



Cisco Unified CME Commands: S2

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shared-line

To create a directory number to be shared by multiple SIP phones, use the **shared-line** command in voice register dn configuration mode. To return to the default, use the **no** form of this command.

shared-line [**max-calls** *number-of-calls*]
no shared-line

Syntax Description	max-calls <i>number-of-calls</i> (Optional) Maximum number of active calls allowed on the shared line. Range: 2 to 16. Default: 2.
---------------------------	---

Command Default Directory number is not a shared line. Maximum number of calls on a shared line is 2.

Command Modes Voice register dn configuration

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(22)YB	Cisco Unified CME 7.1	This command was introduced.
	12.4(24)T	Cisco Unified CME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.

Usage Guidelines This command enables a shared line on an individual SIP phone directory number.

This command is supported only on the Cisco Unified IP Phone 7911G, 7941G, 7941GE, 7961G, 7961GE, 7970G, and 7971GE.

Examples

The following example shows that extension 5001 associated with directory number 2 is defined as a shared line and can support up to four calls:

```
Router(config)# voice register dn 2
Router(config-register-dn)# number 5001
Router(config-register-dn)# shared-line max-calls 4
```

Related Commands	Command	Description
	busy-trigger-per-button	Sets the maximum number of calls allowed on a SIP shared line before activating Call Forward Busy or a busy tone.
	debug shared-line	Displays debugging information about shared lines on SIP phones.
	huntstop	Disables call hunting behavior for a directory number on a SIP phone.
	number (voice register dn)	Associates a telephone or extension number with a SIP phone.
	show shared-line	Displays information about shared lines on SIP phones.
	show voice register dn	Displays all configuration information associated with a specific voice register dn.

shared-line sip

To add an ephone-dn as a member of a shared directory number in the database of the Shared-Line Service Module for a mixed shared line between Cisco Unified SIP and Cisco Unified SCCP IP phones, use the **shared-line sip** command in ephone-dn configuration mode. To return to the default, use the **no** form of this command.

shared-line sip [**max calls** *number-of-calls*]
no shared-line sip

Syntax Description	<table border="1"> <tr> <td>max calls <i>number-of-calls</i></td><td>(Optional) Maximum number of active calls allowed on the shared line. Range: 2 to 16. Default: 2.</td></tr> </table>	max calls <i>number-of-calls</i>	(Optional) Maximum number of active calls allowed on the shared line. Range: 2 to 16. Default: 2.
max calls <i>number-of-calls</i>	(Optional) Maximum number of active calls allowed on the shared line. Range: 2 to 16. Default: 2.		

Command Default	Directory number is not a mixed shared line. Maximum number of calls on a mixed shared line is 2.
------------------------	--

Command Modes	Ephone-dn configuration (config-ephone-dn)
----------------------	--

Command History	Release	Modification
	15.2(2)T	This command was introduced.

Usage Guidelines Use the **shared-line sip** command to add an ephone-dn as a member of a shared directory number in the database of the Shared-Line Service Module for a mixed shared line between Cisco Unified SIP IP phones and Cisco Unified SCCP IP phones. However, a mixed shared line is not enabled when an ephone-dn *nnnn* is the only shared directory number *nnnn* in the database of the Shared-Line Service Module. It is only enabled when a corresponding Cisco Unified SIP IP phone with a shared directory number *nnnn* is subscribed.

Mixed shared lines can only be configured on one of several common directory numbers. All attempts to add more are rejected.



Note The secondary number of an ephone-dn cannot be used as a search key in the Shared-Line Service Module.

Features are effectively supported on a mixed shared line when dial-plan patterns have matching configurations in telephony-service and voice register global configuration modes using the **dialplan pattern** command.

Examples

The following example shows 1001 as the shared line between a Cisco Unified SCCP IP phone and a Cisco Unified SIP IP phone. The maximum number of active calls allowed on the mixed shared line is four.

```
voice register dn 1
 number 1001
 shared-line max-calls 4
 ephone-dn 1 octo-line
 number 1001
 shared-line sip
```

The following example shows how configuring a mixed shared line on a second common directory number is rejected:

```
Router(config)# ephone-dn 14 octo-line
Router(config-ephone-dn)# number 2502
Router(config-ephone-dn)# shared-line sip
Router(config)# ephone-dn 20 octo-line
Router(config-ephone-dn)# number 2502
Router(config-ephone-dn)# shared-line sip
DN number already exists in the shared line database
```

Related Commands

Command	Description
dialplan pattern	Defines a pattern that is used to expand extension numbers in Cisco Unified CME into fully qualified E.164 numbers, in telephony-service configuration mode.
dialplan pattern (voice register)	Defines a pattern that is used to expand extension numbers in Cisco Unified CME into fully qualified E.164 numbers, in voice register global configuration mode.
shared-line	Creates a directory number to be shared by multiple Cisco Unified SIP IP phones.

show capf-server

To display CAPF server configuration and session information, use the **show capf-server** command in privileged EXEC configuration mode.

show capf-server {auth-string | sessions | summary}

Syntax Description

auth-string	Display authentication strings for ephones.
sessions	Display information about active CAPF sessions.
summary	Display CAPF server configuration details.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines

This command is used with Cisco Unified CME phone authentication.

Examples

The following example output displays CAPF server parameters:

```
Router# show capf-server summary

CAPF Server Configuration Details
  Trustpoint for TLS With Phone: cmeserver
  Trustpoint for CA operation: iosra
  Source Address: 10.1.1.1
  Listening Port: 3804
  Phone Key Size: 1024
  Phone KeyGen Retries: 100
  Phone KeyGen Timeout: 120 minutes
  Device Authentication Mode: Auth-String
```

The following example output displays the authentication strings that have been defined for the phones with the listed MAC addresses:

```
Router# show capf-server auth-string

Authentication Strings for configured Ephones
Mac-Addr      Auth-String
-----
000CCE3A817C  7012
001121116BDD  922
000D299D50DF  9182
000ED7B10DAC  3114
000F90485077  3328
0013C352E7F1  0678
```


The following example output displays active sessions between phones (identified by their MAC addresses) and the CAPF server. The phone ID field lists standard phone identifications, which include the letters “SEP” plus the MAC addresses of the phones. The below sample output defines the different session states that can appear in the output.

```
Router# show capf-server sessions

Active CAPF Sessions
Phone ID           State
SEP000CCE3A817C   AWAIT-KEYGEN-RES
```

Table 1: show capf-server sessions State Descriptions

State	Description
IDLE	Phone is idle.
AWAIT AUTH RES	A TLS connection was established on the TCP port that is specified in the configuration file. After a successful handshake verified the server certificate, a dialog was started between the CAPF server and the phone’s CAPF client. The server has challenged the phone by sending an authentication request and is waiting for a response.
AWAIT KEYGEN RESP	Phone authentication was successful. The CAPF server has sent a key generation request message to the phone and is waiting for a response.
AWAIT ENCRYPT MSG RESP	A key has been generated and the CAPF has used the phone’s public key to start the enrollment process with PKI. The CAPF sent an encrypt-message request to the phone and is waiting for a response.
AWAIT CA RESP	The phone has signed the received message using its private key and the CAPF has continued the enrollment process. PKI has forwarded the certificate request to the CA and is waiting for a response.
AWAIT STORE CERT RESP	Upon receiving an certificate issued from the CA, the CAPF has sent a store-certificate request message to the phone. The store-certificate request contains the certificate to be written to the phone’s flash memory. The CAPF is waiting for a store-certificate response message to confirm that the certificate has been stored.

show credentials

To display the credentials settings that have been configured for use during Cisco Unified CME phone authentication communications or secure Cisco Unified SRST fallback, use the **show credentials** command in privileged EXEC mode.

show credentials

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.3(14)T	Cisco SRST 3.3	This command was introduced for Cisco SRST.
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced for Cisco Unified CME.
12.4(9)T	Cisco Unified CME 4.0	This command for Cisco Unified CME was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines

Cisco Unified CME

This command displays the credentials settings on a Cisco Unified CME router that has been configured with a CTL provider to be used with Cisco Unified CME phone authentication.

Cisco Unified SRST

This command displays the credentials settings on the Cisco Unified SRST router that are supplied to Cisco Unified CallManager for use during secure SRST fallback.

Examples

The following is sample output from the **show credentials**:

```
Router# show credentials

Credentials IP: 10.1.1.22
Credentials PORT: 2445
Trustpoint: srstca
```

The below table describes the fields in the sample output.

Table 2: show credentials Field Descriptions

Field	Description
Credentials IP	Cisco Unified CME—IP address where the CTL provider is configured. Cisco Unified SRST—The specified IP address where certificates from Cisco Unified CallManager to the SRST router are received.

Field	Description
Credentials PORT	Cisco Unified CME—TCP port for credentials service communication. Default is 2444. Cisco Unified SRST—The port to which the SRST router connects to receive messages from the Cisco Unified IP phones. The port number is from 2000 to 9999. The default port number is 2445.
Trustpoint	Cisco Unified CME—CTL provider trustpoint label that will be used for TLS sessions with the CTL client. Cisco Unified SRST—The name of the trustpoint that is associated with the credentials service between the Cisco Unified CallManager client and the SRST router.

Related Commands

	Description
credentials	Enters credentials configuration mode to configure a Cisco Unified CME CTL provider certificate or a Cisco Unified SRST router certificate.
ctl-service admin	Specifies a user name and password to authenticate the CTL client during the CTL protocol.
debug credentials	Sets debugging on the credentials service that runs between a Cisco Unified CME CTL provider and the CTL client or between a Cisco Unified SRST router and Cisco Unified CallManager.
ip source-address (credentials)	Enables the Cisco Unified CME or SRST router to receive messages through the specified IP address and port.
trustpoint (credentials)	Specifies the name of the trustpoint to be associated with a Cisco Unified CME CTL provider certificate or with a Cisco Unified SRST router certificate.

show cti

To display the status of the CTI subsystem, use the **show cti** command in privileged EXEC mode.

show cti {call | gcid | line node | session}

Syntax Description

call	Details for active (ACT) calls only.
gcid	List of Global Call IDs for active calls only.
line node	List of line nodes.
session	Details for active CTI sessions.

Command Modes

Privileged EXEC (#)

Command History

Release	Cisco Product	Modification
15.0(1)XA	Cisco Unified CME 8.0	This command was introduced.
15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.
Cisco IOS XE Gibraltar 16.11.1a Release	Unified CME 12.6	This command is deprecated. It is not supported on Unified CME 12.6 and later releases.

Usage Guidelines

This commands displays status information for the CTI subsystem in Cisco Unified CME.

Examples

The following sample output is for each command when there are no active calls.

```
Router#show cti gcid
GCID                               callIDs
=====
no active GCID
Router#show cti call
DN          CallID GCID          Calling    Called      State
=====
201
204
A line-node is the internal data structure of a directory number. Once a line-node is
created, the structure remains until the CTI interface is shut down.
Router#show cti line-node
line dn          number of call instance
=====
1001             0
201              0
202              0
203              0
204              0
233              0
6789             0
A0001            0
```

Router#

The following is sample output from the **show cti gcid** command for one call. This sample contains a single Gcid with two callIDs, one for each call leg.

```
Router#show cti gcid
GCID                               callIDs
=====
1E2E3483-5ACB11DE-BA9EF925-DF2AFB55 59291, 59292,
```

The following is sample output from the **show cti call** command. This sample shows that a call was placed from (DN) 201 to (DN) 204 and both directory numbers are now Active (ACT). Note that the Gcid and callIDs in this sample correspond to those in the output from the **show cti gcid** command.

```
Router#show cti call
DN          CallID GCID                               Calling   Called    State
=====
201
          59291  1E2E3483-5ACB11DE-BA9EF925-DF2AFB55 201        204      ACT
204
          59292  1E2E3483-5ACB11DE-BA9EF925-DF2AFB55 201        204      ACT
```

The following is sample output from the **show cti line-node** command. In the following sample, there are eight line-nodes and two (201 and 204) are in use.

```
Router#show cti line-node
line dn          number of call instance
=====
                                0
1001              0
201              1
          callID 59291(C7C ), *cg = 201, cd = 204
202              0
203              0
204              1
          callID 59292(C7C ), cg = 201, *cd = 204
233              0
6789              0
A0001            0
```

<< Table number >> describes the significant fields shown in the display.

Table 3: show xxx Field Descriptions

Field	Description
GCID	Global Call ID (Gcid)—Unique identifier in for every call on an outbound leg of a VoIP dial peer for an endpoint. A single Gcid remains the same for the same call in the system, and is valid for redirect, transfer, and conference events.
CallID	Unique identifier for each call leg of a call.

Related Commands

Command	Description
clear cti session	Clears the session between a CSTA client application and Cisco Unified CME.

show ctl-client

To display information about the certificate trust list (CTL) client, use the **show ctl-client** command in privileged EXEC configuration mode.

show ctl-client

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
	12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines This command is used with Cisco Unified CME phone authentication.

Examples The following example displays trustpoints and IP addresses known to the CTL client.

```
Router# show ctl-client

CTL Client Information
-----
SAST 1 Certificate Trustpoint: cmeserver
SAST 1 Certificate Trustpoint: sast2
List of Trusted Servers in the CTL
CME      10.1.1.1      cmeserver
TFTP     10.1.1.1      cmeserver
CAPF     10.1.1.1      cmeserver
```

show ephone

To display information about registered Cisco Unified IP phones, use the **show ephone** command in user EXEC or privileged EXEC mode.

show ephone [{*mac-address* *phone-type*}]

Syntax Description

<i>mac-address</i>	(Optional) Displays information for the phone with the specified MAC address.
<i>phone-type</i>	(Optional) Displays information for phones of the specified phone type. Supported phone types are version-specific. Type ? to display a list of values.

Command Modes

User EXEC (>)
Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.1(5)YD	Cisco ITS 1.0 Cisco SRST 1.0	This command was introduced.
12.2(8)T	Cisco ITS 2.0 Cisco SRST 2.0	This command was integrated into Cisco IOS Release 12.2(8)T.
12.2(11)T	Cisco ITS 2.01 Cisco SRST 2.01	The ata keyword was added and this command was implemented on the Cisco 1760.
12.2(11)YT	Cisco ITS 2.1 Cisco SRST 2.1	The 7914 keyword was added.
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	The 7902 , 7905 , and 7912 keywords were added.
12.3(7)T	Cisco CME 3.1 Cisco SRST 3.1	The 7920 and 7936 keywords were added.
12.3(11)XL	Cisco CME 3.2.1 Cisco SRST 3.2.1	The 7970 keyword was added.
12.3(14)T	Cisco CME 3.3 Cisco SRST 3.3	The 7971 keyword was added, and this command was integrated into Cisco IOS Release 12.3(14)T.
12.4(4)XC	Cisco Unified CME 4.0 Cisco Unified SRST 4.0	The 7911 , 7941 , 7941GE , 7961 , and 7961GE keywords were added.
12.4(9)T	Cisco Unified CME 4.0 Cisco Unified SRST 4.0	The 7911 , 7941 , 7941GE , 7961 , and 7961GE keywords were integrated into Cisco IOS Release 12.4(9)T.
12.4(6)XE	Cisco Unified CME 4.0(2)	The 7931 keyword was added for Cisco Unified CME.
12.4(4)XC4	Cisco Unified CME 4.0(3)	The 7931 keyword was added for Cisco Unified CME.
12.4(11)T	Cisco Unified CME 4.0(3)	The 7931 keyword for Cisco Unified CME was integrated into Cisco IOS Release 12.4(11)T.
12.4(11)XJ2	Cisco Unified CME 4.1 Cisco Unified SRST 4.1	The 7921 and 7985 keywords were added.

12.4(15)T1	Cisco Unified CME 4.1(1) Cisco Unified SRST 4.1(1)	The 7942 , 7945 , 7962 , 7965 , and 7975 keywords were added and this command was integrated into Cisco IOS Release 12.4(15)T1.
12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SRST 4.2(1)	Emergency response location (ERL) information displays in the output.
12.4(15)XZ	Cisco Unified CME 4.3 Cisco Unified SRST 4.3	Support for user-defined phone types created with the ephone-type command was added.
12.4(15)XZ1	Cisco Unified CME 4.3 Cisco Unified SRST 4.3	The 7915-12 , 7915-24 , 7916-12 , 7916-24 , and 7937 keywords were added.
12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SRST 7.0	The 7915-12 , 7915-24 , 7916-12 , 7916-24 , and 7937 keywords were added and this command was integrated into Cisco IOS Release 12.4(20)T.
15.0(1)XA	Cisco Unified CME 8.0	This command was modified. The IP-STE keyword was added and logical partitioning class of restriction (LPCOR) and Cancel Call Waiting information was added to the output.
15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Examples

Significant fields in the output from this command are described in the table.

The following sample output shows general information for registered phones:

```
Router# show ephone
ephone-8[7] Mac:000A.B7B1.444A TCP socket:[5] activeLine:0 whisperLine:0 REGISTERED in SCCP
  ver 11/9 max_streams=1
mediaActive:0 whisper_mediaActive:0 startMedia:0 offhook:0 ringing:0 reset:0 reset_sent:0
paging 0 debug:0 caps:8 privacy:0
IP:10.4.188.99 * 50007 Telecaster 7940 keepalive 8424 max_line 2 available_line 2
button 1: cw:1 ccw:(0 0)
  dn 6 number 6006 CH1 IDLE CH2 IDLE overlay shared
button 2: cw:1 ccw:(0 0 0 0 0 0 0)
  dn 42 number 6042 CH1 IDLE CH2 IDLE CH3 IDLE CH4 IDLE
    CH5 IDLE CH6 IDLE CH7 IDLE CH8 IDLE shared
overlay 1: 6(6006) 7(6007) 8(6008)
Preferred Codec: g711ulaw
Lpcor Type: local Incoming: ephone_group1 Outgoing: ephone_group1
```

The table describes significant fields in the output.

Table 4: show ephone Field Descriptions

Field	Description
Active Call	An active call is in progress.
activeLine	Line (button) on the phone that is in use. Zero indicates that no line is in use.
auto-dial <i>number</i>	Intercom extension that automatically dials <i>number</i> .

Field	Description
button <i>number</i> : dn <i>number</i>	Phone button number and the extension (ephone-dn) dn-tag number associated with that button.
bytes	Total number of voice data bytes sent or received by the phone.
Called Dn, Calling Dn	Ephone-dn tag numbers of the called and calling ephone-dn. Set to -1 if the call is not to or from an ephone-dn, or if there is no active call.
cfa <i>number</i>	Call-forward-all to <i>number</i> is enabled for this extension.
CH1 CH2	Status of channel 1 and, if this is a dual-line ephone-dn, the status of channel 2.
cw	1 indicates that Call Waiting is enabled. 0 indicates that Call Waiting is disabled.
debug	1 indicates that debug for the phone is enabled. 0 indicates that debug is disabled.
DnD	Do Not Disturb is set on this phone.
DP tag	Not used.
ephone- <i>number</i>	Unique sequence number used to identify this phone during configuration (phone-tag).
IP	Assigned IP address of the Cisco Unified IP phone.
Jitter	Amount of variation (in milliseconds) of the time interval between voice packets received by the Cisco Unified IP phone.
keepalive	Number of keepalive messages received from the Cisco Unified IP phone by the router.
Latency	Estimated playout delay for voice packets received by the Cisco Unified IP phone.
line <i>number</i>	Button number on an IP phone. Line 1 is the button nearest the top of the phone.
Lost	Number of voice packets lost, as calculated by the Cisco Unified IP phone, on the basis of examining voice packet time-stamp and sequence numbers during playout.
Lpcor Incoming	Setting of the lpcor incoming command.
Lpcor Outgoing	Setting of the lpcor outgoing command.
Lpcor Type	Setting of the lpcor type command.
Mac	MAC address.

Field	Description
Max Conferences	Maximum number of allowable conference calls and number of active conference calls.
max_line <i>number</i>	Maximum number of line buttons that can be configured on this phone.
mediaActive	1 indicates that an active conversation is in progress. 0 indicates that no conversation is ongoing.
monitor-ring	This button is set up as a monitor button.
number	Telephone or extension number associated with the Cisco Unified IP phone button and its dn-tag.
offhook	1 indicates that the phone is off-hook. 0 indicates that the phone is on-hook.
overlay	This button contains an overlay set. Use show ephone overlay to display the contents of overlay sets.
paging	1 indicates that the phone has received an audio page. 0 indicates that the phone has not received an audio page.
paging-dn	Ephone-dn that is dedicated for receiving audio pages on this phone. The paging-dn number is the number of the paging set to which this phone belongs.
Password	Authentication string that the phone user types when logging in to the web-based Cisco Unified CME GUI.
Port	Port used for TAPI transmissions.
REGISTERED	The Cisco Unified IP phone is active and registered. Alternative states are UNREGISTERED (indicating that the connection to the Cisco Unified IP phone was closed in a normal manner) and DECEASED (indicating that the connection to the Cisco Unified IP phone was closed because of a keepalive timeout).
reset	Pending reset.
reset_sent	Request for reset has been sent to the Cisco Unified IP phone.
ringing	1 indicates that the phone is ringing. 0 indicates that the phone is not ringing.
Rx Pkts	Number of received voice packets.
silent-ring	Silent ring has been set on this button and extension.
socket	TCP socket number used to connect to IP phone.
speed dial <i>speed-tag:digit-string</i> <i>label-text</i>	This button is a speed-dial button, assigned to the speed-dial sequence number <i>speed-tag</i> . It dials <i>digit-string</i> and displays the text <i>label-text</i> next to the button.

