream SIP entities (including the User Agent Client (UAC)) that an early dialog has been terminated.

2xx—Successful Responses

200 OK

The request has succeeded. The information returned with the
response depends on the method used in the request.

202 Accepted

Indicates that the request has been accepted for processing, but the processing has not been
completed.

204 No Notification

Indicates the request was successful, but the corresponding response will not be received.

3xx—Redirection Responses

300 Multiple Choices

The address in the request resolved to several choices, each with its
own specific location, and the user (or UA) can select a preferred
communication end point and redirect its request to that location.
The response MAY include a message body containing a list of resource
characteristics and location(s) from which the user or UA can choose
the one most appropriate, if allowed by the Accept request header
field. However, no MIME types have been defined for this message
body.
The choices SHOULD also be listed as Contact fields (Section 20.10).
Unlike HTTP, the SIP response MAY contain several Contact fields or a
list of addresses in a Contact field. UAs MAY use the Contact header
field value for automatic redirection or MAY ask the user to confirm
a choice. However, this specification does not define any standard
for such automatic selection.

This status response is appropriate if the callee can be reached
at several different locations and the server cannot or prefers
not to proxy the request.

301 Moved Permanently

The user can no longer be found at the address in the Request-URI,
and the requesting client SHOULD retry at the new address given by
the Contact header field (Section 20.10). The requestor SHOULD
update any local directories, address books, and user location caches
with this new value and redirect future requests to the address(es)
listed.

302 Moved Temporarily

The requesting client SHOULD retry the request at the new address(es)
given by the Contact header field (Section 20.10). The Request-URI
of the new request uses the value of the Contact header field in the
response.
The duration of the validity of the Contact URI can be indicated
through an Expires (Section 20.19) header field or an expires
parameter in the Contact header field. Both proxies and UAs MAY
cache this URI for the duration of the expiration time. If there is
no explicit expiration time, the address is only valid once for
recursing, and MUST NOT be cached for future transactions.
If the URI cached from the Contact header field fails, the Request-

URI from the redirected request MAY be tried again a single time.
The temporary URI may have become out-of-date sooner than the
expiration time, and a new temporary URI may be available.

305 Use Proxy

The requested resource MUST be accessed through the proxy given by
the Contact field. The Contact field gives the URI of the proxy.
The recipient is expected to repeat this single request via the
proxy. 305 (Use Proxy) responses MUST only be generated by UASs.

380 Alternative Service

The call was not successful, but alternative services are possible.
The alternative services are described in the message body of the
response. Formats for such bodies are not defined here, and may be
the subject of future standardization.

4xx—Client Failure Responses

400 Bad Request

The request could not be understood due to malformed syntax. The
Reason-Phrase SHOULD identify the syntax problem in more detail, for
example, "Missing Call-ID header field".

401 Unauthorized

The request requires user authentication. This response is issued by
UASs and registrars, while 407 (Proxy Authentication Required) is
used by proxy servers.

402 Payment Required

Reserved for future use.

403 Forbidden

The server understood the request, but is refusing to fulfill it.
Authorization will not help, and the request SHOULD NOT be repeated.

404 Not Found (User not found)

The server has definitive information that the user does not exist at
the domain specified in the Request-URI. This status is also
returned if the domain in the Request-URI does not match any of the
domains handled by the recipient of the request.

405 Method Not Allowed

The method specified in the Request-Line is understood, but not
allowed for the address identified by the Request-URI.
The response MUST include an Allow header field containing a list of
valid methods for the indicated address.

406 Not Acceptable

The resource identified by the request is only capable of generating
response entities that have content characteristics not acceptable
according to the Accept header field sent in the request.

407 Proxy Authentication Required

This code is similar to 401 (Unauthorized), but indicates that the
client MUST first authenticate itself with the proxy. SIP access
authentication is explained in Sections 26 and 22.3. [RFC 3261]
This status code can be used for applications where access to the
communication channel (for example, a telephony gateway) rather than
the callee requires authentication.

408 Request Timeout

The server could not produce a response within a suitable amount of time, for example, if it could not determine the location of the user in time. The client MAY repeat the request without modifications at any later time.

409 Conflict

The request could not be completed due to a conflict with the current state of the resource. This response is returned if the action parameter in a REGISTER request conflicts with existing registrations.

410 Gone

The requested resource is no longer available at the server and no forwarding address is known. This condition is expected to be considered permanent. If the server does not know, or has no facility to determine, whether or not the condition is permanent, the status code 404 (Not Found) SHOULD be used instead.

412 Conditional Request Failed

used to indicate that the precondition given for the request has failed.

413 Request Entity Too Large

The server is refusing to process a request because the request entity-body is larger than the server is willing or able to process. The server MAY close the connection to prevent the client from continuing the request.

