

Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure

Cisco Unified Border Element (Cisco UBE) provides an option to configure the error response code when a dial peer is busied out because of an Out-of-Dialog OPTIONS ping failure.

The OPTIONS ping mechanism monitors the status of a remote Session Initiation Protocol (SIP) server, proxy or endpoints. Cisco UBE monitors these endpoints periodically. When there is no response from these monitored endpoints, the configured dial peer is busied out. If the dial-peer endpoint is busied out due to an OPTIONS ping failure, the call is passed on to the next dial-peer endpoint if an alternate dial peer is configured for the same destination. Otherwise the error response 404 is sent. This feature provides the option of configuring the error response code to reroute the call. Therefore when a dial peer is busied out due to the OPTIONS ping failure, the SIP error code configured in the inbound dial-peer is sent as a response.

To configure the SIP error code response, perform the following tasks:

- Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure at the Global Level
- Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure at the Dial Peer Level

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Feature Information for Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/. An account on Cisco.com is not required.

Table 1: Feature Information for Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure

Feature Name	Releases	Feature Information
Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure	Baseline Functionality	This feature provides option to configure the error response code when a dial peer is busied out because of an Out-of-Dialog OPTIONS ping failure. The following commands were introduced or modified in this release: **error-code-override options-keepalive failure**, and **voice-class sip error-code-override options-keepalive failure**

Prerequisites for Configuring an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure

- The Cisco UBE Out-of-Dialog (OOD) OPTIONS Ping for specified SIP servers or Endpoints feature should be configured before configuring this error response code for a ping OPTIONS failure.

Restrictions for Configuring an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure

The error code configuration will not have any effect if it is configured on the outbound dial peer.

Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure at the Global Level

The table below describes the SIP error codes.

Table 2: SIP Error Codes

Error Code Number	Description
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
408	Request Timed Out
416	Unsupported URI
480	Temporarily Unavailable
482	Loop Detected
484	Address Incomplete
486	Busy Here
487	Request Terminated
488	Not Acceptable Here
500-599	SIP 5xx--Server/Service Failure
500	Internal Server Error
502	Bad Gateway
503	Service Unavailable
600-699	SIP 6xx--Global Failure

To configure the error response code for the OPTIONS ping failure to support the Cisco Unified Border Element at the global level, perform the steps in this section.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice service voip**
4. **sip**
5. **error-code-override options-keepalive failure** *sip-status-code-number*
6. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice service voip** **Example:** `Router(config)# voice service voip`	Enters voice service configuration mode.
Step 4	**sip** **Example:** `Router(conf-voi-serv)# sip`	Enters voice service SIP configuration mode.
Step 5	**error-code-override options-keepalive failure** *sip-status-code-number* **Example:** `Router(conf-serv-sip)# error-code-override options-keepalive failure 402`	Configures the specified SIP error code number. • *sip-status-code-number* --SIP status code to be sent for an options keepalive failure. Range: 400 to 699. Default: 503. • The table above provides more details about these error codes.
Step 6	**end** **Example:** `Router(conf-serv-sip)# end`	Exits voice service SIP configuration mode and returns to privileged EXEC mode.

Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure at the Dial Peer Level

To configure the error response code for the OPTIONS ping failure to support the Cisco Unified Border Element at the dial-peer level, perform the steps in this section.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **dial-peer voice** *voice-dial-peer-tag* **voip**
4. **voice-class sip error-code-error-override options-keepalive failure** {*sip-status-code-number* | **system**}
5. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**dial-peer voice** *voice-dial-peer-tag* **voip** **Example:** `Router(config)# dial-peer voice 234 voip`	Enters dial peer voice configuration mode.
Step 4	**voice-class sip error-code-error-override options-keepalive failure** {*sip-status-code-number* | **system**} **Example:** `Router(config-dial-peer)# voice-class sip error-code-override options-keepalive failure 500`	Configures the specified SIP error code number. • *sip-status-code-number* --SIP status code to be sent for an options keepalive failure. Range: 400 to 699. Default: 503. • Configure an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure at the Dial Peer Level, on page 4 provides more details about these error codes. **Note** If the **system** keyword is configured, the global level configuration will override the dial-peer configuration.
Step 5	**end** **Example:** `Router(config-dial-peer)# end`	Exits dial peer voice configuration mode and returns to privileged EXEC mode.

Troubleshooting Tips

The following debug commands display any error that occurs with the error code response:

- **debug ccsip messages--** shows SIP messages.

```
Router# debug ccsip messages
SIP Call messages tracing is enabled
```

- **debug ccsip all** --shows all SIP-related debugging.

```
Router# debug ccsip all
This may severely impact system performance. Continue? [confirm]
All SIP Call tracing is enabled
```