Field	Description
sub=3, sub=4	Subtype 3 means that one Cisco Unified IP Phone 7914 Expansion Module is attached to the main Cisco Unified IP Phones 7960 and 7960G, and subtype 4 means that two are attached.
Tag <i>number</i>	Dn-tag number, the unique sequence number that identifies an ephone-dn during configuration, followed by the type of ephone-dn it is.
TAPI Client IP Address	IP address of the PC running the TAPI client.
TCP socket	TCP socket number used to communicate with the Cisco Unified IP phone. This can be correlated with the output of other debug and show commands.
Telecaster <i>model-number</i>	Type and model of the Cisco Unified IP phone. This information is received from the phone during its registration with the router.
Tx Pkts	Number of transmitted voice packets.
Username	Username that the phone user types when logging in to the web-based Cisco Unified CME GUI.

Related Commands

Command	Description
show ephone-dn	Displays information about Cisco Unified IP phone extensions (ephone-dns).
show ephone login	Displays the login states of all local ephones.
show telephony-service all	Displays systemwide status and information for a Cisco Unified CME system.

show ephone attempted-registrations

To display the log of ephones that unsuccessfully attempt to register with Cisco Unified CME, use the **show ephone attempted-registrations** command in privileged EXEC mode.

show ephone attempted-registrations

Syntax Description This command has no keywords or arguments.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
	12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines The **no auto-reg-ephone** blocks the automatic registration of ephones whose MAC addresses are not explicitly listed in the configuration. When automatic registration is blocked, Cisco Unified CME records the MAC addresses of phones that attempt to register but cannot because they are blocked.

Use the **show ephone attempted-registrations** to view the list of phones that have attempted to register but have been blocked. The **clear telephony-service ephone-attempted-registrations** clears the list.

Examples

The following example displays ephones that unsuccessfully attempted to register with Cisco Unified CME:

```
Router# show ephone attempted-registrations
Attempting Mac address:
Num      Mac Address          DateTime                               DeviceType
-----
1        C863.8475.5417          22:52:05 UTC Thu Apr 28 2005          SCCP Gateway (AN)
2        C863.8475.5408          22:52:05 UTC Thu Apr 28 2005          SCCP Gateway (AN)
...
25       000D.28D7.7222          22:26:32 UTC Thu Apr 28 2005          Telecaster 7960
26       000D.BDB7.A9EA          22:25:59 UTC Thu Apr 28 2005          Telecaster 7960
...
47       C863.94A8.D40F          22:52:17 UTC Thu Apr 28 2005          SCCP Gateway (AN)
48       C863.94A8.D411          22:52:18 UTC Thu Apr 28 2005          SCCP Gateway (AN)
49       C863.94A8.D400          22:52:15 UTC Thu Apr 28 2005          SCCP Gateway (AN)
```

The below table describes the significant fields shown in the display.

Table 5: show ephone attempted-registrations Field Descriptions

Field	Description
Num	Index number.
Mac Address	MAC address of the ephone.
DateTime	Date and time that the attempt to register was made.

 show ephone attempted-registrations

Field	Description
DeviceType	Type of ephone.

Related Commands

Command	Description
auto-reg-ephone	Enables automatic registration of ephones with the Cisco Unified CME system.
clear telephony-service ephone-attempted-registrations	Empties the log of ephones that unsuccessfully attempt to register with Cisco Unified CME.

show ephone cfa

To display status and information on the registered phones that have call-forward-all set on one or more of their extensions (ephone-dns), use the **show ephone cfa** command in privileged EXEC mode.

show ephone cfa

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Examples

The following is sample output from the **show ephone cfa** command:

```
Router# show ephone cfa
ephone-1 Mac:0007.0EA6.353A TCP socket:[2] activeLine:0 REGISTERED
mediaActive:0 offhook:0 ringing:0 reset:0 reset_sent:0 paging 0 debug:0
IP:1.2.205.205 52491 Telecaster 7960 keepalive 14 max_line 6
button 1: dn 11 number 60011 cfa 60022 CH1 IDLE
button 2: dn 17 number 60017 cfa 60021 CH1 IDLE
```

The **show ephone** describes significant fields in this output.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone dn

To display phone information for specified dn-tag or for all dn-tags, use the **show ephone dn** command in privileged EXEC mode.

show ephone dn [*dn-tag*]

Syntax Description

<i>dn-tag</i>	(Optional) Unique sequence number that is used during configuration to identify a particular extension (ephone-dn).
---------------	---

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

Use this command to identify the phone on which a particular dn-tag has been assigned.

Examples

The following is sample output for the two appearances of DN 5:

```
Router# show ephone dn 5
Tag 5, Normal or Intercom dn
ephone 1, mac-address 0030.94C3.CAA2, line 2
ephone 2, mac-address 0030.94c2.9919, line 3
```

The **show ephone** describes significant fields in this output.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone dnd

To display information on the registered phones that have “do not disturb” set on one or more of their extensions (ephone-dns), use the **show ephone dnd** command in privileged EXEC mode.

show ephone dnd

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

This command does not apply to Cisco Unified SRST.

Examples

The following is sample output from the **show ephone dnd** command:

```
Router# show ephone dnd
ephone-1 Mac:0007.0EA6.353A TCP socket:[1] activeLine:0 REGISTERED
mediaActive:0 offhook:0 ringing:0 reset:0 reset_sent:0 paging 0 debug:0
IP:1.2.205.205 52486 Telecaster 7960 keepalive 2729 max_line 6 DnD
button 1: dn 11 number 60011 CH1 IDLE
```

The **show ephone** describes significant fields in this output.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone login

To display the login states of all local IP phones, use the **show ephone login** command in privileged EXEC mode.

show ephone login

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.
15.0(1)XA	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was modified. LOCAL and GLOBAL replace TRUE in the output for “Pin enabled.”
15.1(1)T	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Usage Guidelines

The **show ephone login** command displays whether an ephone has a personal identification number (PIN) and whether its owner is logged in.

In Cisco Unified CME 7.1 and earlier versions, FALSE is displayed if there is no PIN configured for the specified ephone. TRUE is displayed if there is a PIN configured for the specified ephone.

In Cisco Unified CME 8.0 and later versions, the show output is modified as follows:

- FALSE is displayed only if no PIN is defined, neither in an ephone configuration nor in the telephony-service configuration.
- LOCAL is displayed if an individual PIN is defined for the specific ephone.
- GLOBAL is displayed if a global PIN is defined.

Cisco Unified CME 8.0 or Later Versions

The following is sample output from the **show ephone login** command. It shows that a PIN is defined for ephone 1 and that its owner has not logged in. The other phones do not have PINs associated with them.

```
Router# show ephone login
ephone 1      Pin enabled:LOCAL      Logged-in:FALSE
ephone 2      Pin enabled:FALSE
ephone 3      Pin enabled:FALSE
```

The following is sample output from the **show ephone login** command. It shows that a PIN is defined for ephone 1 and that its owner has not logged in. A global PIN is defined also defined for this system.

If the **pin** command is configured in ephone configuration mode and telephony-service configuration mode, the command in ephone configuration mode takes precedence.

```
Router# show ephone login
ephone 1      Pin enabled:LOCAL      Logged-in:FALSE
ephone 2      Pin enabled:GLOBAL  Logged-in:TRUE
ephone 3      Pin enabled:GLOBAL  Logged-in:TRUE
```

The following is sample output from the **show ephone login** command. It shows that neither a local nor a global PIN is enabled for ephones 1 to 3.

```
Router# show ephone login
ephone 1      Pin enabled:FALSE
ephone 2      Pin enabled:FALSE
ephone 3      Pin enabled:FALSE
```

Cisco CME 3.0 to Cisco Unified CME 7.1

The following is sample output from the **show ephone login** command. It shows that a PIN is enabled for ephone 1 and that its owner has not logged in. The other phones do not have PINs associated with them.

```
Router# show ephone login
ephone 1      Pin enabled:TRUE      Logged-in:FALSE
ephone 2      Pin enabled:FALSE
ephone 3      Pin enabled:FALSE
ephone 4      Pin enabled:FALSE
ephone 5      Pin enabled:FALSE
ephone 6      Pin enabled:FALSE
ephone 7      Pin enabled:FALSE
ephone 8      Pin enabled:FALSE
ephone 9      Pin enabled:FALSE
```

The below table describes significant fields in this output.

Table 6: show ephone login Field Descriptions

Field	Description
ephone <i>phone-tag</i>	Phone identified with its unique phone-tag sequence number.
Pin enabled	<p>In Cisco Unified CME 7.1 and earlier versions:</p> <ul style="list-style-type: none"> • TRUE—A PIN is defined for this phone. • FALSE —No PIN is defined for this phone. <p>In Cisco Unified CME 8.0 and later versions:</p> <ul style="list-style-type: none"> • LOCAL—A PIN has been defined for this phone. • GLOBAL—A global PIN is defined for this Cisco Unified CME system. • FALSE—No PIN is defined.

Field	Description
Logged-in	<ul style="list-style-type: none">• TRUE indicates that a phone user is currently logged in on this phone.• FALSE indicates that no phone user is currently logged in on this phone.

Related Commands

Command	Description
login (telephony-service)	Defines when users of IP phones in a Cisco Unified CME system are logged out automatically.
pin	Sets set a personal identification number (PIN) for an IP phone in a Cisco Unified CME system.
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone moh

To display information about moh files in use, use the **show ephone moh** command in global configuration mode.

show ephone moh

Syntax Description This command has no arguments or keywords

Command Modes Global Configuration mode.

Command History	Cisco IOS Release	Cisco Product	Modification
	15.0(1)XA	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was introduced.
	15.1(1)T	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Usage Guidelines Use the show ephone moh to display information about the different MOH group configured. The following examples displays different MOH group configured.

Examples

```
Router #show ephone moh
Skinny Music On Hold Status (moh-group 1)
Active MOH clients 0 (max 830), Media Clients 0
File flash:/minuet.au (not cached) type AU Media_Payload_G711Ulaw64k 160 bytes
Moh multicast 239.10.16.6 port 2000
Skinny Music On Hold Status (moh-group 2)
Active MOH clients 0 (max 830), Media Clients 0
File flash:/audio/hello.au type AU Media_Payload_G711Ulaw64k 160 bytes
Moh multicast on 239.10.16.6 port 2000 via 0.0.0.0
Skinny Music On Hold Status (moh-group 3)
Active MOH clients 0 (max 830), Media Clients 0
File flash:/bells.au type AU Media_Payload_G711Ulaw64k 160 bytes
Moh multicast on 239.10.16.5 port 2000 via 0.0.0.0
Skinny Music On Hold Status (moh-group 4)
Active MOH clients 0 (max 830), Media Clients 0
File flash:/3003.au type AU Media_Payload_G711Ulaw64k 160 bytes
Moh multicast on 239.10.16.7 port 2000 via 0.0.0.0
Skinny Music On Hold Status (moh-group 5)
Active MOH clients 0 (max 830), Media Clients 0
File flash:/4004.au type AU Media_Payload_G711Ulaw64k 160 bytes
Moh multicast on 239.10.16.8 port 2000 via 0.0.0.0
```

Related Commands	Command	Description
	show ephone-dn	Displays MOH group information for a phone directory number.
	show ephone summary	Displays the information about the MOH files in use
	show voice moh-group statistics	Displays the MOH subsystem statistics information

show ephone offhook

To display information and packet counts for the phones that are currently off hook, use the **show ephone offhook** command in privileged EXEC mode.

show ephone offhook

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command is introduced.
	12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command is integrated into Cisco IOS Release 12.3(4)T.
	Cisco IOS XE Gibraltar 16.11.1a	Unified CME 12.6	This command is enhanced to display the keys that are in use per media stream, along with the sRTP Ciphers.

Examples

The following sample output is displayed when no phone is off hook:

```
Router# show ephone offhook
No ephone in specified type/condition.
```

The following sample output displays information for a phone that is off hook:

```
Router# show ephone offhook
ephone-5 Mac:000A.8A2C.8C6E TCP socket:[20] activeLine:1 REGISTERED
mediaActive:0 offhook:1 ringing:0 reset:0 reset_sent:0 paging 0 debug:0
IP:10.22.84.71 51228 Telecaster 7960 keepalive 43218 max_line 6
button 1:dn 9 number 59943 CH1 SIEZE silent-ring
button 2:dn 10 number 59943 CH1 IDLE
button 3:dn 42 number A4400 auto dial A4500 CH1 IDLE
button 4:dn 96 number 69943 auto dial 95259943 CH1 IDLE
button 5:dn 75 number 49943 auto dial 49943 CH1 IDLE
speed dial 1:57514 marketing
Active Call on DN 9 chan 1 :59943 0.0.0.0 0 to 0.0.0.0 2000 via 172.30.151.1
G711Ulaw64k 160 bytes vad
Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Jitter 0 Latency 0 callingDn -1 calledDn -1
Username:user1 Password:newuser
```

The following is a sample output for the show command, **show ephone offhook**. The lines that are added to the show command output as part of the Unified CME 12.6 enhancement are local key and remote key.

```
ephone-1[0] Mac:549A.EBB5.8000 TCP socket:[1] activeLine:1 whisperLine:0 REGISTERED in SCCP
ver 21/17 max_streams=1 + Authentication + Encryption with TLS connection
mediaActive:1 whisper_mediaActive:0 startMedia:1 offhook:1 ringing:0 reset:0 reset_sent:0
paging 0 debug:0 caps:8
```

```

IP:8.44.22.63 * 17872 SCCP Gateway (AN) keepalive 28 max_line 1 available_line 1
port 0/0/0
button 1: cw:1 ccw:(0 0)
  dn 1 number 6901 CM Fallback CH1 CONNECTED CH2 IDLE
Preferred Codec: g711ulaw
Lpcor Type: none Active Secure Call on DN 1 chan 1 :6901 8.44.22.63 18116
  to 8.39.25.11 8066 via 8.39.0.1
G711Ulaw64k 160 bytes no vad
SRTP cipher: AES_CM_128_HMAC_SHA1_32
  local key: 00PV0yxvcnRLPMzHfmYbwgHfdxcuSluPbp5j/Tjk
  remote key: e8DQl3Kvk7LjZlipaCoMg9TMreBmiPsFmNiVHwIA
Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Jitter 0 Latency 0 callingDn -1 calledDn -1

```

The following sample output displays information for a phone that has just completed a call:

```

Router# show ephone offhook
ephone-5 Mac:000A.8A2C.8C6E TCP socket:[20] activeLine:1 REGISTERED
mediaActive:1 offhook:1 ringing:0 reset:0 reset_sent:0 paging 0 debug:0
IP:10.22.84.71 51228 Telecaster 7960 keepalive 43224 max_line 6
button 1:dn 9 number 59943 CH1 CONNECTED silent-ring
button 2:dn 10 number 59943 CH1 IDLE
button 3:dn 42 number A4400 auto dial A4500 CH1 IDLE
button 4:dn 96 number 69943 auto dial 95259943 CH1 IDLE
button 5:dn 75 number 49943 auto dial 49943 CH1 IDLE
speed dial 1:57514 marketing
Active Call on DN 9 chan 1 :59943 10.23.84.71 22926 to 172.30.131.129 2000 via 172.30.151.1
G711Ulaw64k 160 bytes no vad
Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Jitter 0 Latency 0 callingDn -1 calledDn -1 (media path callID 19288 srcCallID 1
9289)
Username:user1 Password:newuser

```

The **show ephone** describes significant fields in this output.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone overlay

To display information for the registered phones that have overlay ephone-dns associated with them, use the **show ephone overlay** in privileged EXEC mode.

show ephone overlay

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
	12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines This command does not apply to Cisco Unified SRST.

Examples The following is sample output from the show ephone overlay command:

```
Router# show ephone overlay
ephone-1 Mac:0007.0EA6.353A TCP socket:[1] activeLine:0 REGISTERED
mediaActive:0 offhook:0 ringing:0 reset:0 reset_sent:0 paging 0 debug:0
IP:10.2.225.205 52486 Telecaster 7960 keepalive 2771 max_line 6
button 1: dn 11 number 60011 CH1 IDLE overlay
button 2: dn 17 number 60017 CH1 IDLE overlay
button 3: dn 24 number 60024 CH1 IDLE overlay
button 4: dn 30 number 60030 CH1 IDLE overlay
button 5: dn 36 number 60036 CH1 IDLE CH2 IDLE overlay
button 6: dn 39 number 60039 CH1 IDLE CH2 IDLE overlay
overlay 1: 11(60011) 12(60012) 13(60013) 14(60014) 15(60015) 16(60016)
overlay 2: 17(60017) 18(60018) 19(60019) 20(60020) 21(60021) 22(60022)
overlay 3: 23(60023) 24(60024) 25(60025) 26(60026) 27(60027) 28(60028)
overlay 4: 29(60029) 30(60030) 31(60031) 32(60032) 33(60033) 34(60034)
overlay 5: 35(60035) 36(60036) 37(60037)
overlay 6: 38(60038) 39(60039) 40(60040)
```

The **show ephone** command describes significant fields in this output. The below table describes a field that is not in that table.

Table 7: show ephone overlay Field Descriptions

Field	Description
overlay <i>number</i>	Displays the contents of an overlay set, including each dn-tag and its associated extension number.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone phone-load

To display information about the phone firmware that is loaded on registered phones, use the **show ephone phone-load** command in privileged EXEC mode.

show ephone phone-load

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
	12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Examples

The following is sample output that displays the phone firmware versions for all phones in the system:

```
Router# show ephone phone-load
DeviceName          CurrentPhoneLoad      PreviousPhoneLoad      LastReset
=====
SEP0002B9AFC49F     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP003094C2D0B0     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP000C30F03707     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP003094C2999F     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP000A8A2C8C6E     3.2 (2.14)            3.2 (2.14)            Initialized
SEP0002B9AFBB4D     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP00075078627F     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP0002FD659E59     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP00024BCCD626     3.2 (2.14)            3.2 (2.14)            CM-closed-TCP
SEP0008215F88C1     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP000C30F0390C     3.2 (2.14)            3.2 (2.14)            TCP-timeout
SEP003094C30143     3.2 (2.14)            3.2 (2.14)            TCP-timeout
```

The below table describes significant fields in this output.

Table 8: show ephone phone-load Field Descriptions

Field	Description
DeviceName	Device name.
CurrentPhoneLoad	Current phone firmware version.
PreviousPhoneLoad	Phone firmware version before last phone load.
LastReset	Reason for last reset of phone.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone registered

To display the status of registered phones, use the **show ephone registered** command in privileged EXEC mode.

show ephone registered

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
	12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.
	15.0(1)XA	Cisco Unified CME 8.0	This command was modified. The output was enhanced to include the setting of the feature-button command.
	15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Examples

The following is sample output from the show ephone registered command:

```
Router# show ephone registered
ephone-12[11] Mac:001A.A11B.7D6D TCP socket:[5] activeLine:0 whisperLine:0 REGIS
TERED in SCCP ver 15/12 max_streams=1
mediaActive:0 whisper_mediaActive:0 startMedia:0 offhook:0 ringing:0 reset:0 res
et_sent:0 paging 0 debug:0 caps:7
IP:10.10.1.17 * 35177 6941 keepalive 3593 max_line 4 available_line 3
button 1: cw:1 dn 11 number 1001 CH1 IDLE CH2 IDLE
button 2: cw:1 dn 56 number 6971 auto dial 6970 CH1 IDLE
button 3: cw:1 dn 10 number 1000 CH1 IDLE CH2 IDLE
1 feature buttons enabled: dnd
Preferred Codec: g711ulaw
Lpcor Type: none
```

The below table describes significant fields in this output.

Table 9: show ephone registered Field Descriptions

Field	Description
active	Number of active parties registered.
ephone	Cisco IP phone.
mac-address	MAC address of the Cisco IP phone.
keepalive	Defines keepalive timeout period to unregister IP phone.

Field	Description
feature-buttons	Displays the type of feature button on the ephone.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone registered summary

To display the details of all the registered Skinny Client Control Protocol (SCCP) phones that are sorted based on ephone tags, use the **show ephone registered summary** command in privileged EXEC mode.

show ephone registered summary

Syntax Description	This command has no arguments or keywords.		
Command Default	This command has no default behavior or values.		
Command Modes	Privileged EXEC (#)		
Command History	Cisco IOS Release	Cisco Product	Modification
	15.4(3)M	Cisco Unified CME 10.5	This command was introduced.
Usage Guidelines	Use this command to view the details of the registered phones configured in the SCCP mode sorted by ephone tags.		

Example

The following is sample output of the registered phones configured in the SCCP mode.



Note

The * symbol adjacent to the Directory Number (DN) in the command output indicates that the Directory Number (DN) is an Overlay-dn.

```
router# show ephone registered summary
```

```
=====
PhoneType  Ephone  MacAddress      IPAddress      Ln   Dn   Number  Status
=====
8941        1       7081.050C.0927  9.51.0.71     1   1   3001    Registered
                        2   2*   3002    Registered
                        2   5*   3005    Registered
                        2   6*   3006    Registered
7970        2       001B.D52C.DF27  9.51.0.72     1   3   3003    Registered
                        2   4   3004    Registered
7970        5       001B.D52C.4AEE  9.51.0.75     1   9   3009    Registered
                        2   10  3010    Registered
=====
Total ephones configured      : 10
Total ephones registered      : 3
Total ephones unregistered    : 5
Total ephones deceased        : 0
Ephones in unknown state      : 2
```

Table 10: show ephone registered summary field descriptions

Field	Description
DN	Directory number of the phone.
Ephone	Total number of ephone tags configured.
IP Address	IP address of the phones.
LN	Line number of the phone.
MacAddress	Shows the MAC address of the SCCP phone.
Number	Number assigned to ephone.
PhoneType	Shows the type of Cisco IP phone.
Status	Shows the registration status.