If the condition is temporary, the server SHOULD include a Retry-After header field to indicate that it is temporary and after what time the client MAY try again.

414 Request-URI Too Long

The server is refusing to service the request because the Request-URI is longer than the server is willing to interpret.

415 Unsupported Media Type

The server is refusing to service the request because the message body of the request is in a format not supported by the server for the requested method. The server MUST return a list of acceptable formats using the Accept, Accept-Encoding, or Accept-Language header field, depending on the specific problem with the content. UAC processing of this response is described in Section 8.1.3.5.

416 Unsupported URI Scheme

The server cannot process the request because the scheme of the URI in the Request-URI is unknown to the server. Client processing of this response is described in Section 8.1.3.5.

417 Unknown Resource-Priority

Unknown Resource-Priority [RFC 4412]

420 Bad Extension

The server did not understand the protocol extension specified in a Proxy-Require (Section 20.29) or Require (Section 20.32) header field. The server MUST include a list of the unsupported extensions in an Unsupported header field in the response. UAC processing of

this response is described in Section 8.1.3.5. [RFC 3261]

421 Extension Required

The UAS needs a particular extension to process the request, but this
extension is not listed in a Supported header field in the request.
Responses with this status code MUST contain a Require header field
listing the required extensions.

A UAS SHOULD NOT use this response unless it truly cannot provide any
useful service to the client. Instead, if a desirable extension is
not listed in the Supported header field, servers SHOULD process the
request using baseline SIP capabilities and any extensions supported
by the client.

422 Session Interval Too Small

It is generated by a UAS or proxy when a request contains a Session-Expires header field with a
duration below the minimum timer for the server [RFC4028]

423 Interval Too Brief

The server is rejecting the request because the expiration time of
the resource refreshed by the request is too short. This response
can be used by a registrar to reject a registration whose Contact
header field expiration time was too small. The use of this response
and the related Min-Expires header field are described in Sections
10.2.8, 10.3, and 20.23.

424 Bad Location Information

Bad Location Information [RFC6442]

428 Use Identity Header

Use Identity Header [RFC4474]

429 Provide Referrer Identity

Provide Referrer Identity [RFC3892]

433 Anonymity Disallowed

Anonymity Disallowed [RFC5079]

436 Bad Identity-Info

Bad Identity-Info [RFC4474]

437 Unsupported Certificate

Unsupported Certificate [RFC4474]

438 Invalid Identity Header

Invalid Identity Header [RFC4474]

480 Temporarily Unavailable

The callee's end system was contacted successfully but the callee is
currently unavailable (for example, is not logged in, logged in but
in a state that precludes communication with the callee, or has
activated the "do not disturb" feature). The response MAY indicate a
better time to call in the Retry-After header field. The user could
also be available elsewhere (unbeknownst to this server). The reason
phrase SHOULD indicate a more precise cause as to why the callee is
unavailable. This value SHOULD be settable by the UA. Status 486
(Busy Here) MAY be used to more precisely indicate a particular
reason for the call failure.

This status is also returned by a redirect or proxy server that
recognizes the user identified by the Request-URI, but does not

currently have a valid forwarding location for that user.

481 Call/Transaction Does Not Exist

This status indicates that the UAS received a request that does not match any existing dialog or transaction.

482 Loop Detected.

The server has detected a loop.

483 Too Many Hops

The server received a request that contains a Max-Forwards (Section 20.22) [RFC 3261] header field with the value zero.

484 Address Incomplete

The server received a request with a Request-URI that was incomplete. Additional information SHOULD be provided in the reason phrase.

This status code allows overlapped dialing. With overlapped dialing, the client does not know the length of the dialing string. It sends strings of increasing lengths, prompting the user for more input, until it no longer receives a 484 (Address Incomplete) status response.

485 Ambiguous

The Request-URI was ambiguous. The response MAY contain a listing of possible unambiguous addresses in Contact header fields. Revealing alternatives can infringe on privacy of the user or the organization. It MUST be possible to configure a server to respond with status 404 (Not Found) or to suppress the listing of possible choices for ambiguous Request-URIs.

Example response to a request with the Request-URI sip:lee@example.com:

SIP/2.0 485 Ambiguous
Contact: Carol Lee <sip:carol.lee@example.com>
Contact: Ping Lee <sip:p.lee@example.com>
Contact: Lee M. Foote <sips:lee.foote@example.com>
Some email and voice mail systems provide this functionality. A status code separate from 3xx is used since the semantics are different: for 300, it is assumed that the same person or service will be reached by the choices provided. While an automated choice or sequential search makes sense for a 3xx response, user intervention is required for a 485 (Ambiguous) response.