Related Commands

Command	Description
show ephone summary types	Displays the total number of registered and unregistered SCCP phones for each phone type.
show ephone unregistered summary	Displays the details of all the unregistered SCCP phones.

show ephone remote

To display nonlocal phones (phones with no Address Resolution Protocol [ARP] entry), use the **show ephone remote** command in privileged EXEC mode.

show ephone remote

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

Phones without ARP entries are suspected not to be on the LAN. Use the **show ephone remote** command to identify phones without ARP entries that might have operational issues.

Examples

The following is sample output that identifies ephone 2 as not having an ARP entry:

```
Router# show ephone remote
ephone-2 Mac:0185.047C.993E TCP socket:[4] activeLine:0 REGISTERED
mediaActive:1 offhook:0 ringing:0 reset:0 reset_sent:0 paging 1 debug:0
IP:10.50.50.20 49231 Telecaster 7910 keepalive 112 max_line 2 dual-line
button 1:dn 3 number 95021 CH1 IDLE
paging-dn 25
```

The **show ephone** describes significant fields in this output.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone ringing

To display information on phones that are ringing, use the **show ephone ringing** command in privileged EXEC mode.

show ephone ringing

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
	12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Examples

The following is sample output from the **show ephone ringing** command:

```
Router# show ephone ringing
ephone-1 Mac:0005.5E37.8090 TCP socket:[1] activeLine:0 REGISTERED
mediaActive:0 offhook:0 ringing:1 reset:0 reset_sent:0 paging 0 debug:0
IP:10.50.50.10 49329 Telecaster 7960 keepalive 17602 max_line 6
button 1:dn 1 number 95011 CH1 RINGING CH2 IDLE
button 2:dn 2 number 95012 CH1 IDLE
```

The **show ephone** describes significant fields in this output.

Related Commands	Command	Description
	show ephone	Displays statistical information about registered Cisco IP phones.

show ephone rtp connections

To display active Real-Time Transport Protocol (RTP) call information on ephone call legs, use the **show ephone rtp connections** command in privileged EXEC mode.

show ephone rtp connections

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Release	Modification
	15.2(1)T	This command was introduced.

Usage Guidelines The **show ephone rtp connections** command displays information on active RTP calls, including the ephone tag number of the phone with an active call, the channel of the ephone-dn, and the caller and called party's numbers for the connection for both local and remote endpoints. The output from this command provides an overview of all the connections in the system, narrowing the criteria for debugging pulse code modulation and Cisco Unified CME packets without a sniffer.



Note When an ephone to non-ephone call is made, information on the non-ephone does not appear in a **show ephone rtp connections** command output. To display the non-ephone call information, use the **show voip rtp connections** command.

Examples

The following sample output shows all the connected ephones in the Cisco Unified CME system. The sample output shows five active ephone connections with one of the phones having the **dspfarm-assist** keyword configured to transcode the code on the local leg to the indicated codec. The output also shows four ephone to ephone calls, represented in the CallID columns of both the RTP connection source and RTP connection destination by zero values.

Normally, a phone can have only one active connection but in the presence of a whisper intercom call, a phone can have two. In the sample output, ephone-40 has two active calls: it is receiving both a normal call and a whisper intercom call. The whisper intercom call is being sent by ephone-6, which has an invalid LocalIP of 0.0.0.0. The invalid LocalIP indicates that it does not receive RTP audio because it only has a one-way voice connection to the whisper intercom call recipient.

```
Router# show ephone rtp connections
Ephone RTP active connections :
Ephone   Line  DN Chan  SrcCallID  DstCallID          Codec (xcoded?)
  SrcNum  DstNum  LocalIP                RemoteIP
ephone-5   1    5    1      15         14          G729 (Y)
  1005  1102  [192.168.1.100]:23192  [192.168.1.1]:2000
ephone-6   2   35    1        0          0          G711Ulaw64k (N)
  1035  1036  [0.0.0.0]:0  [192.168.1.81]:21256
ephone-40  1  140    1        0          0          G711Ulaw64k (N)
  1140  1141  [192.168.1.81]:21244  [192.168.1.70]:20664
ephone-40  2   36    1        0          0          G711Ulaw64k (N)
  1035  1036  [192.168.1.81]:21256  [192.168.1.1]:2000
```

```

ephone-41      1 141      1          0          0          G711Ulaw64k (N)
               1140 1141  [192.168.1.70]:20664 [192.168.1.81]:21244
Found 5 active ephone RTP connections

```

The below table explains the fields in the **show ephone rtp connections** command output.

Table 11: show ephone rtp connections Field Descriptions

Field	Description
Ephone	Ephone tag number with an active call.
Line	Line appearance of the phone.
DN	Ephone-dn tag.
Chan	Channel of the ephone-dn.
SrcCallID	CCAPI CallID for the RTP connection source. For ephone to ephone calls, this will be 0. SrcCallID compares to “CallId” in the show voip rtp connections command output.
DstCallID	CCAPI CallID for the RTP connection destination. For ephone to ephone calls, this will be 0. DstCallID compares to “dstCallId” in the show voip rtp connections command output.
Codec (xcoded)	Codec name used by the phone with the active call. If xcoded is ‘Y’, the phone has the dspfarm-assist keyword configured to transcode the code on the local leg to the indicated codec.
SrcNum	Caller’s number for the connection. This number is not necessarily the ephone’s DN.
DstNum	Called party’s number for the connection.
LocalIP	Call’s local IP address and port. This is usually the ephone’s IP address. The IP address in brackets is either in IPv4 or IPv6 format, followed by a colon and the port number. The port compares to the “LocalRTP” number in the show voip rtp connections command output.
RemoteIP	Call’s remote IP address and port. For flow-around ephone to ephone calls, this is usually the other ephone’s IP address. For flow-through trunk calls, this is usually the Cisco Unified CME’s IP address. The port compares to the “RmtRTP” number in the show voip rtp connections command output.

Related Commands

Command	Description
show ephone registered	Displays the status of registered SCCP phones in Cisco Unified CME.
show voip rtp connections	Displays information about Real-Time Transport Protocol (RTP) named event packets.

show ephone socket

To display IP addresses (IPv4, IPv6, or dual-stack) being used by ephone sockets, use the **show ephone socket** command in privileged EXEC mode.

show ephone socket

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	15.0(1)XA	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was introduced.
	15.1(1)T	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Usage Guidelines Use the **show ephone socket** command to verify if IPv4 only, IPv6 only, or dual-stack (IPv4/IPv6) is configured on Cisco Unified CME. In the following example, `skinny_tcp_listen_socket fd = 0` and `skinny_tcp_listen_socket fd = 1` verify that dual-stack configuration. When IPv6 only is configured `show ephone socket` command displays `skinny_tcp_listen_socket fd = -1` and `skinny_tcp_listen_socket fd = 0` values. When IPv4 only is configured the `show ephone socket` command displays `skinny_tcp_listen_socket fd = 0` and `skinny_tcp_listen_socket (ipv6) fd = -1` values.

Examples

The following is sample output from the **show ephone socket** command:

```
Router# show ephone ssocket
skinny_tcp_listen_socket fd = 0
skinny_tcp_listen_socket (ipv6) fd = 1

skinny_secure_tcp_listen_socket fd = -1
skinny_secure_tcp_listen_socket (ipv6) fd = -1

skinny_open_sockets = 3:
Phone 3,
skinny_sockets[0] fd = 1
    read_buffer 0x480061E8, read_offset 0, read_header N, read_length 0

    resend_queue 0x47CE8178, resend_offset 0, resend_flag N, resend_Q_depth 0
Phone 2,
skinny_sockets[1] fd = 2
    read_buffer 0x48006A24, read_offset 0, read_header N, read_length 0

    resend_queue 0x47CE8104, resend_offset 0, resend_flag N, resend_Q_depth 0
Phone 1,
skinny_sockets[2] fd = 3
    read_buffer 0x48007260, read_offset 0, read_header N, read_length 0

    resend_queue 0x47CE8090, resend_offset 0, resend_flag N, resend_Q_depth 0
```

Related Commands

Command	Description
show ephone summary	Displays information about Cisco IP phones.

show ephone summary brief

To display details of all the SCCP phones sorted by ephone-tag, use the **show ephone summary brief** command in privileged EXEC mode.

show ephone summary brief

Syntax Description This command has no arguments or keywords.

Command Default This command had no default behavior or values.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	15.4(3)M	Cisco SIP CME 10.5	This command was introduced.

Usage Guidelines The command output displays the status, IP address, and MAC address of the phones.

Example

The following is sample output of the **show ephone summary brief** command.



Note

The asterisk symbol (*) adjacent to the Directory Number (DN) in the command output indicates that the Directory Number (DN) is an Overlay-dn.

```
router# show ephone summary brief
```

PhoneType Status	Ephone	MacAddress	IpAddress	Ln	Dn	Number
8941 Registered	1	7081.050C.0927	9.51.0.71	1	1	3001
Registered				2	2*	3002
Registered				2	5*	3005
Registered				2	6*	3006
7970 Registered	2	001B.D52C.DF27	9.51.0.72	1	3	3003
Registered				2	4	3004
7970 Unregistered	3	001B.54CA.43F7		1	5	3005
Unregistered				2	6	3006
Unregistered				3	2*	3002
Unregistered				3	3*	3003
Unregistered				3	8*	3008

```

      Unregistered
8945      4      D48C.B5C9.D2E6      1      7      3007
      Unregistered
      2      8      3008
      Unregistered
7970      5      001B.D52C.4AEE      9.51.0.75      1      9      3009
      Registered
      2      10      3010

      Registered
8941      6      1111.2222.3333
      Unregistered
8941      10      1111.2222.3334
      Unregistered
6901      11 1111.2222.3332
      Unregistered
Unknown Ephone      12
      Unknown
Unknown Ephone      13
      Unknown

```

```

Total ephones configured : 10
Total ephones registered : 3
Total ephones unregistered: 5
Total ephones deceased : 0
Ephones in unknown state : 2

```

Table 12: show ephone summary brief field descriptions

Field	Description
DN	Directory number of the phone.
Ephone	ephone tag.
IP Address	IP address of the phone.
LN	Line number of the phone.
MacAddress	Shows the MAC address of the SCCP phone.
Number	Number assigned to ephone.
PhoneType	Shows the type of Cisco IP phone.
Status	Shows the registration status.

Related Commands

Command	Description
show ephone summary types	Displays the total number of registered and unregistered SCCP phones for each phone type.

show ephone summary

To display brief information about Cisco IP phones, use the **show ephone summary** command in privileged EXEC mode.

show ephone summary

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.1(5)YD	Cisco CME 1.0 Cisco SRST 1.0	This command was introduced.
	12.2(8)T	Cisco CME 2.0 Cisco SRST 2.0	This command was integrated into Cisco IOS Release 12.2(8)T .
	15.0(1)XA	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was modified. The output was enhanced to show IPv6 or IPv4 addresses configured on ephones.
	15.1(1)T	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.
	15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was modified. The output was enhanced to show voice-class stun-usage information.

Examples

The following is sample output from the **show ephone summary** command:

```
Router# show ephone summary
hairpin_block:
ephone-1[0] Mac:FCAC.3BAE.0000 TCP socket:[17] activeLine:0 whisperLine:0 REGISTERED
mediaActive:0 whisper_mediaActive:0 startMedia:0 offhook:0 ringing:0 reset:0 reset_sent:0
debug:0 primary_dn: 1*
IP:10.2.1.0 * SCCP Gateway (AN) keepalive 2966 music 0 1:1
port 0/0/0
voice-class stun is enabled
ephone-2[1] Mac:FCAC.3BAE.0001 TCP socket:[18] activeLine:0 whisperLine:0 REGISTERED
mediaActive:0 whisper_mediaActive:0 startMedia:0 offhook:0 ringing:0 reset:0 reset_sent:0
debug:0 primary_dn: 2*
IP:10.2.1.5 * SCCP Gateway (AN) keepalive 2966 music 0 1:2
port 0/0/1
voice-class stun is enabled
ephone-4 Mac:0030.94C3.F43A TCP socket:[-1] activeLine:0 REGISTERED
mediaActive:0 offhook:0 ringing:0 reset:0 reset_sent:0 debug:0
IP:10.2.1.1 Telecaster 7960 keepalive 59
Max 48, Registered 1, Unregistered 0, Deceased 0, Sockets 1
Max Conferences 4 with 0 active (4 allowed)
Skinny Music On Hold Status
Active MOH clients 0 (max 72), Media Clients 0
No MOH file loaded
```


The **show ephone** command describes significant fields in this output.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone summary types

To display the total count of registered and unregistered phones for each phone type operating in the Skinny Client Control Protocol (SCCP) mode, use the **show ephone summary types** command in privileged EXEC mode.

show ephone summary types

Syntax Description This command has no arguments or keywords.

Command Default This command has no default behavior or values.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	15.4(3)M	Cisco Unified CME 10.5	This command was introduced.

Usage Guidelines This command displays the count of configured, registered, unregistered, and deceased phones.

Example

The following is an example of the **show ephone summary types** command:

```
Router# show ephone summary types
=====
PhoneType           Configured  Registered  Unregistered  Deceased  Other
=====
Unknown Ephone type    2           0           0           0         2
6901                   1           0           1           0         0
8945                   1           0           1           0         0
7970                   3           2           1           0         0
8941                   3           1           2           0         0
=====
Total Phones          10           3           5           0         2
=====
```

Related Commands	Command	Description
	show ephone summary brief	Displays the details of all the SCCP phones configured.

show ephone tapiclients

To display status of ephone Telephony Application Programming Interface (TAPI) clients, use the **show ephone tapiclients** command in privileged EXEC mode.

show ephone tapiclients

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Examples

The following is sample output from the **show ephone tapiclients** command:

```
Router# show ephone tapiclients
ephone-4 Mac:0007.0EA6.39F8 TCP socket:[2] activeLine:0 REGISTERED
mediaActive:0 offhook:0 ringing:0 reset:0 reset_sent:0 paging 0 debug:0
IP:192.168.1.18 50291 Telecaster 7960 sub=3 keepalive 728 max_line 20
button 1:dn 6 number 1004 CH1 IDLE CH2 IDLE
button 2:dn 1 number 1000 CH1 IDLE shared
button 3:dn 2 number 1000 CH1 IDLE shared
button 7:dn 3 number 1001 CH1 IDLE CH2 IDLE monitor-ring shared
button 8:dn 4 number 1002 CH1 IDLE CH2 IDLE monitor-ring shared
button 9:dn 5 number 1003 CH1 IDLE CH2 IDLE monitor-ring
button 10:dn 91 number A00 auto dial A01 CH1 IDLE
speed dial 1:2000 PAGE-STAFF
speed dial 2:2001 HUNT-STAFF
paging-dn 90
Username:userB Password:ge30qe
Tapi client information
Username:userB status:REGISTERED Socket :[5]
Tapi Client IP address: 192.168.1.5 Port:2295
```

The **show ephone** command describes significant fields in this output.

Related Commands

	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone telephone-number

To display information for the phone associated with a specified number, use the **show ephone telephone-number** command in privileged EXEC mode.

show ephone telephone-number *number*

Syntax Description

<i>number</i>	Telephone number that is associated with an ephone.
---------------	---

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

Use this command to find the phone on which a particular telephone number appears.

Examples

The following is sample output from the **show ephone telephone-number**:

```
Router# show ephone telephone-number 91400
DP tag: 0, primary
Tag 1, Normal or Intercom dn
    ephone 1, mac-address 000A.0E51.19F0, line 1
```

The **show ephone** command describes significant fields in this output.

Related Commands

Command	Description
show ephone	Displays statistical information about registered Cisco IP phones.

show ephone unregistered

To display information about unregistered phones, use the **show ephone unregistered** command in privileged EXEC mode.

show ephone unregistered

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
	12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines There are two ways that an ephone can become unregistered. The first way is when an ephone is listed in the running configuration but no physical device has been registered for that ephone. The second way is when an unknown device was registered at some time after the last router reboot but has since unregistered.

Examples

The following is sample output from the **show ephone unregistered**:

```
Router# show ephone unregistered
ephone-1 Mac:0007.0E81.10F0 TCP socket:[-1] activeLine:0 UNREGISTERED
mediaActive:0 offhook:0 ringing:0 reset:0 reset_sent:0 paging 0 debug:0
IP:0.0.0.0 0 Unknown 0 keepalive 0 max_line 0
```

The **show ephone** command describes significant fields in this output.

Related Commands	Command	Description
	show ephone	Displays statistical information about registered Cisco IP phones.

show ephone unregistered summary

To display the details of all the unregistered Skinny Call Control Protocol (SCCP) phones sorted by ephone tag, use the **show ephone unregistered summary** command in privileged EXEC mode.

show ephone unregistered summary

Syntax Description This command has no arguments or keywords.

Command Default This command has no default behavior or values.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	15.4(3)M	Cisco SIP CME 10.5	This command was introduced.

Usage Guidelines Use this command to view the details of the unregistered phones configured in the SCCP mode.

Example

The following is a sample output of the **show ephone unregistered summary** command.



Note The * symbol adjacent to the Directory Number (DN) in the command output indicates that the Directory Number (DN) is an Overlay-dn.

```

router# show ephone unregistered summary
=====
PhoneType   Ephone   MacAddress   IPAddress   Ln   Dn   Number   Status
=====
7970         3        001B.54CA.43F7          1   5   3005   Unregistered
                                     2   6   3006   Unregistered
                                     3   2*  3002   Unregistered
                                     3   3*  3003   Unregistered
                                     3   8*  3008   Unregistered
8945         4        D48C.B5C9.D2E6          1   7   3007   Unregistered
                                     2   8   3008   Unregistered
8941         6        1111.2222.3333          1   7   3007   Unregistered
8941        10        1111.2222.3334          1   7   3007   Unregistered
6901        11        11 1111.2222.3332          1   7   3007   Unregistered
=====
Total ephones configured   : 10
Total ephones registered   : 3
Total ephones unregistered: 5
Total ephones deceased     : 0
Ephones in unknown state   : 2

```

Table 13: show ephone unregistered summary field descriptions

Field	Description
DN	Directory number of the phone.
Ephone	Total number of ephone tags configured.
IP Address	IP address of the phones.
LN	Line number of the phone.
MacAddress	Shows the MAC address of the SCCP phone.
Number	Number assigned to ephone.
PhoneType	Shows the type of Cisco IP phone.
Status	Shows the registration status.

Related Commands

Command	Description
show ephone registered summary	Displays the details of all the registered SCCP phones.
show ephone summary types pattern	Displays the total number of registered and unregistered SCCP phones for each phone type.

show ephone-dn

To display status and information for a Cisco IP phone destination number or for extensions (ephone-dns) in a Cisco Unified CallManager Express (Cisco Unified CME) or Cisco Unified Survivable Remote Site Telephony (SRST) environment, use the **show ephone-dn** command in privileged EXEC mode.

show ephone-dn [*dn-tag*]

Syntax Description

<i>dn-tag</i>	(Optional) For Cisco Unified CME, a unique sequence number that is used during configuration to identify a particular extension (ephone-dn). (Optional) For Cisco Unified SRST, a destination number tag. The destination number can be from 1 to 288.
---------------	---

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.1(5)YD	Cisco CME 1.0 Cisco SRST 1.0	This command was introduced.
12.2(8)T	Cisco CME 2.0 Cisco SRST 2.0	This command was integrated into Cisco IOS Release 12.2(8)T command.

Examples

Cisco Unified CME

The following Cisco Unified CME sample output displays status and information for all ephone-dns:

```
Router# show ephone-dn
50/0/1 CH1 DOWN
EFXS 50/0/1 Slot is 50, Sub-unit is 0, Port is 1
Type of VoicePort is EFXS
Operation State is UP
Administrative State is UP
No Interface Down Failure
Description is not set
Noise Regeneration is enabled
Non Linear Processing is enabled
Non Linear Mute is disabled
Non Linear Threshold is -21 dB
Music On Hold Threshold is Set to -38 dBm
In Gain is Set to 0 dB
Out Attenuation is Set to 0 dB
Echo Cancellation is enabled
Echo Cancellation NLP mute is disabled
Echo Cancellation NLP threshold is -21 dB
Echo Cancel Coverage is set to 8 ms
Playout-delay Mode is set to adaptive
Playout-delay Nominal is set to 60 ms
Playout-delay Maximum is set to 200 ms
Playout-delay Minimum mode is set to default, value 40 ms
Playout-delay Fax is set to 300 ms
Connection Mode is normal
```



```

Connection Number is not set
Initial Time Out is set to 10 s
Interdigit Time Out is set to 10 s
Call Disconnect Time Out is set to 60 s
Ringing Time Out is set to 180 s
Wait Release Time Out is set to 30 s
Companding Type is u-law
Region Tone is set for US
Station name None, Station number 91400
Caller ID Info Follows:
Standard BELLCORE
Translation profile (Incoming):
Translation profile (Outgoing):
Digit Duration Timing is set to 100 ms
50/0/2 CH1 IDLE      CH2 IDLE
EFXS 50/0/2 Slot is 50, Sub-unit is 0, Port is 2
Type of VoicePort is EFXS
Operation State is DORMANT
Administrative State is UP
No Interface Down Failure
Description is not set
Noise Regeneration is enabled
Non Linear Processing is enabled
Non Linear Mute is disabled
Non Linear Threshold is -21 dB
Music On Hold Threshold is Set to -38 dBm
In Gain is Set to 0 dB
Out Attenuation is Set to 0 dB
Echo Cancellation is enabled
Echo Cancellation NLP mute is disabled
Echo Cancellation NLP threshold is -21 dB
Echo Cancel Coverage is set to 8 ms
Playout-delay Mode is set to adaptive
Playout-delay Nominal is set to 60 ms
Playout-delay Maximum is set to 200 ms
Playout-delay Minimum mode is set to default, value 40 ms
Playout-delay Fax is set to 300 ms
Connection Mode is normal
Connection Number is not set
Initial Time Out is set to 10 s
Interdigit Time Out is set to 10 s
Call Disconnect Time Out is set to 60 s
Ringing Time Out is set to 180 s
Wait Release Time Out is set to 30 s
Companding Type is u-law
Region Tone is set for US
Station name None, Station number 91450
Caller ID Info Follows:
Standard BELLCORE
Translation profile (Incoming):
Translation profile (Outgoing):
Digit Duration Timing is set to 100 ms

```

Cisco Unified SRST

The following SRST sample output displays status and information for all ephone-dns:

```

Router# show ephone-dn 7
50/0/7 INVALID
EFXS 50/0/7 Slot is 50, Sub-unit is 0, Port is 7
Type of VoicePort is EFXS

```

```

Operation State is UP
Administrative State is UP
No Interface Down Failure
Description is not set
Noise Regeneration is enabled
Non Linear Processing is enabled
Non Linear Mute is disabled
Non Linear Threshold is -21 dB
Music On Hold Threshold is Set to -38 dBm
In Gain is Set to 0 dB
Out Attenuation is Set to 0 dB
Echo Cancellation is enabled
Echo Cancellation NLP mute is disabled
Echo Cancellation NLP threshold is -21 dB
Echo Cancel Coverage is set to 8 ms
Playout-delay Mode is set to default
Playout-delay Nominal is set to 60 ms
Playout-delay Maximum is set to 200 ms
Playout-delay Minimum mode is set to default, value 4 ms
Playout-delay Fax is set to 300 ms
Connection Mode is normal
Connection Number is not set
Initial Time Out is set to 10 s
Interdigit Time Out is set to 10 s
Call Disconnect Time Out is set to 60 s
Ringing Time Out is set to 8 s
Wait Release Time Out is set to 30 s
Companding Type is u-law
Region Tone is set for US
Station name None, Station number None
Caller ID Info Follows:
Standard BELLCORE
Voice card specific Info Follows:
Digit Duration Timing is set to 100 ms

```

The following table describes significant fields in the output from this command.

Table 14: show ephone-dn Field Descriptions

Field	Description
Administrative State	Administrative (configured) state of the voice port.
alert	The number of calls that were disconnected by the far-end device when the local IP phone was in the call alerting state (for example, because the far-end phone rang but was not answered and the far-end system decided to drop the call rather than let the phone ring for too long).
answered (incoming)	The number of incoming calls that were actually answered (the phone goes off hook when ringing).
answered (outgoing)	The number of outgoing call attempts that were answered by the far end.
busy	The number of outgoing call attempts that got a busy response.
Call Disconnect Time Out	Not applicable to the Cisco IP phone.
called, calling	Extension numbers of called and calling parties.
Caller ID Info Follows	Information about the caller ID.

Field	Description
Call Ref	A unique per-call identifier used by the SCCP protocol. The Call Ref values are assigned sequentially within the Cisco CME–SCCP interface, so this value also indicates the total number of SCCP calls since the router was last rebooted.
chan	Channel number of an ephone-dn.
CODEC	Codec type.
Companding Type	Not applicable to the Cisco IP phone.
connect	The number of calls that were disconnected by the far-end device when the local IP phone was in the call connected state.
Connection Mode	Not applicable to the Cisco IP phone.
Connection Number	Not applicable to the Cisco IP phone.
Description	Not applicable to the Cisco IP phone.
Digit Duration Timing	Not applicable to the Cisco IP phone.
DN STATE	Ephone-dn tag number and state of the phone line associated with an extension.
Echo Cancellation...	Not applicable to the Cisco IP phone.
Echo Cancel Coverage	Not applicable to the Cisco IP phone.
EFXS	Voice port type.
Far-end disconnect at...	See connect, alert, hold, and ring.
Final Jitter	The final voice packet receive jitter reported by the IP phone at the end of the call.
hold	The number of calls that were disconnected by the far-end device when the local IP phone was in the call hold state (for example, if the caller was left on hold for too long and got tired of waiting).
incoming	The number of incoming calls presented (the phone rings).
In Gain	Not applicable to the Cisco IP phone.
Initial Time Out	Amount of time the system waits for an initial input digit from the caller.
Interdigit Time Out	Amount of time the system waits for a subsequent input digit from the caller.
Last 64 far-end disconnect cause codes	See the Mappings of PSTN Cause Codes to SIP Event table for a list of public switch telephone network (PSTN) cause codes that can be sent as an ISDN cause information element (IE) and the corresponding Session Interface Protocol (SIP) event.

Field	Description
Latency	The final voice packet receive latency reported by the IP phone at the end of the call.
Lost	Number of lost packets.
Music On Hold Threshold	Not applicable to the Cisco IP phone.
No Interface Down Failure	State of the interface.
Noise Regeneration	Not applicable to the Cisco IP phone.
Non Linear...	Not applicable to the Cisco IP phone.
Operation State	Operational state of the voice port.
Out Attenuation	Not applicable to the Cisco IP phone.
outgoing	The number of outgoing call attempts.
Playout-delay Maximum	Not applicable to the Cisco IP phone.
Playout-delay...	Not applicable to the Cisco IP phone.
Port	Port number for the interface associated with the voice interface card.
Region Tone	Not applicable to the Cisco IP phone.
ring	The number of calls that were disconnected by the far-end device when the local IP phone was in the ringing state (for example, if the call was not answered and the caller hung up).
Ringing Time Out	Duration, in seconds, for which ringing is to continue if a call is not answered. Set with the timeouts ringing command.
Rx Pkts, bytes	Number of packets and bytes received during the current or last call.
Signal Level to phone, peak	For G.711 calls only, this parameter indicates the most recent voice signal level in the voice IP packets sent from the router to the IP phone. This parameter is valid only for VoIP or PSTN G.711 calls to the IP phones. This parameter is not valid for calls between local IP phones, or calls that use codecs other than G.711. The peak field indicates the peak signal level seen during the entire call.
Slot	Slot used in the voice interface card for this port.
Station name	Station name.
Station number	Station number.
Stream Port	RTP port allocated by the given DN/channel.
Sub-unit	Subunit used in the voice interface card for this port.

Field	Description
Tx Pkts, bytes	Number of packets and bytes transmitted during the current call or last call.
Type of VoicePort	Voice port type.
VAD	Voice activity detection.
Voice card specific info	Information specific to the voice card.
VPM STATE	State indication for the VPM software component.
VTSP STATE	State indication for the VTSP software component.
Wait Release Time Out	Time that a voice port stays in the call-failure state while the router sends a busy tone, reorder tone, or out-of-service tone to the port.

The following table lists the PSTN cause codes that can be sent as an ISDN cause information element (IE) and the corresponding SIP event for each. These are the far-end disconnect cause codes listed in the output for the **show ephone-dn statistics** command.

Table 15: Mappings of PSTN Cause Codes to SIP Events

PSTN Cause Code	Description	SIP Event
1	Unallocated number	410 Gone
3	No route to destination	404 Not found
16	Normal call clearing	BYE
17	User busy	486 Busy here
18	No user responding	480 Temporarily unavailable
19	No answer from the user	
21	Call rejected	603 Decline
22	Number changed	302 Moved temporarily
27	Destination out of order	404 Not found
28	Address incomplete	484 Address incomplete
29	Facility rejected	501 Not implemented
31	Normal unspecified	404 Not found

PSTN Cause Code	Description	SIP Event
34	No circuit available	503 Service unavailable
38	Network out of order	
41	Temporary failure	
42	Switching equipment congestion	
44	Requested channel not available	
47	Resource unavailable	
55	Incoming class barred within CUG	603 Decline
57	Bearer capability not authorized	501 Not implemented
58	Bearer capability not presently available	
63	Service or option unavailable	503 Service unavailable
65	Bearer cap not implemented	501 Not implemented
79	Service or option not implemented	
87	User not member of CUG	603 Decline
88	Incompatible destination	400 Bad Request
95	Invalid message	
102	Recover on timer expiry	408 Request timeout
111	Protocol error	400 Bad request
127	Interworking unspecified	500 Internal server error
Any code other than those listed above	500 Internal server error	

Related Commands

Command	Description
show ephone-dn callback	Displays information about pending callbacks in a Cisco Unified CME or a Cisco Unified SRST environment.
show ephone-dn loopback	Displays information about loopback ephone-dns that have been created in a Cisco Unified CME or a Cisco Unified SRST environment.
show ephone-dn statistics	Displays display call statistics for a Cisco IP destination or for extensions (ephone-dns) in a Cisco Unified CME or a Cisco Unified SRST environment.

Command	Description
show ephone-dn summary	Displays brief information about Cisco IP phone destination numbers or for extensions (ephone-dns) in a Cisco Unified CME or a Cisco Unified SRST environment.

show ephone-dn callback

To display information about pending callbacks in a Cisco Unified CallManager Express (Cisco Unified CME) or a Cisco Unified Survivable Remote Site Telephony (Cisco Unified SRST) environment, use the **show ephone-dn callback** command in privileged EXEC mode.

show ephone-dn callback

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Examples

The following sample output shows a callback placed by ephone-dn 1 against ephone-dn 3. Ephone-dn 3 has its channel 1 on hold and has just seized dial tone on its channel 2.

```
Router# show ephone-dn callback
DN 3 (95021) CallBack pending to DN 1 (95021) for ephone-1 age 7 seconds
State for DN 3 is CH1 HOLD      CH2 SIEZE
```

The following sample output shows a callback placed by ephone-dn 1 against ephone-dn 3. Ephone-dn 3 has a call in progress on channel 1.

```
Router# show ephone-dn callback
DN 3 (95021) CallBack pending to DN 1 (95021) for ephone-1 age 8 seconds
State for DN 3 is CH1 CONNECTED
```

Significant fields in the output from this command are described in the following table.

Table 16: show ephone-dn callback Field Descriptions

Field	Description
DN 3 (95021) CallBack pending to DN 1 (95021)	Callback originator is the extension with the dn-tag 1 (in this example), and the callback has been placed on the extension with the dn-tag 3 and the number 95021.
age	Number of seconds since the callback was placed.
State for DN 3 is CH1... CH2...	Call states for channel 1 and channel 2, if any, of the extension that the callback is for.

Related Commands

Command	Description
show ephone-dn	Displays status and information for a Cisco IP phone destination number or for extensions (ephone-dns) in a Cisco Unified CME or a Cisco Unified SRST environment.

show ephone-dn conference

To display information about ad hoc and meet-me conferences in a Cisco Unified CallManager Express (Cisco Unified CME) environment, use the **show ephone-dn conference** command in privileged EXEC mode.

show ephone-dn conference [{ad-hoc [video] | meetme [video] | number *number*}]

Syntax Description

ad-hoc	(Optional) Displays adhoc conferences.
meetme	(Optional) Displays meet-me conferences.
video	(Optional) Displays video conferences.
number <i>number</i>	(Optional) Displays the conference telephone or extension number.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(11)XJ2	Cisco Unified CME 4.1	This command was introduced.
12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
15.0(1)XA	Cisco Unified CME 8.0	This command was modified. The command output was enhanced to display the unlocked Meet-Me conference setting.
15.1(4)M	Cisco CME 8.6	This command was modified to display information on video conferences.

Examples

The following sample output displays information for the 1397 conference number. There are three directory numbers and six inactive parties. The number of unlocked DN tags are displayed at the end of each MeetMe conference.

```
Router# show ephone-dn conference number 1397
type    active inactive numbers
=====
Meetme   0         6      1397
DN tags: 10, 11, 12
Unlocked DN tags: 2/3
Meetme   0         4      2486
DN tags: 13, 14
All DN tags unlocked.
Meetme   0         4      1111
DN tags: 15, 16
Ad-hoc   0         4      7777
DN tags: 20, 21
Router# sh ephone-dn conference ad-hoc video
type    active inactive numbers
=====
Ad-hoc-video   3         3      2000
```

```

DN tags: 20, 21, 22
Router# sh ephone-dn conference meetme video
type      active  inactive  numbers
=====
Meetme-video    0          8        3000
1. DN tags: 25

```

The following table describes the significant fields shown in the display.

Table 17: show ephone-dn conference Field Descriptions

Field	Description
active	Number of active parties in the conference.
DN tags	Directory numbers (DNs) in the conference.
inactive	Number of inactive parties in the conference.
number	Conference telephone or extension number.
type	Type of conference: meet-me or ad hoc.

Related Commands

Command	Description
show ephone-dn	Displays status and information for a Cisco IP phone destination number or for extensions (ephone-dns) in a Cisco Unified CME or a Cisco Unified SRST environment.

show ephone-dn loopback

To display information about loopback ephone-dns that have been created in a Cisco Unified CallManager Express (Cisco Unified CME) or a Cisco Unified Survivable Remote Site Telephony (Cisco Unified SRST) environment, use the **show ephone-dn loopback** command in privileged EXEC mode.

show ephone-dn loopback

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.1(5)YD	Cisco CME 1.0 Cisco SRST 1.0	This command was introduced.
12.2(8)T	Cisco CME 2.0 Cisco SRST 2.0	This command was integrated into Cisco IOS Release 12.2(8)T.

Examples

The following example displays information for a loopback using ephone-dn 21 and ephone-dn 22:

```
Router# show ephone-dn loopback
LOOPBACK DN status (min 21, max 22):
DN 21 51... Loopback to DN 22 CH1 IDLE
CallingDn -1 CalledDn -1 Called Calling G711Ulaw64k
Strip NONE, Forward 2, prefix 10 retry 10 Media 0.0.0.0 0
callID 0 srcCallID 0 ssrc 0 vector 0
DN 22 11... Loopback to DN 21 CH1 IDLE
CallingDn -1 CalledDn -1 Called Calling G711Ulaw64k
Strip NONE, Forward 2, prefix 50 retry 10 Media 0.0.0.0 0
callID 0 srcCallID 0 ssrc 0 vector 0
```

Significant fields in the output from this command are described in the following table.

Table 18: show ephone-dn loopback Field Descriptions

Field	Description
Called, Calling	Called number and calling number when there is a call present.
CalledDn, CallingDn	Ephone-dn tag numbers of the called and calling ephone-dn. Set to -1 if the call is not to or from an ephone-dn, or if there is no active call.
callID	Internal call reference. This usage is the same as in other Cisco IOS voice gateway commands.
DN	Ephone-dn tag (sequence number).
Forward	Number of digits in the original called number to forward to the other ephone-dn in the loopback-dn pair.

Field	Description
G711...	G711Ulaw64k indicates G.711 codec, mu-law, 64000-bit stream. G711alaw64k indicates G.711 codec, A-law, 64000-bit stream.
Loopback to command...	Indicates the opposite ephone-dn in the loopback pair and the status of that ephone-dn.
Media	IP destination address, if any, for any voice packets that are passing through the loopback DN.
min, max	Lowest and highest dn-tag numbers of ephone-dns that are configured as loopback-dns.
prefix	Digit string to add to the beginning of forwarded called numbers.
retry	Number of seconds to wait before retrying the loopback target when is it busy.
srcCallID	Internal call reference for the destination.
ssrc	Real-time transport protocol (RTP) synchronization source (SSRC) of the most recent RTP packet.
Strip	Number of leading digits to strip before forwarding to the other extension in the loopback-dn pair.
vector	<p>The following values describe the media path for voice packets that pass through the loopback-dn:</p> <ul style="list-style-type: none"> • 0—No media path or not a loopback-dn path (inactive). • 1—Normal path. Loopback-dn has identified the final media destination as a local IP phone. The media IP address field shows a valid, non-zero value. • 2—Hairpin. Media packets are routed back through paired loopback-dns. The final destination is not known. For example, this can be a VoIP-to-VoIP call path by a loopback-dn. • 3—Hairpin. The final destination is an ephone-dn in a special mode such as paging. • 4—Loopback-dn chain has been detected, in which two loopback-dn pairs have been connected together. • 5—Loopback-dn chain has been detected in which more than two loopback-dn pairs are connected in series.

Related Commands

Command	Description
loopback-dn	Creates a virtual loopback voice port (loopback-dn) to establish a demarcation point for VoIP voice calls and supplementary services.
show ephone-dn	Displays status and information for a Cisco IP phone destination number or for extensions (ephone-dns) in a Cisco Unified CME or a Cisco Unified SRST environment.

show ephone-dn paging

To display configuration information on paging groups, use the **show ephone-dn paging** command in user EXEC or privileged EXEC mode.

show ephone-dn paging

Syntax Description

This command has no arguments or keywords.

Command Modes

User EXEC (>)

Privileged EXEC (#)

Command History

Release	Modification
15.2(2)T	This command was introduced.

Usage Guidelines

Use the **show ephone-dn paging** command to display which paging dn is specified and which phone is being paged.

Examples

The following is a sample output from the **show ephone-dn paging** command before paging. The output shows two parts: the static “Paging Configuration” part and the dynamic “Paging Control Info” part. The output of the **show ephone-dn paging** command should be exactly the same before and after paging.

```
Router# show ephone-dn paging
Paging Configuration
ephone-dn 250 ( IDLE )
  number 7770
  paging ip 239.1.1.0 port 20480
    ephone-2[1]          paging-dn 250(OFF)
    ephone-7[6]          paging-dn 250(OFF)
  paging group 251,252
    voice reg pool 1      pagingGrp 251(OFF)
    voice reg pool 2      pagingGrp 252(OFF)
ephone-dn 251 ( IDLE )
  number 7771
  paging ip 239.1.1.1 port 20480
    voice reg pool 1      paging-dn 251(OFF)
ephone-dn 252 ( IDLE )
  number 7772
  paging ip 239.1.1.2 port 20480
    voice reg pool 2      paging-dn 252(OFF)
ephone-dn 253 ( IDLE )
  number 7773
  paging ip 239.1.1.3 port 20480
    ephone-8[7]          paging-dn 253(OFF)
Paging Control Info
skinnyPC[0] ephone-paging-dn 250      ( IDLE ) count 0
skinnyPC[1] ephone-paging-dn 251      ( IDLE ) count 0
skinnyPC[2] ephone-paging-dn 252      ( IDLE ) count 0
skinnyPC[4] ephone-paging-dn 253      ( IDLE ) count 0
```

The following is a sample output from the **show ephone-dn paging** command during paging. In this output, the “Paging Configuration” part remains the same expect for the changes in state from IDLE to ACTIVE and OFF to ON. However, the “Paging Control Info” part displays the changes in the paging control information.

```
Router# show ephone-dn paging
      Paging Configuration
ephone-dn 250 (ACTIVE)
  number 7770
  paging ip 239.1.1.0 port 20480
    ephone-2[1]          paging-dn 250(ON )
    ephone-7[6]          paging-dn 250(OFF)
  paging group 251,252
    voice reg pool 1      pagingGrp 251(ON )
    voice reg pool 2      pagingGrp 252(ON )
ephone-dn 251 ( IDLE )
  number 7771
  paging ip 239.1.1.1 port 20480
    voice reg pool 1      paging-dn 251(ON )
ephone-dn 252 ( IDLE )
  number 7772
  paging ip 239.1.1.2 port 20480
    voice reg pool 2      paging-dn 252(ON )
ephone-dn 253 ( IDLE )
  number 7773
  paging ip 239.1.1.3 port 20480
    ephone-8[7]          paging-dn 253(OFF)
      Paging Control Info
skinnyPC[0] ephone-paging-dn 250          (ACTIVE) count 1
  phone          ip address          port
ephone#[phone]  2[1]                239.1.1.0    20480
sccp(ephone#[phone]): 2[1](mcast)
  group 251      (ephone#[phone]): None
  group 252      (ephone#[phone]): None
sip (pool[peer tag]): None
  group 251      (pool[peer tag]): 1[40001](mcast)
  group 252      (pool[peer tag]): 2[40003](mcast)
skinnyPC[1] ephone-paging-dn 251          ( IDLE ) count 0
skinnyPC[2] ephone-paging-dn 252          ( IDLE ) count 0
skinnyPC[4] ephone-paging-dn 253          ( IDLE ) count 0
```

The following is another sample output from the **show ephone-dn paging** command during paging:

```
Paging Configuration
ephone-dn 250 ( IDLE )
  number 7770
  paging ip 239.1.1.0 port 20480
  paging group 251
    ephone-2[1]          pagingGrp 251(ON )
    voice reg pool 3      pagingGrp 251(ON )
ephone-dn 251 (ACTIVE)
  number 7771
  paging ip 239.1.1.1 port 20480
    ephone-2[1]          paging-dn 251(ON )
    voice reg pool 3      paging-dn 251(ON )
      Paging Control Info
skinnyPC[0] ephone-paging-dn 250          ( IDLE ) count 0
skinnyPC[1] ephone-paging-dn 251          (ACTIVE) count 1
  phone          ip address          port
ephone#[phone]  2[1]                239.1.1.1    20480
sccp(ephone#[phone]): 2[1](m)
sip (pool[peer tag]): 3[40007](m)
```

The following table describes the significant fields shown in the display.

Table 19: show ephone-dn paging Field Descriptions

Field	Description
phone	Indicates the ephone-dn and the paging-dn tag.
ip address	Indicates the IP multicast address to multicast voice packets for audio paging.
port	Indicates the UDP port for multicast paging. Range is from 2000 to 65535. Note The correct paging port for the paging-dn of Cisco Unified SIP IP phones is an even number from 20480 to 32768 only.