486 Busy Here

The callee's end system was contacted successfully, but the callee is currently not willing or able to take additional calls at this end system. The response MAY indicate a better time to call in the Retry-After header field. The user could also be available elsewhere, such as through a voice mail service. Status 600 (Busy Everywhere) SHOULD be used if the client knows that no other end system will be able to accept this call.

487 Request Terminated

The request was terminated by a BYE or CANCEL request. This response is never returned for a CANCEL request itself.

488 Not Acceptable Here

The response has the same meaning as 606 (Not Acceptable), but only applies to the specific resource addressed by the Request-URI and the request may succeed elsewhere.

A message body containing a description of media capabilities MAY be present in the response, which is formatted according to the Accept header field in the INVITE (or application/sdp if not present), the same as a message body in a 200 (OK) response to an OPTIONS request.

489 Bad Event

Bad Event [RFC3265]

491 Request Pending

The request was received by a UAS that had a pending request within the same dialog. Section 14.2 describes how such "glare" situations are resolved.

493 Undecipherable

The request was received by a UAS that contained an encrypted MIME body for which the recipient does not possess or will not provide an appropriate decryption key. This response MAY have a single body containing an appropriate public key that should be used to encrypt MIME bodies sent to this UA. Details of the usage of this response code can be found in Section 23.2. [RFC 3261]

494 Security Agreement Required

Security Agreement Required [RFC3329]

5xx—Server Failure Responses

500 Server Internal Error

The server encountered an unexpected condition that prevented it from fulfilling the request. The client MAY display the specific error condition and MAY retry the request after several seconds.

If the condition is temporary, the server MAY indicate when the client may retry the request using the Retry-After header field.

501 Not Implemented: The SIP request method is not implemented here

The server does not support the functionality required to fulfill the request. This is the appropriate response when a UAS does not recognize the request method and is not capable of supporting it for any user. (Proxies forward all requests regardless of method.)

Note that a 405 (Method Not Allowed) is sent when the server recognizes the request method, but that method is not allowed or supported.

502 Bad Gateway

The server, while acting as a gateway or proxy, received an invalid response from the downstream server it accessed in attempting to fulfill the request.

503 Service Unavailable

The server is temporarily unable to process the request due to a temporary overloading or maintenance of the server. The server MAY indicate when the client should retry the request in a Retry-After header field. If no Retry-After is given, the client MUST act as if it had received a 500 (Server Internal Error) response.

A client (proxy or UAC) receiving a 503 (Service Unavailable) SHOULD
attempt to forward the request to an alternate server. It SHOULD NOT
forward any other requests to that server for the duration specified
in the Retry-After header field, if present.
Servers MAY refuse the connection or drop the request instead of
responding with 503 (Service Unavailable).

504 Server Time-out

The server did not receive a timely response from an external server
it accessed in attempting to process the request. 408 (Request
Timeout) should be used instead if there was no response within the
period specified in the Expires header field from the upstream
server.

505 Version Not Supported: The server does not support this version of the SIP protocol

The server does not support, or refuses to support, the SIP protocol
version that was used in the request. The server is indicating that
it is unable or unwilling to complete the request using the same
major version as the client, other than with this error message.

513 Message Too Large

The server was unable to process the request since the message length
exceeded its capabilities.

580 Precondition Failure

6xx—Global Failure Responses

600 Busy Everywhere

The callee's end system was contacted successfully but the callee is
busy and does not wish to take the call at this time. The response
MAY indicate a better time to call in the Retry-After header field.
If the callee does not wish to reveal the reason for declining the
call, the callee uses status code 603 (Decline) instead. This status
response is returned only if the client knows that no other end point
(such as a voice mail system) will answer the request. Otherwise,
486 (Busy Here) should be returned.

603 Decline

The callee's machine was successfully contacted but the user
explicitly does not wish to or cannot participate. The response MAY
indicate a better time to call in the Retry-After header field. This
status response is returned only if the client knows that no other
end point will answer the request.

604 Does Not Exist Anywhere

The server has authoritative information that the user indicated in
the Request-URI does not exist anywhere.

606 Not Acceptable

The user's agent was contacted successfully but some aspects of the
session description such as the requested media, bandwidth, or
addressing style were not acceptable.
A 606 (Not Acceptable) response means that the user wishes to
communicate, but cannot adequately support the session described.
The 606 (Not Acceptable) response MAY contain a list of reasons in a
Warning header field describing why the session described cannot be

supported. Warning reason codes are listed in Section 20.43 [RFC 3261]

APPLIES TO
CCM for Lync 5.10
Keywords: Lync Ignite SIP Response Codes 5.10

Last Modified By: amontpetit, Friday, June 29, 2012
http://micc.mitel.com/kb/KnowledgebaseArticle51586.aspx

Wednesday, May 18, 2022