Related Commands

Command	Description
paging-dn	Creates a paging extension (paging-dn) to receive audio pages on a Cisco Unified IP phone in a Cisco Unified CME system.
paging-dn (voice register)	Registers a Cisco Unified SIP IP phone to an ephone-dn paging directory number.
paging group	Creates a combined paging group from two or more previously established paging sets.

show ephone-dn park

To display information about call-park slots in the system, use the **show ephone-dn park** command in privileged EXEC mode.

show ephone-dn park

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Release	Modification
	12.3(7)T	This command was introduced.

Examples

The following example shows information for a single call-park slot that uses an ephone-dn identifier of 50 and an extension number of 1560.

```
Router
#
 show ephone-dn park
DN 50 (1560) park-slot state IDLE
Notify to ( ) timeout 15 limit 20
```

The following table describes the significant fields shown in the display.

Table 20: show ephone-dn park Field Descriptions

Field	Description
DN	Ephone-dn tag (identifier) number for the call-park slot.
(1560)	Extension number associated with the call-park slot.
park-slot state	Whether the call-park slot is in use or idle.
Notify to ()	Extension that has been specified for notification. Empty parentheses indicate that no extension was specified in the configuration.
timeout	Number of seconds between reminder rings, in seconds.
limit	Number of reminder rings before a call parked at this slot is disconnected.

Related Commands

Command	Description
park-slot	Creates a floating extension (ephone-dn) at which calls can be temporarily held (parked).

show ephone-dn statistics

To display call statistics for a Cisco IP destination or for extensions (ephone-dns) in a Cisco Unified CallManager Express (Cisco Unified CME) or a Cisco Unified Survivable Remote Site Telephony (Cisco Unified SRST) environment, use the **show ephone-dn** command in privileged EXEC mode.

show ephone-dn [*dn-tag*] **statistics**

Syntax Description	<i>dn-tag</i>	(Optional) Unique sequence number that is used during configuration to identify a particular extension (ephone-dn).
	statistics	Displays voice quality statistics on calls for a specified extension or for all extensions.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.2(15)ZJ1	Cisco CME 3.0 Cisco SRST 3.0	This command was introduced.
	12.3(4)T	Cisco CME 3.0 Cisco SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Examples

The following sample output displays statistics for all extensions (ephone-dns) in a Cisco Unified CME system. There are two ephone-dns (DN1 and DN3) in this example.

```
Router# show ephone-dn statistics
Total Calls 103
Stats may appear to be inconsistent for conference or shared line cases
DN 1 chan 1 incoming 36 answered 21 outgoing 60 answered 30 busy 6
Far-end disconnect at:connect 29 alert 18 hold 7 ring 15
Last 64 far-end disconnect cause codes
17 17 17 17 17 17 16 16 16 16 16 16 16 16 16 16
16 16 16 16 65 16 65 65 65 65 16 65 65 65 16 16
16 16 16 16 16 16 16 16 16 16 16 16 16 65 47 65
47 47 16 16 16 16 16 16 16 16 16 16 16 16 16 16
local phone on-hook
DN 1 chan 1 (95011) voice quality statistics for last call
Call Ref 103 called 91500 calling 95011
Total Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Final Jitter 30 Latency 0 Lost 0
Signal Level to phone 0 (-78 dB) peak 0 (-78 dB)
Packets counted by router 0
DN 1 chan 2 incoming 0 answered 0 outgoing 1 answered 0 busy 0
Far-end disconnect at:connect 0 alert 0 hold 0 ring 0
Last 64 far-end disconnect cause codes
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
local phone on-hook
DN 1 chan 2 (95011) voice quality statistics for last call
Call Ref 86 called calling
Total Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Final Jitter 0 Latency 0 Lost 0
```

```

Signal Level to phone 0 (-78 dB) peak 0 (-78 dB)
Packets counted by router 0
DN 3 chan 1 incoming 0 answered 0 outgoing 1 answered 1 busy 0
Far-end disconnect at:connect 0 alert 0 hold 0 ring 0
Last 64 far-end disconnect cause codes
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DN 3 chan 1 (95021) voice quality statistics for current call
Call Ref 102 called 94011 calling 95021
Current Tx Pkts 241 bytes 3133 Rx Pkts 3304 bytes 515023 Lost 0
Jitter 30 Latency 0
Worst Jitter 30 Worst Latency 0
Signal Level to phone 201 (-39 dB) peak 5628 (-12 dB)
Packets counted by router 3305

```

The following sample output displays voice quality statistics for the ephone-dn with dn-tag 2:

```

Router# show ephone-dn 2 statistics
DN 2 chan 1 incoming 0 answered 0 outgoing 2 answered 0 busy 0
Far-end disconnect at: connect 0 alert 0 hold 0 ring 0
Last 64 far-end disconnect cause codes
28 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
local phone on-hook
DN 2 chan 1 (91450) voice quality statistics for last call
Call Ref 2 called calling
Total Tx Pkts 0 bytes 0 Rx Pkts 0 bytes 0 Lost 0
Final Jitter 0 Latency 0 Lost 0
Signal Level to phone 0 (-78 dB) peak 0 (-78 dB)
Packets counted by router 0

```

The **show ephone-dn** command describes significant fields in the output from this command.

Related Commands

Command	Description
show ephone-dn	Displays status and information for a Cisco IP phone destination number or for extensions (ephone-dns) in a Cisco Unified CME or a Cisco Unified SRST environment.

show ephone-dn summary

To display brief information about Cisco IP phone destination numbers or for extensions (ephone-dns) in a Cisco Unified CallManager Express (Cisco Unified CME) or a Cisco Unified Survivable Remote Site Telephony (Cisco Unified SRST) environment, use the **show ephone-dn summary** command in privileged EXEC mode.

show ephone-dn summary

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.1(5)YD	Cisco CME 1.0 Cisco SRST 1.0	This command was introduced.
12.2(8)T	Cisco CME 2.0 Cisco SRST 2.0	This command was integrated into Cisco IOS Release 12.2(8)T.

Examples

The following is example output from the **show ephone-dn summary**:

```
Router# show ephone-dn summary
PORT      DN STATE    CODEC    VAD  VTSP STATE    VPM STATE
-----
50/0/1    DOWN        -        -   -             EFXS_ONHOOK
50/0/2    DOWN        -        -   -             EFXS_ONHOOK
50/0/3    DOWN        -        -   -             EFXS_ONHOOK
50/0/4    INVALID     -        -   -             EFXS_INIT
50/0/5    INVALID     -        -   -             EFXS_INIT
50/0/6    INVALID     -        -   -             EFXS_INIT
```

The following table describes significant fields in the output from this command.

Table 21: show ephone-dn summary Field Descriptions

Field	Description
CODEC	Type of codec.
DN STATE	Status of the ephone-dn.
EFXS	Voice port type.
PORT	Port number (virtual) for this interface. The number that follows the last slash in the port number is the ephone-dn tag. For example, if the port number is 50/0/1, the dn-tag is 1.
VAD	Voice activity detection status.

Field	Description
VPM STATE	State indication for the voice port module (VPM) software component.
VTSP STATE	State indication for the voice telephony service provider (VTSP) software component.

Related Commands

Command	Description
show ephone-dn	Displays status and information for a Cisco IP phone destination number or for extensions (ephone-dns) in a Cisco Unified CME or a Cisco Unified SRST environment.

show ephone-dn whisper

To display information about whisper intercom ephone-dns that have been created in Cisco Unified CME, use the **show ephone-dn whisper** command in privileged EXEC mode.

show ephone-dn whisper

Syntax Description This command has no arguments or keywords.

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(22)YB	Cisco Unified CME 7.1	This command was introduced.
	12.4(24)T	Cisco Unified CME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.

Examples

The following is sample output from the **show ephone-dn whisper** command showing an active whisper intercom call between extension 6001 and 6002:

Router# **show ephone-dn whisper**

DN	DN NUMBER	LABEL	SPEED DIAL	DN STATE	PHONE
==	=====	=====	=====	=====	=====
101	8881	wi_8881	-	IDLE	35 w36
102	8882	-	-	IDLE	36
103	8883	wi_8883	-	IDLE	m35 38
104	8884	wi_8884	-	IDLE	38
105	8885	wi_8885_sd_8888882	-	IDLE	
106	8886	wi_8886_sd_8888883	-	IDLE	36
107	8887	-	8888	IDLE	35
108	8888	Mary_sd_Peter	8887	IDLE	36
109	8889	-	-	IDLE	
110	8890	wi_8890	-	IDLE	
111	4441	4441_wi_sd_4444442	-	IDLE	
112	4442	wi_4442	-	IDLE	
113	4443	-	-	IDLE	
114	4444	4444_sd-8882	8882	IDLE	
141	5551	-	-	IDLE	
142	5552	-	-	IDLE	
143	5553	-	-	IDLE	
144	5554	-	-	IDLE	
145	5555	-	-	IDLE	
161	6001	-	6002	WHISPER	1
162	6002	-	6001	WHISPER	2
163	6003	-	6001	IDLE	
164	6004	-	6002	IDLE	
166	6006	-	6003	IDLE	
167	6007	-	6003	IDLE	
168	6008	-	6002	IDLE	
169	6009	-	6006	IDLE	

The following table describes the significant fields in the output from this command in alphabetical order.

Table 22: show ephone-dn whisper Field Descriptions

Field	Description
DN	Directory number tag.
DN Number	Extension or telephone number assigned to directory number.
Label	Text string that identifies the whisper intercom line.
Speed Dial	Whisper intercom number to speed dial.
DN State	State of the directory number, either Idle or Busy.
Phone	Ephone that the directory number is assigned to.

Related Commands

Command	Description
debug ephone whisper-intercom	Displays debugging messages for the Whisper Intercom feature.
show ephone-dn	Displays status and configuration information for phone extensions (ephone-dns) in Cisco Unified CME.
whisper-intercom	Enables the Whisper Intercom feature on a directory number.

show ephone-hunt

To display ephone-hunt configuration information and current status and statistics information, use the **show ephone-hunt** command in privileged EXEC mode.

show ephone-hunt [{*tag* | *summary*}]

Syntax Description

<i>tag</i>	(Optional) Hunt-group number that was used to identify a hunt group in the ephone-hunt command. Range is 1 to 100.
summary	(Optional) Displays hunt group configuration information.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco CME 3.0	This command was introduced.
12.3(4)T	Cisco CME 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

The **show ephone-hunt** and **show ephone-hunt summary** commands display information for peer, sequential, and last-idle ephone hunt groups. Using the *tag* argument outputs data for a specific ephone hunt group.

The output is dependent on call activity. If there is no activity, no data is displayed.

Examples

The following examples are contained in this section:

Verbose Output

The following is a sample output from the **show ephone-hunt** command when no argument or keyword has been entered. The sample contains information for a peer hunt group, a sequential hunt group, and a longest-idle hunt group. See the table for descriptions of significant fields in the output.

```
Router# show ephone-hunt
Group 1
  type: peer
  pilot number: 450, peer-tag 20123
  list of numbers:
    451, aux-number A450A0900, # peers 5, logout 0, down 1
      peer-tag  dn-tag  rna  login/logout  up/down
      [20122    42     0    login         up   ]
      [20121    41     0    login         up   ]
      [20120    40     0    login         up   ]
      [20119    30     0    login         up   ]
      [20118    29     0    login         down ]
    452, aux-number A450A0901, # peers 4, logout 0, down 0
      peer-tag  dn-tag  rna  login/logout  up/down
      [20127    45     0    login         up   ]
      [20126    44     0    login         up   ]
      [20125    43     0    login         up   ]
      [20124    31     0    login         up   ]
```



```

    453, aux-number A450A0902, # peers 4, logout 0, down 0
      peer-tag dn-tag rna login/logout up/down
      [20131    48    0    login    up  ]
      [20130    47    0    login    up  ]
      [20129    46    0    login    up  ]
      [20128    32    0    login    up  ]
    477, aux-number A450A0903, # peers 1, logout 0, down 0
      peer-tag dn-tag rna login/logout up/down
      [20132    499    0    login    up  ]
  preference: 0
  members initial state: logout
  preference (sec): 7
  timeout: 3, 3, 3, 3
  max timeout : 10
  hops: 4
  next-to-pick: 1
  E.164 register: yes
  auto logout: no
  stat collect: no
Group 2
  type: sequential
  pilot number: 601, peer-tag 20098
  list of numbers:
    123, aux-number A601A0200, # peers 1, logout 0, down 0
      peer-tag dn-tag rna login/logout up/down
      [20097    56    0    login    up  ]
    622, aux-number A601A0201, # peers 3, logout 0, down 0
      peer-tag dn-tag rna login/logout up/down
      [20101    112    0    login    up  ]
      [20100    111    0    login    up  ]
      [20099    110    0    login    up  ]
    623, aux-number A601A0202, # peers 3, logout 0, down 0
      peer-tag dn-tag rna login/logout up/down
      [20104    122    0    login    up  ]
      [20103    121    0    login    up  ]
      [20102    120    0    login    up  ]
    *, aux-number A601A0203, # peers 1, logout 0, down 1
      peer-tag dn-tag rna login/logout up/down
      [20105      0      0      -    down]
    *, aux-number A601A0204, # peers 1, logout 0, down 1
      peer-tag dn-tag rna login/logout up/down
      [20106      0      0      -    down]
  final number: 5255348
  preference: 0
  members initial state: logout
  preference (sec): 9
  timeout: 5, 5, 5, 5, 5
  max timeout : 40
  fwd-final: orig-phone
  E.164 register: yes
  auto logout: no
  stat collect: no
Group 3
  type: longest-idle
  pilot number: 100, peer-tag 20142
  list of numbers:
    101, aux-number A100A9700, # peers 3, logout 0, down 3
      on-hook time stamp 7616, off-hook agents=0
      peer-tag dn-tag rna login/logout up/down
      [20141    132    0    login    down]
      [20140    131    0    login    down]
      [20139    130    0    login    down]
    *, aux-number A100A9701, # peers 1, logout 0, down 1
      on-hook time stamp 7616, off-hook agents=0

```

```

        peer-tag dn-tag rna login/logout up/down
        [20143    0    0    -          down]
102, aux-number A100A9702, # peers 2, logout 0, down 2
on-hook time stamp 7616, off-hook agents=0
        peer-tag dn-tag rna login/logout up/down
        [20145    142   0    login    down]
        [20144    141   0    login    down]
all agents down!
preference: 0
members initial state: logout
preference (sec): 7
timeout: 100, 100, 100
hops: 0
E.164 register: yes
auto logout: no
stat collect: no

```

Summary Output

The following example shows a summary output. See the table for descriptions of significant fields in the output.

```

Router# show ephone-hunt summary
Group 1
  type: peer
  pilot number: 5000
  list of numbers:
    5001
    5002
    5003
    5004
    5005
  final number: 5006
  preference: 0
  members initial state: logout
  timeout: 180
  hops: 2
  E.164 register: yes
Group 2
  type: sequential
  pilot number: 6000
  list of numbers:
    5005
    5004
    5003
    5002
    5001
  final number: 5007
  preference: 5
  members initial state: logout
  timeout: 3
  E.164 register: no

```

Agent Status Control Conditions

A portion of the **show ephone-hunt** command output displays the ready and not-ready agent status of extensions in hunt groups. An extension that is ready is available to receive hunt-group calls. An

extension that is in not-ready status blocks hunt-group calls. An agent toggles an extension from ready to not ready and back to ready using the HLog soft key or a FAC.

The following examples display some output that reports different agent status not-ready conditions within a hunt group. In the hunt group used for these examples, there are four users: agent1 and agent4 share extension 8001, agent2 is on extension 8002, and agent3 is on extension 8003.

In the **show ephone-hunt** output, “logout 0” means that all instances of the extension are in ready status. Any number greater than zero next to “logout” indicates that at least one ephone using the extension has activated not-ready status.

If agent1 is in not-ready status, the **show ephone-hunt** command will display the following output. The logout value for extension 8001 is 1 because one phone is in not-ready status.

```
Router# show ephone-hunt
.
.
.
list of numbers:
 8001, aux-number A8000A100, # peers 2, logout 1 ...
 8002, aux-number A8000A101, # peers 1, logout 0...
 8003, aux-number A8000A102, # peers 1, logout 0...
.
```

If agent1 and agent2 place their phones in not-ready status, the **show ephone-hunt** command will display the following output:

```
Router# show ephone-hunt
.
.
.
list of numbers:
 8001, aux-number A8000A100, # peers 2, logout 1...
 8002, aux-number A8000A101, # peers 1, logout 1...
 8003, aux-number A8000A102, # peers 1, logout 0...
```

If all agents place their phones in not-ready status, the **show ephone-hunt** command displays the following output. Note that the logout value of 2 for extension 8001 indicates that both ephone-dns with that extension number (agent1 and agent4) are in not-ready status.

```
Router# show ephone-hunt
.
.
.
list of numbers:
 8001, aux-number A8000A100, # peers 2, logout 2...
 8002, aux-number A8000A101, # peers 1, logout 1...
 8003, aux-number A8000A102, # peers 1, logout 1...
all agents logout!
```

Automatic Agent Status Not-Ready Parameters

The **show ephone-hunt** command displays the parameters that have been set using the **auto logout** command, which is used for the Automatic Agent Status Not-Ready feature. The table shows the possible values of the auto logout field. describes other fields in the output.

```
Router# show ephone-hunt 1
```

```

Group 1
  type:sequential
  pilot number:8888, peer-tag 20029
  list of numbers:
    8001, aux-number A8888A000, # peers 1, logout 0, down 0
      peer-tag:dn-tag [ 20028:1]
    8003, aux-number A8888A001, # peers 1, logout 0, down 0
      peer-tag:dn-tag [ 20030:3]
  preference:0
  members initial state: logout
  preference (sec):9
  timeout:5
  E.164 register:yes
  auto logout:no
  stat collect:yes

```

Table 23: show ephone-hunt Auto Logout Examples

show ephone-hunt Output	Description	auto logout Command
auto logout: no	The Automatic Agent Status Not-Ready feature is disabled. This is also the default if this command is not used.	no auto logout
auto logout: 1 type: both	The Automatic Agent Status Not-Ready feature is enabled and no options have been used with the auto logout command. The number of unanswered calls is 1 and the command applies to both static and dynamic hunt group members by default.	auto logout
auto logout: 2 type: both	Two unanswered calls will be sent to a hunt group agent before the agent's status is automatically changed to not ready. The command applies to both static and dynamic hunt group members by default.	auto logout 2
auto logout: 3 type: static	Three unanswered calls will be sent to a hunt group agent before the agent's status is automatically changed to not ready. The command applies to static hunt group members only.	auto logout 3 static

The table describes significant fields shown in **show ephone-hunt** command displays.

Table 24: show ephone-hunt Field Descriptions

Field	Description
auto logout	Indicates whether the Automatic Agent Status Not-Ready feature has been enabled. See the table.
aux-number	Auxiliary number used to generate dial peers for a hunt group. This number is generated by the list command.
description	Description string entered for the ephone hunt group. This value is set using the description (ephone-hunt) command.
dn-tag	Directory number (DN) sequence number.
E.164 register	Displays whether a pilot number registers with an H.323 gatekeeper. This value is set by the no-reg command.

Field	Description
final number	Last number in the ephone-hunt group, after which a call is no longer redirected. This value is set by the final command.
fwd-final	Final destination of an unanswered call that has been transferred into a hunt group: orig-phone means calls are returned to the transferring phone, and final means calls are sent to the final number specified in the configuration. This value is set by the fwd-final command.
hops	Number of hops before a call proceeds to the final number. This value is set by the hops command.
list of numbers	Extension numbers that are group members of the specified ephone hunt group. This value is set by the list command.
login/logout	Ready status of the agent: login means ready and accepting calls, and logout means not-ready and blocking hunt-group calls.
logout	Number of agents in the not-ready state (not accepting hunt-group calls).
max timeout	Maximum combined timeout for the no-answer periods for all ephone-dns in the ephone-hunt list. This value is set by the max-timeout command.
members initial state: logout/login	Sets all static members initial state to logout.
next-to-pick	(Peer hunt groups only) List number of the agent whose phone will ring when the next call comes in to the hunt group. (For example, if the order of agents in the list command is 451, 452, 453, 454, the list number 2 represents extension 452.)
off-hook agents	Number of agents who are currently off-hook.
on-hook time stamp	(Longest-idle hunt groups only) The last on-hook time of the agent, which is used to determine which agent to ring next time.
peers	Displays the number of ephone-dn dial peers.
peer-tag	Dial-peer sequence number.
pilot number	Number that callers dial to reach the ephone hunt group.
preference	Preference order set by the preference (ephone-hunt) command for the primary pilot number.
preference (sec)	Preference order set by the preference (ephone-hunt) command for the secondary pilot number.
rna	Number of unanswered hunt group calls (ring-no-answer) by this agent, used for the Automatic Agent Status Not-Ready feature.
stat collect	Indicates whether statistic are being Cisco Unified CME B-ACD data is being collected. See the statistics collect command.

Field	Description
timeout	Number of seconds after which a call that is not answered at one number is redirected to the next number in the hunt-group list. Multiple values in this field refer to the timeouts for the hops between ephone-dns in a hunt group as they appear in the list command. This value is set by the timeout command.
type	Type of ephone hunt group: longest-idle, peer, or sequential.
up/down	Dial peer is up or down.

Related Commands

Command	Description
auto logout	Enables automatic change of agent status to not-ready after a specified number of hunt-group calls are not answered.
ephone-hunt	Enters ephone-hunt configuration mode to create a hunt group for use in a Cisco Unified CME system.
hunt-group logout	Enables separate handling of DND and HLog functionality for hunt-group agents and the display of an HLog soft key on phones.
members logout	Sets all static members initial state to logout.
show ephone-hunt statistics	Displays hunt group call statistics.

show ephone-hunt statistics

To display ephone-hunt statistics information, use the **show ephone-hunt statistics** command in privileged EXEC mode.

show ephone-hunt tag statistics {last hours hours | start day time [to day time]}

Syntax Description

<i>tag</i>	Hunt-tag number that was used to identify a hunt group in an ephone-hunt command. Range is 1 to 100.
last	Displays information for the previous number of specified hours, counting backward from the current hour. Range is 1 to 167.
<i>hours hours</i>	Number of hours for which to display call statistics.
start	Defines the start of a period for which to display call statistics. Default duration is one hour.
<i>day</i>	Day of week. Use sun , mon , tue , wed , thu , fri , or sat .
<i>time</i>	Hour of day. Range is 0 to 23.
to	(Optional) Defines the stop time for display of call statistics.

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.3(11)T	Cisco CME 3.2	This command was introduced.
12.4(4)XC	Cisco Unified CME 4.0	Call hold statistics were added.
12.4(9)T	Cisco Unified CME 4.0	Call hold statistics were integrated into Cisco IOS Release 12.4(9)T.
15.2(2)T	Cisco Unified CME 9.0	This command was modified to add the following fields: Calls handoff to IOS, Average time to handoff, Longest time to handoff, and Number of error calls.

Usage Guidelines

The **show ephone-hunt statistics last** and **show ephone-hunt statistics** commands provide expanded information regarding extension (list of numbers) and pilot numbers.

The output is dependent on call activity. If there is no activity, no data is displayed.

If your Cisco Unified CME system is configured with the basic automatic call distribution (B-ACD) and auto-attendant service, you can enable the collection of call statistics per ephone hunt group with the **statistics collect** command. Additional data is displayed for all agents combined and for individual agents. The additional data includes statistics such as: the number of calls received, the amount of time the calls waited to be answered, and the amount of time the calls spent on hold or in a queue.

The **statistics collect** command can be used to obtain other call statistics, such as direct calls to hunt group pilot numbers. For more information, see the “[Cisco Unified CME Basic Automatic Call Distribution and Auto-Attendant Service](#)” chapter in the *Cisco Unified CME B-ACD and TCL Call-Handling Applications* guide.

Once you have enabled statistics collection, you can use the **show ephone-hunt statistics** command to display call statistics, or you can use the **hunt-group report every hours** and **hunt-group report url** commands to transfer the statistics to files using TFTP.



Note On the day that daylight saving time adjusts the time back by one hour at 2 a.m. each year, the original 1 a.m. to 2 a.m. statistics for that day are lost because they are overwritten by the new 1 a.m. to 2 a.m. statistics.

Examples

The following is a sample output that displays call statistics for the past hour for hunt group 2, which is associated with a Cisco Unified CME B-ACD service:

```
Router# show ephone-hunt 2 stat last 1 h
Thu 02:00 - 03:00
  Max Agents: 3
  Min Agents: 3
  Total Calls: 9
  Answered Calls: 7
  Abandoned Calls: 2
  Average Time to Answer (secs): 6
  Longest Time to Answer (secs): 13
  Average Time in Call (secs): 75
  Longest Time in Call (secs): 161
  Average Time before Abandon (secs): 8
  Calls on Hold: 2
  Average Time in Hold (secs): 16
  Longest Time in Hold (secs): 21
  Per agent statistics:
    Agent: 8004
      From Direct Call:
        Total Calls Answered : 3:
        Average Time in Call (secs) : 70
        Longest Time in Call (secs) : 150
        Total Calls on Hold : 1:
        Average Hold Time (secs) : 21
        Longest Hold Time (secs) : 21
      From Queue:
        Total Calls Answered : 3
        Average Time in Call (secs) : 55
        Longest Time in Call (secs) : 78
        Total Calls on Hold : 2:
        Average Hold Time (secs) : 19
        Longest Hold Time (secs) : 26
    Agent: 8006
      From Direct Call:
        Total Calls Answered : 3:
        Average Time in Call (secs) : 51
        Longest Time in Call (secs) : 118
        Total Calls on Hold : 1:
        Average Hold Time (secs) : 11
        Longest Hold Time (secs) : 11
      From Queue:
        Total Calls Answered : 1
        Average Time in Call (secs) : 4
```



```

        Longest Time in Call (secs) : 4
Agent: 8044
  From Direct Call:
    Total Calls Answered : 1:
    Average Time in Call (secs) : 161
    Longest Time in Call (secs) : 161
  From Queue:
    Total Calls Answered : 1
    Average Time in Call (secs) : 658
    Longest Time in Call (secs) : 658
Queue related statistics:
  Total calls presented to the queue: 5
  Calls handoff to IOS: 2
  Number of calls in the queue: 1
  Average time to handoff (secs): 2
  Longest time to handoff (secs): 3
  Number of abandoned calls: 0
  Average time before abandon (secs): 0
  Calls forwarded to voice mail: 0
  Calls answered by voice mail: 0
Number of error calls: 0

```

The following is a sample output from the **show ephone-hunt statistics** command. The output focuses on queue-related statistics.

```

Queue related statistics:
  Total calls presented to the queue: 8
  Calls handoff to IOS: 3
Number of calls in the queue: 1
  Average time to handoff (secs): 10
  Longest time to handoff (secs): 15
Number of abandoned calls: 4
  Average time before abandon (secs): 7
  Calls forwarded to voice mail: 0
  Calls answered by voice mail: 0
Number of error calls: 0

```

The table describes the significant fields shown in the output of the **show ephone-hunt statistics** command, in alphabetical order.

Table 25: show ephone-hunt statistics Field Descriptions

Field	Description
Abandoned calls	Total number of calls abandoned by hunt group agents. This does not include calls going to the final number.
Answered call	Total number of calls answered by hunt group agents.
Average time before abandon (secs)	Average length of time that unanswered calls waited before hanging up.
Average hold time (secs)	Average length of time that calls waited on hold for this agent.
Average time in call (secs)	Average length of time that unanswered calls waited before going to an agent.
Average time in hold (secs)	Average length of time that calls were kept on hold for all agents.

Field	Description
Average time to answer (secs)	Average length of time that all calls to Cisco Unified CME B-ACD waited before being answered.
Average time to handoff (secs)	Average length of time before a call was handed off to IOS.
Calls answered by voice mail	Total number of calls to Cisco Unified CME B-ACD that were answered by voice mail.
Calls exited the queue	Total number of calls to Cisco Unified CME B-ACD that exited queues.
Calls forwarded to voice mail	Total number of calls to Cisco Unified CME B-ACD that were forwarded to voice mail.
Calls handoff to IOS	Total number of calls handed off to IOS.
Calls on hold	Total number of calls that were placed on hold.
Longest hold time (secs)	Longest length of time that a call to this agent spent between being placed on hold and being picked up.
Longest time in call (secs)	Longest length of time in which calls to Cisco Unified CME B-ACD went to an agent and waited in a call queue.
Longest time in hold (secs)	Longest length of time that a call spent between being placed on hold and being picked up by agents.
Longest time to answer (secs)	Longest length of time before calls to Cisco Unified CME B-ACD were answered.
Longest time to handoff (secs)	Longest length of time before a call was handed off to IOS.
Max agent	Maximum number of hunt group agents.
Min agent	Minimum number of hunt group agents.
Number of abandoned calls:	Total number of calls to Cisco Unified CME B-ACD that hung up before being answered.
Number of error calls	Total number of misdialed calls.
Total calls answered	Total number of calls to Cisco Unified CME B-ACD that were answered by an agent.
Total calls on hold	Total number of calls that were on hold for this agent.
Total calls presented to the queue	Total number of calls made to Cisco Unified CME B-ACD.
Total calls	Total number of direct calls made to the hunt group.



Note From Cisco Unified CME Release 10.5 onwards, abandoned calls will not include the calls going to the final number. However, the total calls includes calls going to the final number. Use the formula "**Final Calls= Total Calls - Answered Calls - Abandoned Calls**", to calculate the calls going to the final number.

Related Commands

Command	Description
ephone-hunt	Enters ephone-hunt configuration mode to create a hunt group for use in a Cisco Unified CME system.
hunt-group report every hours	Sets the hourly interval at which Cisco Unified CME B-ACD call statistics are automatically transferred to a file.
hunt-group report url	Sets filename parameters and the URL path where Cisco Unified CME B-ACD call statistics are to be sent using TFTP.
statistics collect	Enables the collection of call statistics for an ephone hunt group.

show fb-its-log

To display information about the Cisco CallManager Express (Cisco CME) eXtensible Markup Language (XML) application program interface (API) configuration, statistics on XML API queries, and the XML API event logs, use the **show fb-its-log** command in privileged EXEC mode.

show fb-its-log [**summary**]

Syntax Description

summary	(Optional) Displays only the XML API configuration and the statistics for queries and logs, and not the logs themselves.
----------------	--

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco CME Version	Modification
12.2(15)ZJ	3.0	This command was introduced.
12.3(4)T	3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Examples

The following is sample output from the **show fb-its-log** summary command:

```
Router# show fb-its-log summary
IP Keyswitch Logs:(21:11:30 UTC Wed Jul 1 2003)
  ---- Current Period ----
    extension events:4
    device events: 3
    overwrites:0
    missed:0
    deleted:0
  ---- History -----
    overwrites:0
    missed:0
    deleted:8
  ---- Threads ----
    max xml threads:2
    current thread:0
    read in process:FALSE
```

The following is sample output from the **show fb-its-log** command:

```
Router# show fb-its-log
IP Keyswitch Logs:(21:11:30 UTC Wed Jul 1 2003)
  ---- Current Period ----
    extension events:4
    device events: 3
    overwrites:0
    missed:0
    deleted:0
  ---- History -----
    overwrites:0
    missed:0
    deleted:8
  ---- Threads ----
    max xml threads:2
```

```

    current thread:0
    read in process:FALSE
1  Time:21:11:06 UTC Wed Jul 1 2003
    Event:DN 1[2001] goes down
2  Time:21:11:06 UTC Wed Jul 1 2003
    Event:DN 2[2003] goes down
3  Time:21:11:06 UTC Wed Jul 1 2003
    Event:IP Phone 1[SEP003094C3F96A] unregistered
4  Time:21:11:06 UTC Wed Jul 1 2003
    Event:IP Phone 1[SEP003094C3F96A] unregistered
5  Time:21:11:54 UTC Wed Jul 2003
    Event:IP Phone 1[SEP003094C3F96A] registered
6  Time:21:11:57 UTC Wed Jul 2003
    Event:DN 1[2001] goes up
7  Time:21:11:57 UTC Wed Jul 2003
    Event:DN 2[2003] goes up

```

The following table describes the significant fields in this output.

Table 26: show fb-its-log Field Descriptions

Field	Description
Current Period	The time between the last retain-timer-triggered cleanup to the next cleanup.
extension events	Events related to extensions that have been captured in the internal buffer.
device events	Events related to devices that have been captured in the internal buffer.
overwrites	Events that are written over previously recorded events in the buffer. Overwrites occur when the internal buffer size is too small; new events overwrite old ones. The internal buffer size is set using the max-size keyword in the log table command.
missed	Events that happen too quickly for the system to record.
deleted	Events removed from the internal buffer.
History	Information since the last system restart.
Threads	Current number of threads configured in the system.
max xml threads	Maximum number of concurrent XML threads allowed.
current thread	XML API query thread.
read in process	TRUE indicates that the xml-test.html file is being read now. FALSE indicates that the file is not being read.
UTC	Coordinated Universal Time, which is used by the system clock on the Cisco CME router.

Related Commands

Command	Description
log table	Sets the maximum size of the table used to capture phone events used for the Cisco CME XML API.

show ip address trusted list

To display a list of trusted IP addresses, use the **show ip address trusted list** command in privileged EXEC mode.

show ip address trusted list

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	15.1(2)T	Cisco Unified CME 8.1	This command was introduced.

Usage Guidelines Use this command to display a list of trusted IP addresses.

Examples The following is a sample output from this command displaying all statistical information:

```
Router #show ip address trusted list
IP Address Trusted Authentication
  Administration State: UP
  Operation State:      UP
IP Address Trusted Call Block Cause: call-reject (21)
VoIP Dial-peer IPv4 Session Targets:
Peer Tag      Oper State      Session Target
-----
11            DOWN           ipv4:1.3.45.1
1             UP            ipv4:1.3.45.1
IP Address Trusted List:
ipv4 172.19.245.1
ipv4 172.19.247.1
ipv4 172.19.243.1
ipv4 171.19.245.1
ipv4 171.19.10.1
```

Related Commands	Command	Description
	ip address trusted list	Allows to add a list of trusted IP addresses.

show presence global

To display configuration information about the presence service, use the **show presence global** command in user EXEC or privileged EXEC mode.

show presence global

Syntax Description

This command has no arguments or keywords.

Command Modes

User EXEC (>)
Privileged EXEC (#)

Command History

Release	Modification
12.4(11)XJ	This command was introduced.
12.4(15)T	This command was integrated into Cisco IOS Release 12.4(15)T.

Usage Guidelines

This command displays the configuration settings for presence.

Examples

The following example displays output from the **show subscription global**:

```
Router# show subscription global
Presence Global Configuration Information:
=====
Presence feature enable           : TRUE
Presence allow external watchers : FALSE
Presence max subscription allowed : 100
Presence number of subscriptions : 0
Presence allow external subscribe : FALSE
Presence call list enable        : TRUE
Presence server IP address       : 0.0.0.0
Presence sccp blfsd retry interval : 60
Presence sccp blfsd retry limit  : 10
Presence router mode             : CME mode
```

The table describes the significant fields shown in the display.

Table 27: show subscription global Field Descriptions

Field	Description
Presence feature enable	Indicates whether presence is enabled on the router with the presence command.
Presence allow external watchers	Indicates whether internal presentities can be watched by external watchers, as set by the watcher all
Presence max subscription allowed	Maximum number of presence subscriptions allowed by the max-subscription command.
Presence number of subscriptions	Current number of active presence subscriptions.

Field	Description
Presence allow external subscribe	Indicates whether internal watchers are allowed to subscribe to status notifications from external presentities, as set by the allow subscribe command.
Presence call list enable	Indicates whether the Busy Lamp Field (BLF) call-list feature is enabled with the presence call-list command.
Presence server IP address	Displays the IP address of an external presence server defined with the server command.
Presence sccp blfsd retry interval	Retry timeout, in seconds, for BLF speed-dial numbers on SCCP phones set by the sccp blf-speed-dial retry interval command.
Presence sccp blfsd retry limit	Maximum number of retries allowed for BLF speed-dial numbers on SCCP phones set by the sccp blf-speed-dial retry interval command.
Presence router mode	Indicates whether the configuration mode is set to Cisco Unified CME or Cisco Unified SRST by the mode command.

Related Commands

Command	Description
allow watch	Allows a directory number on a phone registered to Cisco Unified CME to be watched in a presence service.
allow subscribe	Allows internal watchers to monitor external presence entities (directory numbers).
debug presence	Displays debugging information about the presence service.
presence enable	Allows the router to accept incoming presence requests.
server	Specifies the IP address of a presence server for sending presence requests from internal watchers to external presence entities.
show presence subscription	Displays information about active presence subscriptions.
watcher all	Allows external watchers to monitor internal presence entities (directory numbers).

show presence subscription

To display information about active presence subscriptions, use the **show presence subscription** command in user EXEC or privileged EXEC mode.

show presence subscription [{**details**|**presentity** *telephone-number*|**subid** *subscription-id*|**summary**}]

Syntax Description	details	(Optional) Displays detailed information about presentities, watchers, and presence subscriptions.
	presentity <i>telephone-number</i>	(Optional) Displays information on the presentity specified by the destination telephone number.
	subid <i>subscription-id</i>	(Optional) Displays information for the specific subscription ID.
	summary	(Optional) Displays summary information about active subscription requests.

Command Default Information for all active presence subscriptions is displayed.

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Release	Modification
	12.4(11)XJ	This command was introduced.
	12.4(15)T	This command was integrated into Cisco IOS Release 12.4(15)T.
	12.4(24)T	This command was integrated into Cisco IOS Release 12.4(24)T.

Usage Guidelines This command displays details about the currently active presence subscriptions

Examples The following is sample output from the **show presence subscription details** command:

```
Presence Active Subscription Records Details:
=====
```

```
Subscription ID      : 1
  Watcher           : 6002@10.4.171.60
  Presentity        : 6005@10.4.171.34
  Expires           : 3600 seconds
  Subscription Duration : 1751 seconds
  line status       : idle
  watcher type      : local
  presentity type    : local
  Watcher phone type : SIP Phone
  subscription type  : Incoming Indication
  retry limit        : 0
  sibling subID       : 0
  sdb                : 0
  dp                 : 6555346C
  watcher dial peer tag : 40001
```

show presence subscription

```

number of presentity : 1

Subscription ID      : 2
  Watcher           : 6002@10.4.171.60

Presence Active Subscription Records:
=====

Subscription ID      : 30
  Watcher           : 4085550103@10.4.171.34
  Presentity        : 5001@10.4.171.20
  Expires           : 3600 seconds
  line status       : idle
  watcher type      : local
  presentity type    : remote
  Watcher phone type : SCCP [BLF Call List]
  subscription type  : Outgoing Request
  retry limit       : 0
  sibling subID      : 23
  sdb               : 0
  dp               : 0
  watcher dial peer tag : 0

```

The following is sample output from the **show presence subscription summary** command:

Router# **show presence subscription summary**

```

Presence Active Subscription Records Summary: 15 subscription
=====
Watcher           Presentity           SubID  Expires  SibID  Status
=====
6002@10.4.171.60   6005@10.4.171.34       1      3600     0      idle
6005@10.4.171.81   6002@10.4.171.34       6      3600     0      idle
6005@10.4.171.81   6003@10.4.171.34       8      3600     0      idle
6005@10.4.171.81   6002@10.4.171.34       9      3600     0      idle
6005@10.4.171.81   6003@10.4.171.34      10      3600     0      idle
6005@10.4.171.81   6001@10.4.171.34      12      3600     0      idle
6001@10.4.171.61   6003@10.4.171.34      15      3600     0      idle
6001@10.4.171.61   6002@10.4.171.34      17      3600     0      idle
6003@10.4.171.59   6003@10.4.171.34      19      3600     0      idle
6003@10.4.171.59   6002@10.4.171.34      21      3600     0      idle
6003@10.4.171.59   5001@10.4.171.34      23      3600    24      idle
6002@10.4.171.60   6003@10.4.171.34     121      3600     0      idle
6002@10.4.171.60   5002@10.4.171.34     128      3600    129      idle
6005@10.4.171.81   1001@10.4.171.34     130      3600    131      busy
6005@10.4.171.81   7005@10.4.171.34     132      3600    133      idle

```

The following is sample output from the **show presence subscription summary** command showing that device-based BLF monitoring is enabled on two phones.

```

Watcher           Presentity           SubID  Expires  SibID  Status
=====
D 2036@10.6.2.6    2038@10.6.2.254      33      3600     0      idle
      2036@10.6.2.6    2038@10.6.2.254      35      3600     0      idle
D 2036@10.6.2.6    8883@10.6.2.254      37      3600     0      unknown

```

The following is sample output from the **show presence subscription subid** command:

```
Router# show presence subscription subid 133
```

```
Presence Active Subscription Records:
```

```
=====
```

```
Subscription ID      : 133
Watcher             : 6005@10.4.171.34
Presentity          : 7005@10.4.171.20
Expires             : 3600 seconds
line status         : idle
watcher type        : local
presentity type     : remote
Watcher phone type  : SIP Phone
subscription type   : Outgoing Request
retry limit         : 0
sibling subID       : 132
sdb                 : 0
dp                  : 0
watcher dial peer tag : 0
```

The following table describes the significant fields shown in the display.

Table 28: show presence subscription Field Descriptions

Field	Description
Watcher	IP address of the watcher.
Presentity	IP address of the presentity.
Expires	Number of seconds until the subscription expires. Default is 3600.
line status	Status of the line: <ul style="list-style-type: none"> • Idle—Line is not being used. • In-use—User is on the line, whether or not this line can accept a new call. • Unknown—Phone is unregistered or this line is not allowed to be watched.
watcher type	Whether the watcher is local or remote.
presentity type	Whether the presentity is local or remote.
Watcher phone type	Type of phone, either SCCP or SIP.
subscription type	The type of presence subscription, either incoming or outgoing.
retry limit	Maximum number of times the router attempts to subscribe for the line status of an external SCCP phone when either the presentity does not exist or the router receives a terminated NOTIFY from the external presence server. Set with the sccp blf-speed-dial retry-interval command.
sibling subID	Sibling subscription ID if presentity is remote. If value is 0, presentity is local.
sdb	Voice port of the presentity.
dp	Dial peer of the presentity.

Field	Description
watcher dial peer tag	Dial peer tag of the watcher device.

Related Commands

Command	Description
allow watch	Allows a directory number on a phone registered to Cisco Unified CME to be watched in a presence service.
blf-speed-dial	Enables BLF monitoring for a speed-dial number on a phone registered to Cisco Unified CME.
debug ephone blf	Displays debugging information for BLF presence features.
debug presence	Displays debugging information about the presence service.
presence	Enables presence service and enters presence configuration mode.
presence enable	Allows the router to accept incoming presence requests.
show presence global	Displays configuration information about the presence service.

show sdspfarm

To display the status of the configured digital signal processor (DSP) farms and transcoding streams, use the **show sdspfarm** command in privileged EXEC mode.

show sdspfarm {units | sessions {active | callID *number* | statistics | summary}}

Syntax Description

units	Displays the configured and registered DSP farms.
sessions	Displays the transcoding streams.
active	Displays all active sessions.
callID	Displays activities for a specific caller ID.
<i>number</i>	Displays caller ID number displayed by the show voip rtp connection command.
statistics	Displays session statistics.
summary	Displays summary information.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Products	Modification
12.3(11)T	Cisco CME 3.2	This command was introduced.

Examples

The following is sample output from the **show sdspfarm units** :

```
Router# show sdspfarm units
mtp-1 Device:MTP123456782012 TCP socket:[-1] UNREGISTERED
actual_stream:0 max_stream 0 IP:0.0.0.0 0 Unknown 0 keepalive 0
mtp-2 Device:MTP000a8aeaca80 TCP socket:[5] REGISTERED
actual_stream:40 max_stream 40 IP:10.5.49.160 11001 MTP YOKO keepalive 12074
Supported codec:G711Ulaw
                G711Alaw
                G729
                G729a
                G729b
                G729ab
max-mtps:2, max-streams:240, alloc-streams:40, act-streams:0
```

The following is sample output from the **show sdspfarm sessions active** :

```
Router# show sdspfarm sessions active
Stream-ID:3 mtp:2 1.5.49.160 20174 Local:2000 START
usage:MoH (DN=3 , CH=1) FE=TRUE
codec:G729 duration:20 vad:0 peer Stream-ID:4
Stream-ID:4 mtp:2 1.5.49.160 17072 Local:2000 START
usage:MoH (DN=3 , CH=1) FE=FALSE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:3
```

The following is sample output from the **show sdspfarm sessions callID** :

show sdspfarm

```

Router# show sdspfarm sessions callid 51M
Stream-ID:6, srcCall-ID:51, codec:G729AnnexA , dur:20ms, vad:0, dstCall-ID:52, confID:5,
mtp:2^
Peer Stream-ID:5, srcCall-ID:52, codec:G711Ulaw64k , dur:20ms, vad:0, dstCall-ID:51, confID:5,
mtp:2^
Router-2015# show sdspfarm sessions callid 52
Stream-ID:5, srcCall-ID:52, codec:G711Ulaw64k , dur:20ms, vad:0, dstCall-ID:51, confID:5,
mtp:2
Peer Stream-ID:6, srcCall-ID:51, codec:G729AnnexA , dur:20ms, vad:0, dstCall-ID:52, confID:5,
mtp:2

```

The following is sample output from the **show sdspfarm sessions statistics** :

```

Router# show sdspfarm sessions statistics
Stream-ID:1 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:1014 in-pak:0 discard:0
Stream-ID:2 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:3 mtp:2 10.5.49.160 20174 Local:2000START MoH (DN=3 , CH=1) FE=TRUE
codec:G729 duration:20 vad:0 peer Stream-ID:4
recv-pak:0 xmit-pak:0 out-pak:4780 in-pak:0 discard:0
Stream-ID:4 mtp:2 10.5.49.160 17072 Local:2000START MoH (DN=3 , CH=1) FE=FALSE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:3
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:5 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:6 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:7 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:8 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:9 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:10 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:11 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:12 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:13 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:14 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:15 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:16 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:17 mtp:2 0.0.0.0 0 Local:0IDLE

```

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show sdsfarm

```

recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:39 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0
Stream-ID:40 mtp:2 0.0.0.0 0 Local:0IDLE
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
recv-pak:0 xmit-pak:0 out-pak:0 in-pak:0 discard:0

```

The following is sample output from the **show sdsfarm sessions summary** :

```

Router# show sdsfarm sessions summary
max-mtps:2, max-streams:240, alloc-streams:40, act-streams:2
  ID  MTP  State  CallID  confID  Usage  Codec/Duration
=====
1    2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=TRUE G711Ulaw64k /20ms
2    2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
3    2    START  -1      3      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
4    2    START  -1      3      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
5    2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
6    2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
7    2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
8    2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
9    2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
10   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
11   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
12   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
13   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
14   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
15   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
16   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
17   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
18   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
19   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
20   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
21   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
22   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
23   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
24   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
25   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
26   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
27   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
28   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
29   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
30   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
31   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
32   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
33   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
34   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
35   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
36   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
37   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
38   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
39   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms
40   2    IDLE   -1      0      MoH (DN=3 , CH=1) FE=FALSE G711Ulaw64k /20ms

```

The following table describes the fields shown in the show sdsfarm display.

Table 29: show sdsfarm Field Descriptions

Field	Description
act-streams	Active streams that are currently involved in calls.

Field	Description
alloc-streams	Number of transcoding streams that are actually allocated to all DSP farms that are registered to Cisco CME.
callID	Caller ID that the active stream is in.
Codec	Codec in use.
confID	ConfID that is used to communicate with DSP farms.
discard	Number of packets that are discarded.
dstCall-ID	Caller ID of the destination IP call leg.
Duration or dur	Packet rates, in milliseconds.
ID	Transcoding stream sequence number in Cisco CME.
in-pak	Number of incoming packets from the source call leg.
Local	Local port for voice packets.
max-mtps	Maximum number of Message Transfer Parts (MTPs) that are currently allowed to register in Cisco CME.
max-streams	Maximum number of transcoding streams that are currently allowed in Cisco CME.
mtp or MTP	MTP sequence number where the transcoding stream is located.
out-pak	Number of outgoing packets sending to source call leg.
peer Stream-ID	Stream sequence number of the other stream paired in the same transcoding session. (Two transcoding streams make up a transcoding session).
recv-pak	Number of voice packets received from DSP farm.
srcCall-ID	Source caller ID of the source IP call leg.
State	Current state of the transcoding stream, could be IDLE, SEIZE, START, STOP, or END.
Stream-ID	Transcoding stream sequence number in Cisco CME.
TCP-socket	Socket number for DSP farm (similar to TCP socket for show ephone output).
usage	Current usage of the stream; for example, Ip-Ip (IP to IP transcoding), MOH (for MOH transcoding) and Conf (conference).
vad	Voice-activity detection (VAD) flag for the transcoding stream. It should always be 0 (False).
xmit-pak	Number of packets that are sent to DSP farm.

Related Commands

Command	Description
sdspfarm tag	Permits a DSP farm to be registered to Cisco CME and be associated with an SCCP client interface's MAC address.
sdspfarm transcode sessions	Specifies the maximum number of transcoding sessions allowed per Cisco CME router.
sdspfarm units	Specifies the maximum number of DSP farms that are allowed to be registered to Cisco CME.

show shared-line

To display information about the Session Initiation Protocol (SIP) shared lines, use the **show shared-line** command in user EXEC or privileged EXEC mode.

show shared-line {**call** | **details** | **subscription** | **summary**}

Syntax Description	call	Displays information about all active calls on shared lines.
	details	Displays detailed information about each shared line.
	subscription	Displays information for specific subscriptions to shared lines.
	summary	Displays summary information about active subscriptions to shared lines.

Command Modes

User EXEC (>)
Privileged EXEC (#)

Command History	Release	Modification
	12.4(24)T	This command was introduced.

Examples

The following is sample output from the **show shared-line call** command:

```
Router# show shared-line call
Shared-Line active call info:
Shared-Line: '20141', active calls: 3
Local User      Local Address      Remote User      Remote Address    CallID
=====
20141            20141@10.6.0.2        20143            20143@10.10.0.1   3168
20141            20141@10.6.0.1        Barge            20143@10.10.0.1   3209
20141            20141@10.6.0.2        20141            20141@10.10.0.1   3210
```

The following is sample output from the **show shared-line details** command:

```
Router# show shared-line details
Shared-Line info details:

Shared-Line: '20141', subscribed users: 2, max calls limit: 10
Index      Users            sub_id      peer_tag      Status
=====
  1         20141@10.6.0.1      5           40001         ACTIVE
  2         20141@10.6.0.2      6           40002         ACTIVE
Free call queue size: 7, Active call queue size: 3

Message queue size: 20, Event queue size: 64
```

The following is sample output from the **show shared-line subscription** command:

```
Router# show shared-line subscription
```

show shared-line

Shared-Line Subscription Info:

```
Subscriptions to: '20141', total subscriptions: 2
SubID      Subscriber      Expires      Sub-Status
=====
5          20141@10.6.0.1          3600        NOTIFY_ACKED
6          20141@10.6.0.2          3600        NOTIFY_ACKED
```

The following is sample output from the **show shared-line summary** command:

```
Router# show shared-line summary
Shared-Line info summary:
Shared-Line: '20141', subscribed users: 2, max calls limit: 10
```

The following table describes the significant fields shown in the displays.

Table 30: show shared-line Field Descriptions

Field	Description
Expires	Number of seconds until the subscription expires.
Local Address	IP address of the local phone involved in the shared line call.
Local User	Extension number of the shared line.
Remote Address	IP address of the remote phone involved in the shared line call.
Remote User	Extension of the remote phone involved in the shared line call.
SubID	Subscription ID.
Subscriber	Extension number of the shared line and the IP address of the phone subscriber.
Sub-Status	Status of the subscription.
Users	IP addresses of the phones using the shared line.

Related Commands

Command	Description
debug shared-line	Displays debugging information about SIP shared lines.

show telephony-service admin

To display information about the Cisco CallManager Express (Cisco CME) system administrator, use the **show telephony-service admin** command in user EXEC or privileged EXEC mode.

show telephony-service admin

Syntax Description This command has no arguments or keywords.

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco CME Version	Modification
	12.2(2)XT	2.0	This command was introduced.
	12.2(8)T	2.0	This command was integrated into Cisco IOS Release 12.2(8)T.
	Cisco IOS XE Gibraltar 16.11.1a Release	Unified CME 12.6	The command is deprecated. It is not supported on Unified CME 12.6 and later releases.

Examples

The following is sample output from this command:

```
Router# show telephony-service admin
admin_username Admin
admin_password word
edit DN through Web: enabled.
edit TIME through Web: enabled.
```

The following table describes the significant fields in this output.

Table 31: show telephony-service admin Field Descriptions

Field	Description
admin_username	Username of system administrator.
admin_password	Password of system administrator.
edit DN through Web	Whether editing of extensions through the GUI has been enabled using the dn-webedit command.
edit TIME through Web	Whether changing the router time through the GUI has been enabled using the time-webedit command.

Related Commands

Command	Description
dn-webedit	Enables adding of extensions (ephone-dns) through the web interface.

 show telephony-service admin

Command	Description
time-webedit	Enables setting of time through the web interface.

show telephony-service all

To display detailed configuration for phones, voice ports, and dial peers in a Cisco Unified Communications Manager Express (Cisco Unified CME) system, use the **show telephony-service all** command in user EXEC or privileged EXEC mode.

show telephony-service all

Syntax Description

This command has no arguments or keywords.

Command Modes

User EXEC (>)
Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco CME Version	Modification
12.1(5)YD	Cisco Unified CME 1.0	This command was introduced.
12.2(8)T	Cisco Unified CME 2.0	This command was integrated into Cisco IOS Release 12.2(8)T.
15.2(2)T	Cisco Unified CME 9.0	This command was modified to display the total number of data collected from both ephone and voice hunt groups.

Usage Guidelines

Use the **show telephony-service all** command to display the total number of ephone and voice hunt groups that have statistics collection turned on.

Examples

The following is a sample output from the **show telephony-service all** command:

```
Router# show telephony-service all
CONFIG
=====
ip source-address 10.0.0.1 port 2000
max-ephones 24
max-dn 24
dialplan-pattern 1 408734....
voicemail 11111
transfer-pattern 510734....
keepalive 30
ephone-dn 1
number 5001
huntstop
ephone-dn 2
number 5002
huntstop
call-forward noan 5001 timeout 8
ephone-dn 3
number 5003
huntstop
ephone 1
mac-address 0030.94C3.37CB
type 0
button 1:1
speed-dial 1 5002
speed-dial 2 5003
cos 0
```

show telephony-service all

```

!
ephone 2
mac-address 0030.94C3.F96A
type 0
button 1:2 2:3 3:4
speed-dial 1 5004
speed-dial 2 5001
cos 0
!
voice-port 50/0/1
station-id number 5001
!
voice-port 50/0/2
station-id number 5002
timeout ringing 8
!
dial-peer voice 20025 pots
destination-pattern 5001
huntstop
port 50/0/1
dial-peer voice 20026 pots
destination-pattern 5002
huntstop
call-forward noan 5001
port 50/0/2
dial-peer voice 20027 pots
destination-pattern 5003
huntstop
port 50/0/3

```

The following is a sample output from the **show telephony-service all** command. The output shows that call statistics are collected for 14 hunt groups, including 6 ephone and 8 voice hunt groups.

```

Router# show telephony-service all
CONFIG (Version=8.7)
=====
Version 8.7
Max phoneload sccp version 17
Max dspfarm sccp version 18
Cisco Unified Communications Manager Express
For on-line documentation please see:
http://www.cisco.com/en/US/products/sw/voicesw/ps4625/tsd_products_support_series_home.html
protocol mode default
ip source-address 1.4.190.80 port 2000
ip qos dscp:
  ef (the MS 6 bits, 46, in ToS, 0xB8) for media
  cs3 (the MS 6 bits, 24, in ToS, 0x60) for signal
  af41 (the MS 6 bits, 34, in ToS, 0x88) for video
  default (the MS 6 bits, 0, in ToS, 0x0) for serviceservice directed-pickup
load 6921 SCCP69xx.9-0-3-0
load 6961 SCCP69xx.8-5-3-0
max-ephones 14
max-dn 56
max-conferences 4 gain -6
dspfarm units 0
dspfarm transcode sessions 0
conference software
privacy
no privacy-on-hold
hunt-group report url prefix tftp://223.255.254.254/ngm/huntgp/uc500/test
hunt-group report url suffix 0 to 20
hunt-group report every 1 hours
# of hunt-group collect data: 14

```



```

hunt-group report delay 0 hours
Number of ephone hunt-group configured: 6
hunt-group logout DND
max-redirect 20
cnf-file location: system:
cnf-file option: PER-PHONE-TYPE

```

The following is another sample output from the **show telephony-service all** command. The output shows that call statistics are collected for seven hunt groups, including three ephone and four voice hunt groups.

```

Router# show telephony-service all
.
.
.
.
.
hunt-group report url prefix tftp://223.255.254.254/ngm/huntgp/uc500/test
hunt-group report url suffix 0 to 20
hunt-group report every 1 hours
# of hunt-group collect data: 7
hunt-group report delay 0 hours
Number of ephone hunt-group configured: 3
.
.
.
.
.

```

The following table describes significant fields in this output, in alphabetical order.

Table 32: show telephony-service all Field Descriptions

Field	Description
button	Button on the Cisco IP phone.
call-forward noan	Call forward no answer is set.
cnf-file location	Storage location for phone configuration files. System (default), flash or slot 0 memory, and external TFTP server.
cnf-file option	Specifies the use of different phone configuration files by type of phone or by individual phone.
cos	Not applicable; unused.
destination-pattern	Destination pattern (telephone number) configured for this dial peer.
dial-peer voice	Voice dial peer.
dialplan-pattern	Dial-plan pattern is set to expand the abbreviated extension numbers to fully qualified E.164 numbers.
ephone	Cisco IP phone.
ephone-dn	Cisco IP phone directory number.
huntstop	Huntstop is set.

Field	Description
ip source-address	IP address used by Cisco IP phones to register with the router for service.
keepalive	IP phone keepalive period, in seconds.
mac-address	MAC address.
max-dn	Maximum directory numbers.
max-ephones	Maximum numbers of Cisco IP phones.
number	Cisco IP phone number.
port	TCP port number used by Cisco IP phones to communicate with the router.
pots	POTS dial peer set.
speed-dial	Speed-dial is set.
station-id number	Number used for caller ID purposes when calls are made using the line.
timeout	Timeout is set.
timeout ringing	Maximum amount of time that the phone is allowed to ring before the call is disconnected.
transfer-pattern	Transfer pattern is set to allow transfer of calls to a specified number.
type	Not applicable; unused.
voicemail	A voice-mail (speed-dial) number is set.
voice-port	(Virtual) voice port designator.
# of hunt-group collect data	Total number of data collected from both ephone and voice hunt groups.

Related Commands

Command	Description
show telephony dial-peer	Displays dial peers for extensions in a Cisco Unified CME system.
show telephony voice-port	Displays virtual voice-port configuration for extensions in a Cisco Unified CME system.

show telephony-service bulk-speed-dial

To display information about bulk speed-dial lists, use the **show telephony-service bulk-speed-dial** command in privileged EXEC mode.

show telephony-service bulk-speed-dial {*global list-id index-id [all]* | *local phone-tag list-id index-id [all]* | **summary**}

Syntax Description

global	Global lists that can be accessed by all users.
local	Personal lists that can be accessed by users configured to use the lists.
<i>list-id</i>	Digit that identifies the list. Range is from 0 to 9.
<i>index-id</i>	Identification number for an entry.
<i>phone-tag</i>	Ephone identifier (phone-tag).
summary	List of registered bulk speed-dial text files.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Examples

The following example displays the list of bulk speed-dial text files that have been configured in the system:

```
Router# show telephony-service bulk-speed-dial summary
List-id    Entries    Size    Reference    url
  0           40      3840    Global      tftp://192.168.254.254/phonedirs/ut.csv
  1           20      1920    Global      phoneBook.csv
  8           15      1440    Global      tftp://192.168.254.254/phonedirs/big.txt
  9           20      1920    Global      tftp://192.168.254.254/phonedirs/phoneBook.csv
  6          24879  2388384 ephone-2    tftp://192.168.254.254/phonedirs/big.txt1
  7           20      1920    ephone-2    phoneBook.csv
  6          24879  2388384 ephone-3    big.txt1
  7           20      1920    ephone-3    phoneBook.csv
4 Global List(s) 4 Local List(s)
```

The following example displays the single entry 1234 from list 9:

```
Router# show telephony-service bulk-speed-dial global 9 1234
Number: 1800 200 1345 name: Jay Smith Private: yes Extension: No
```

The following example displays all index entries starting with 1 for personal list number 7 for ephone 2:

```
Router# show telephony-service bulk-speed-dial local 2 7 1 all
```

show telephony-service bulk-speed-dial

Index	Number	Name	Hide	Append
1000	918005550164	ABC Co Front Desk	no	no
1003	919005550167	ABC Co File room	no	no
1100	918005550118		no	no
1200	918005550184	ABC Co President	no	no
1301	918005550152		no	no
1342	91800,5550185	ABC Co Sales	no	no
1682	91800555,,0115	ABC Co Service	no	no

The following table describes the significant fields shown in the display.

Table 33: show telephony-service bulk-speed-dial Field Descriptions

Field	Description
List-id	Digit that identifies the list. Range is from 0 to 9.
Entries	Number of entries in the speed-dial file.
Size	Size of the file, in KB.
Reference	Assignment of the list: global if assigned to all ephones, or a specific ephone number.
url	Location of the text file, in URL format.
Index	Identification number for an entry.
Number	Number to be dialed and displayed on the phone.
Name	Name to be displayed on the phone.
Hide	Yes indicates that this number should not be displayed when it is dialed.
Append	Yes indicates that additional digits can be dialed by the user after this number has been speed-dialed before the call is completed.

Related Commands

Command	Description
bulk-speed-dial list (ephone)	Enables a personal bulk speed-dial list for an ephone.
bulk-speed-dial list (telephony-service)	Enables a global bulk speed-dial list for all users of a Cisco Unified CME system.
bulk-speed-dial prefix	Sets the prefix code that phone users dial to access speed-dial numbers from a bulk speed-dial list.

show telephony-service conference hardware

To display information about hardware conferences in a Cisco Unified Communications Manager Express (Cisco CME) system, use the **show telephony-service conference hardware** command in privileged EXEC mode.

show telephony-service conference hardware [{ad-hoc [{detail | video}]} | detail [video] | meetme [{detail | video}]} | number *telephone-number*}]

Syntax Description

ad-hoc	(Optional) Ad-hoc hardware conferences.
detail	(Optional) Detailed information for all conferences.
video	(Optional) Video conferences.
meetme	(Optional) Meet-me hardware conferences.
number	(Optional) Conference number.
<i>telephone-number</i>	(Optional) Telephone or extension number.

Command Modes

Privileged EXEC (#)

Command History

Release	Cisco Product	Modification
12.4(11)XJ2	Cisco Unified CME 4.1	This command was introduced.
12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
15.1(4)M	Cisco Unified CME 8.6	This command was modified to include the video option.
15.2(2)T	Cisco Unified CME9.0	This command was modified to add hardware conference information on Cisco Unified SIP IP phones to the output display.

Usage Guidelines

Use the **show telephony-service conference hardware** command to display ad-hoc and meet-me hardware conferences information, including which parties are still in the conference.

Examples

The following is a sample output that displays information for a four-party ad-hoc hardware conference. Extension 8044 created the conference by calling extension 8012, then adding extension 8004 to the conference. The conference administrator, extension 8006, called into the conference after it was established.

```
Router# show telephony-service conference hardware detail
```

```
Conference Type Active Max Peak Host HostPhone Last
```

```
cur(initial)
```

```
8893 Ad-hoc 4 8 4 8044 29 ( 29) 8006
```

show telephony-service conference hardware

Conference parties:

8006 (admin)

8004

8012

8044

The following is a sample output that displays information for a meet-me video conference:

```
Router# show telephony-service conference hardware detail video
Conference  Type                Active Max Peak Host HostPhone Last
                                cur(initial)

=====
9999      Meetme-Video            10   16  10  n/a      0      ( 0)  9012

Conference parties (number:phone)
  9012 :12 :Audio
  7001 :Video
  9003 :3 :Audio
  7047 :Audio
  7015 :Video
  3667 :Audio
  9024 :24 :Audio
  9023 :23 :Video
  3665 :Video
  9022 :22 :Video
```

The following is another sample output from the **show telephony-service conference hardware detail** command. The output shows an ad-hoc video hardware conference among three participants, two of which are Cisco Unified SIP IP phones.

```
Router# show telephony-service conference hardware detail
Conference  Type Active Max Peak Host HostPhone Last
                                cur(initial)

=====
B000      Ad-hoc Video      3      4      3      3915 SIP3915 15(15)
          5801 RM5801
Conference parties (number:phone)
  5801 5801 :Video
  3916 SIPPHONE3916 :16 :Video
  3915 SIPPHONE3915 :15 (admin):Video
```

The following is a sample output from the **show telephony-service conference hardware ad-hoc** command:

```
Router# show telephony-service conference hardware ad-hoc
Conference  Type Active Max Peak Host HostPhone Last
                                cur(initial)

=====
B000      Ad-hoc Video      3      4      3      3915 SIP3915 15(15)
          5801 RM5801
```

The following is a sample output from the **show telephony-service conference hardware meetme** command:

```

Router# show telephony-service conference hardware meetme
Conference   Type                Active Max Peak Host                HostPhone Last
=====
              cur(initial)
=====
7788         Meetme Video      4      4   4      3916 SIP3916      16(16)
              5802 RM5802

```

The following is a sample output from the **show telephony-service conference hardware number** command:

```

Router# show telephony-service conference hardware number B000
Conference   Type                Active Max Peak Host                HostPhone Last
=====
              cur(initial)
=====
B000         Ad-hoc Video      3      4   3      3915 SIP3915      15(15)
              5801 RM5801

```

The following is another sample output from the **show telephony-service conference hardware number** command:

```

Router# show telephony-service conference hardware number 7788
Conference   Type                Active Max Peak Host                HostPhone Last
=====
              cur(initial)
=====
7788         Meetme Video      4      4   4      3917 SIP3917      17(17)
              4801 SCCP4801

```

The following table describes the significant fields shown in the display, listed in alphabetical order.

Table 34: show telephony-service conference hardware Field Descriptions

Field	Description
Active	Number of active parties in the conference.
admin	Ad hoc and meet-me hardware conference administrator. The administrator can: <ul style="list-style-type: none"> • Dial in to any conference directly through the conference number. • Use the ConfList soft key to list conference parties. • Remove any party from any conference.
Conference	Conference directory number (DN).
Conference parties	DNs in the conference.
Last	Last participant to join the conference.
Host	Conference creator.

Field	Description
HostPhone cur(initial)	cur—Current host phone. The phone that currently hosts the conference creator. (initial)—Initial host phone. The phone that hosted the conference creator when the conference was created. Because you can transfer the conference creator, the current host phone may be different from the initial host phone.
Max	Maximum number of participants allowed in the conference.
Peak	Maximum number of participants in the conference at any time.
Type	Type of conference: meet-me or ad hoc.

show telephony-service directory-entry

To display the entries made using the **directory entry** , use the **show telephony-service directory-entry** command in user EXEC or privileged EXEC mode.

show telephony-service directory-entry

Syntax Description

This command has no arguments or keywords.

Command Modes

User EXEC
Privileged EXEC

Command History

Cisco IOS Release	Cisco CME Version	Modification
12.2(15)ZJ	3.0	This command was introduced.
12.3(4)T	3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

This command lists directory entries that are made using the **directory entry** but does not list entries that are made using the **name** and **number** commands in ephone-dn configuration mode.

Examples

The following is sample output from this command:

```
Router# show telephony-service directory-entry
directory entry 1 4085550123 name Smith, John
```

The following table describes significant fields in this output, in alphabetical order.

Table 35: show telephony-service directory-entry Field Descriptions

Field	Description
directory <i>directory-tag</i> (shown as 1 in the example)	Sequence number or unique identifier for a directory entry.
<i>name</i> (shown as Smith, John)	Name that appears in the directory associated with the number.
<i>number</i> (shown as 4085550123 in the example)	Telephone number or extension for the directory entry.

Related Commands

Command	Description
directory entry	Adds an entry to a local phone directory that can be displayed on IP phones.
show telephony-service all	Displays detailed configuration of a Cisco CME system.
show telephony-service ephone-dn	Displays information for extensions (ephone-dns) in a Cisco CME system.

show telephony-service ephone

To display configuration for the Cisco IP phones, use the **show telephony-service ephone** command in user EXEC or privileged EXEC mode.

show telephony-service ephone

Syntax Description This command has no arguments or keywords.

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.1(5)YD	Cisco CME 1.0	This command was introduced.
	12.2(8)T	Cisco CME 2.0	This command was integrated into Cisco IOS Release 12.2(8)T.
	12.4(11)XJ2	Cisco Unified CME 4.1	The conference add-mode, conference drop-mode, and conference admin fields were added.
	12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
	15.0(1)XA	Cisco Unified CME 8.0	This command was modified. The output was enhanced to include the setting of the feature-button command and information about logical partitioning class of restriction (LPCOR).
	15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Examples

The following is sample output from this command:

```
Router# show telephony-service ephone

Number of Configured ephones 2 (Registered 2)
ephone 1
Device Security Mode: Non-Secure
mac-address 1234.4321.7000
type 7960
button 1:1
keepalive 30 auxiliary 30
multicast-moh
max-calls-per-button 8
busy-trigger-per-button 0
Always send media packets to this router: No
Preferred codec: g711ulaw
conference drop-mode never
conference add-mode all
conference admin: No
privacy: Yes
feature-button 1 Dnd
user-locale US
```

```

network-locale US
lpcor type: remote
lpcor (incoming): ephone_group2 (outgoing): ephone_group2
!
ephone 2
Device Security Mode: Non-Secure
mac-address 1234.4321.6000
type 7960
button 1:2
keepalive 30 auxiliary 30
multicast-moh
max-calls-per-button 8
busy-trigger-per-button 0
Always send media packets to this router: No
Preferred codec: g711ulaw
conference drop-mode never
conference add-mode all
conference admin: No
privacy: Yes
feature-button 1 Dnd
user-locale US
network-locale US
lpcor type: local
lpcor (incoming): ephone_group1 (outgoing): ephone_group1
!

```

The table describes significant fields in this output, in alphabetical order.

Table 36: show telephony-service ephone Field Descriptions

Field	Description
button	Button number on IP phone, separator to denote ring characteristics and ephone-dn tag. A colon (:) separator denotes a normal ring.
conference add-mode	Who can add parties to a conference: <ul style="list-style-type: none"> • creator—Only the creator can add parties. • all—Any party can add other parties if the creator remains in the conference.
conference drop-mode	When conferences are dropped: <ul style="list-style-type: none"> • creator—Conference terminates when the creator hangs up. • local—Conference terminates when the last local party in the conference hangs up or drops out of the conference. • never—Conference is not dropped, even if the creator hangs up, as long as three parties remain in the conference.
conference admin	Ad hoc and meet-me hardware conference administrator. The administrator can: <ul style="list-style-type: none"> • Dial in to any conference directly through the conference number • Use the ConfList soft key to list conference parties • Remove any party from any conference
ephone	Cisco IP phone.
feature-button	Displays the type of feature button on the ephone. Feature type can be configured with privacy or DND.

Field	Description
lpcor (incoming)	Setting of the lpcor incoming command.
lpcor (outgoing)	Setting of the lpcor outgoing command.
lpcor type	Setting of the lpcor type command.
mac-address	MAC address of the Cisco IP phone.
speed-dial	Speed-tag (unique identifier) and the number that is programmed for that speed-tag.
type	Model type of phone.

Related Commands

Command	Description
show telephony-service all	Displays detailed configuration for a Cisco Unified CME system.
show telephony-service dial-peer	Displays dial-peer information for extensions in Cisco Unified CME.
show telephony-service ephone-dn	Displays information for extensions in Cisco Unified CME.
show telephony-service voice-port	Displays configurations for virtual voice ports in Cisco Unified CME.

show telephony-service ephone-dn

To display information about extensions (ephone-dns) in a Cisco CallManager Express (Cisco CME) system, use the **show telephony-service ephone-dn** command in user EXEC or privileged EXEC mode.

show telephony-service ephone-dn

Syntax Description

This command has no arguments or keywords.

Command Modes

User EXEC (>)
Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco CME Version	Modification
12.1(5)YD	1.0	This command was introduced
12.2(8)T	2.0	This command was integrated into Cisco IOS Release 12.2(8)T.

Examples

The following is sample output from this command:

```
Router# show telephony-service ephone-dn
ephone-dn 1
  number 5001
  huntstop
ephone-dn 2
  number 5002
  huntstop
  call-forward noan 5001 timeout 8
ephone-dn 3
  number 5003
  huntstop
ephone-dn 4
  number 5004
  huntstop
```

The following table describes significant fields in this output, in alphabetical order.

Table 37: show telephony-service ephone-dn Field Descriptions

Field	Description
call-forward noan	Call forwarding is set to no answer. Other available options are call-forward busy and call-forward all.
ephone-dn	Cisco IP phone directory number.
huntstop	Huntstop is set.
number	Cisco IP phone number.
timeout	Timeout setting for call forwarding when an extension does not answer.

 **show telephony-service ephone-dn****Related Commands**

Command	Description
show telephony-service all	Displays the detailed configuration of all the Cisco IP phones.
show telephony-service dial-peer	Displays dial peer information for extensions (ephone-dns) in a Cisco CME system.
show telephony-service voice-port	Displays configurations for virtual voice ports in a Cisco CME system.

show telephony-service ephone-dn-template

To display information about ephone-dn-template configurations, use the **show telephony-service ephone-dn-template** command in user EXEC or privileged EXEC mode.

show telephony-service ephone-dn-template

Syntax Description This command has no arguments or keywords.

Command Modes User EXEC
Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
	12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines This command displays contents of ephone-dn templates. Use the **show running-config** to display the association of templates to particular ephone-dns.

Examples The following is sample output from this command:

```
Router# show telephony-service ephone-dn-template
ephone-template 1
  softkeys idle Newcall Redial Cfwdall Dnd Pickup Gpickup Login
  codec g711ulaw
  User Locale: US
  Network Locale: US
ephone-template 2
  softkeys idle Redial Newcall Dnd Cfwdall Pickup Gpickup Login
  codec g711ulaw
  User Locale: US
  Network Locale: US
```

Related Commands	Command	Description
	ephone-dn-template	Creates an ephone-dn template and enters ephone-dn-template configuration mode.

show telephony-service ephone-template

To display the contents of ephone-templates, use the **show telephony-service ephone-template** command in user EXEC or privileged EXEC mode.

show telephony-service ephone-template

Syntax Description This command has no arguments or keywords.

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.3(11)T	Cisco CME 3.2	This command was introduced.
	12.4(11)XJ2	Cisco Unified CME 4.1	The conference add-mode, conference drop-mode, and conference admin fields were added.
	12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
	12.4(15)XY	Cisco Unified CME 4.2(1)	Emergency response location (ERL) information assigned to an ephone displays in the output.
	12.4(20)T	Cisco Unified CME 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.
	15.0(1)XA	Cisco Unified CME 8.0	This command was modified. Logical partitioning class of restriction (LPCOR) information was added to the output.
	15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Usage Guidelines Use this command to display the contents of each ephone template that is defined. Use the **show running-config** command to display the association of templates to specific ephones.

Examples The following is sample output from this command:

```
Router# show telephony-service ephone-template

ephone-template 1
softkey idle Cfdall Dnd Gpickup Join Pickup RmLstC
softkey connected Acct ConfList Confrn Endcall Hold Join Park
conference drop-mode never
conference add-mode all
conference admin: No
max-calls-per-button 8
busy-trigger-per-button 0
privacy default
MLPP max precedence level -1
MLPP indication Enabled
```



```

MLPP preemption Enabled
Always send media packets to this router: No
Preferred codec: g711ulaw
keepalive 30 auxiliary 30
User Locale: US
Network Locale: US
Emergency Response Location: 6
lpcor type: remote
lpcor (incoming): local_sccp_phone_1      (outgoing): local_sccp_phone_1

```

The following table describes significant fields in this output.

Table 38: show telephony-service ephone Field Descriptions

Field	Description
ephone-template	Identifier for the ephone template.
softkey hold	Soft keys displayed during the hold call stage.
softkey idle	Soft keys displayed during the call-idle call stage.
softkey seized	Soft keys displayed during the call-seized call stage.
softkey alerting	Soft keys displayed during the call-alerting call stage.
softkey connected	Soft keys displayed during the call-connected call stage.
conference drop-mode	When conferences are dropped: <ul style="list-style-type: none"> • creator: Conference terminates when the creator hangs up. • local: Conference terminates when the last local party in the conference hangs up or drops out of the conference. • never: Conference is not dropped, even if the creator hangs up, if three parties remain in the conference.
conference add-mode	Who can add parties to a conference: <ul style="list-style-type: none"> • creator: Only the creator can add parties. • all: Any party can add other parties if the creator remains in the conference.
conference admin	Ad hoc and meet-me hardware conference administrator. The administrator can: <ul style="list-style-type: none"> • Dial in to any conference directly through the conference number. • Use the Conflist soft key to list conference parties. • Remove any party from any conference.
Always send media packets to this router	Always send media packets to this Cisco Unified CME router, which acts as a proxy and forwards the packets to the destination, instead of sending them directly to the destination IP phone.
Preferred codec	Codec to use when initiating a call.

show telephony-service ephone-template

Field	Description
button-layout	Type of IP phone and number of fixed line or feature set. <ul style="list-style-type: none"> • 1: Button 24=Menu. Button 23=Headset. • 2: Button 24=Menu. Button 23=Headset. Button 22=Directories. Button 21=Messages.
User Locale	Locale that is associated with the phone user interface. The user locale identifies a set of detailed information, including language and font, to support users.
Network Locale	Locale that is associated with the phone. The network locale contains a definition of the tones and cadences that are used by the phones and gateways in the device pool in a specific geographic area.
Emergency response location	Identification of the ERL defined with the emergency response location command.
lpcor (incoming)	Setting of the lpcor incoming command.
lpcor (outgoing)	Setting of the lpcor outgoing command.
lpcor type	Setting of the lpcor type command.

Related Commands

Command	Description
ephone-template	Creates an ephone template.

show telephony-service fac

To display current feature access codes (FACs), use the **show telephony-service fac** command in privileged EXEC mode.

show telephony-service fac

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines

Phone users dial FACs to access phone features. The set of standard FACs must be enabled using the **fac standard** before phone users can use them. Individual FACs can be changed using the **fac custom** command.

Examples

The following example displays the set of standard FACs:

```
Router# show telephony-service fac
telephony-service fac standard
callfwd all **1
callfwd cancel **2
pickup local **3
pickup group **4
pickup direct **5
park **6
dnd **7
redial **8
voicemail **9
ephone-hunt join *3
ephone-hunt cancel #3
```

Related Commands

Command	Description
fac	Enables standard FACs or creates a custom FAC.

show telephony-service security-info

To display the security-related information that is configured under telephony-service, use the **show telephony-service security-info** command in privileged EXEC configuration mode.

show telephony-service security-info

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
	12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines This command is used with Cisco Unified CME phone authentication.

Examples The following example displays security information that was configured under telephony-service.

```
Router# show telephony-service security-info
Skinny Server Trustpoint for TLS: cisco1
TFTP Credentials Trustpoint: cisco1
Server Security Mode: Secure
Global Device Security Mode: Authenticated
```

show telephony-service tftp-bindings

To display the current configuration files accessible to IP phones, use the **show telephony-service tftp-bindings** command in user EXEC or privileged EXEC mode.

show telephony-service tftp-bindings

Syntax Description This command has no arguments or keywords.

Command Modes
User EXEC
Privileged EXEC

Command History	Cisco IOS Release	Cisco CME Version	Modification
	12.2(11)YT	2.1	This command was introduced.
	12.2(15)T	2.1	This command was integrated into Cisco IOS Release 12.2(15)T.

Usage Guidelines Use this command with Cisco IOS Telephony Services V2.1, Cisco CallManager Express 3.0, or a later version.

This command provides a list of configuration files that are accessible to IP phones using TFTP, including the dictionary, language, and tone configuration files that are associated with the ISO-3166 codes that have been selected using the **user-locale** and **network-locale** commands.

Examples

The following is sample output from the **show telephony-service tftp-bindings** when the ISO-3166 code for Germany has been selected for both language and tones:

```
Router(config)# show telephony-service tftp-bindings
tftp-server system:/its/SEPDEFAULT.cnf
tftp-server system:/its/SEPDEFAULT.cnf alias SEPDefault.cnf
tftp-server system:/its/XMLDefault.cnf.xml alias XMLDefault.cnf.xml
tftp-server system:/its/ATADefault.cnf.xml
tftp-server system:/its/XMLDefault7960.cnf.xml alias SEP00036B54BB15.cnf.xml
tftp-server system:/its/germany/7960-font.xml alias German_Germany/7960-font.xml
tftp-server system:/its/germany/7960-dictionary.xml alias German_Germany/7960-dictionary.xml
tftp-server system:/its/germany/7960-kate.xml alias German_Germany/7960-kate.xml
tftp-server system:/its/germany/SCCP-dictionary.xml alias German_Germany/SCCP-dictionary.xml
tftp-server system:/its/germany/7960-tones.xml alias Germany/7960-tones.xml
```

Related Commands	Command	Description
	network-locale	Sets the definition of the tones and cadences on the Cisco IP Phones 7940 and 7940G and the Cisco IP Phones 7960 and 7960G for a specific geographic area.
	user-locale	Sets language for displays on the Cisco IP Phones 7940 and 7940G and the Cisco IP Phones 7960 and 7960G.

show telephony-service voice-port

To display configurations of virtual voice ports in a Cisco CallManager Express (Cisco CME) system, use the **show telephony-service voice-port** command in user EXEC or privileged EXEC mode.

show telephony-service voice-port

Syntax Description This command has no arguments or keywords.

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco CME Version	Modification
	12.1(5)YD	1.0	This command was introduced.
	12.2(8)T	2.0	This command was integrated into Cisco IOS Release 12.2(8)T.

Usage Guidelines This command displays virtual voice-port configurations for a Cisco CME system. Each ephone-dn corresponds to a virtual voice port. For example, the ephone-dn with dn-tag 7 corresponds to virtual voice port 50/0/7. The virtual voice port provides the telephone line associated with the Cisco IP phone extension (ephone-dn).

Examples The following is sample output from this command:

```
Router# show telephony-service voice-port
voice-port 50/0/1
  station-id number 5001
!
voice-port 50/0/2
  station-id number 5002
  timeout ringing 8
!
voice-port 50/0/3
  station-id number 5003
!
voice-port 50/0/4
  station-id number 5004
!
```

The following table describes significant fields in this output, in alphabetical order.

Table 39: show telephony-service voice-port Field Descriptions

Field	Description
station-id number	Phone number used for caller ID purposes for calls made from this voice port.
timeout ringing	Maximum amount of time that a phone is allowed to ring before the call is disconnected.
voice-port	Virtual voice port.

Related Commands

Command	Description
show telephony-service all	Displays the detailed configuration of all the Cisco IP phones.
show telephony-service dial-peer	Displays dial-peer information for extensions in a Cisco CME system.
show telephony-service ephone-dn	Displays information for extensions (ephone-dns) in a Cisco CME system.

show voice emergency

To display the IP address, subnet mask, and ELIN for each emergency response location, use the **show voice emergency** command in user EXEC or privileged EXEC mode.

show voice emergency

Syntax Description This command has no arguments or keywords.

Command Default No default behavior or values

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SRST 4.2(1) Cisco Unified SIP SRST 4.2(1)	This command was introduced.
	12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SRST 7.0 Cisco Unified SIP SRST 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines Use this command to display the IP address, subnet mask, and ELIN for each emergency response location.

Examples The following example shows sample output which includes IP mask and ELIN information for each ERL:

```

EEMERGENCY RESPONSE LOCATIONS
ERL          | ELIN 1      | ELIN2      | SUBNET 1    | SUBNET 2
1            | 6045550101 |             | 10.0.0.0    | 255.0.0.0
2            | 6045550102 | 6045550106 | 192.168.0.0 | 255.255.0.0
3            |             | 6045550107 | 172.16.0.0  | 255.255.0.0
4            | 6045550103 |             | 192.168.0.0 | 255.255.0.0
5            | 6045550105 |             | 209.165.200.224 | 255.0.0.0
6 6045550198 |             | 6045550109 | 209.165.201.0 | 255.255.255.224

```

Related Commands	Command	Description
	voice emergency response location	Creates a tag for identifying an ERL for E911 services.

show voice emergency addresses

To display address information for each emergency response location, use the **show emergency addresses** command in user EXEC or privileged EXEC mode.

show voice emergency addresses

Syntax Description This command has no arguments or keywords.

Command Default No default behavior or values

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SRST 4.2(1) Cisco Unified SIP SRST 4.2(1)	This command was introduced.
	12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SRST 7.0 Cisco Unified SIP SRST 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines This command displays the physical address of each emergency response location.

Examples

The following example shows a sample output which includes physical address information for the ERL:

```
Router# show voice emergency addresses
3850 Zanker Rd, San Jose,604,5550101
225 W Tasman Dr, San Jose,604,5550102
275 W Tasman Dr, San Jose,604,5550103
518 Bellew Dr,Milpitas,604,5550104
400 Tasman Dr,San Jose,604,5550105
3675 Cisco Way,San Jose,604,5550106
```

Related Commands	Command	Description
	address	Specifies a comma separated text entry (up to 250 characters) of an ERL's civic address.
	show voice emergency all	Displays all emergency response location information.
	voice emergency response location	Creates a tag for identifying an ERL for E911 services.

show voice emergency all

To display all emergency response location information, use the **show voice emergency all** command in user EXEC or privileged EXEC mode.

show voice emergency all

Syntax Description This command has no arguments or keywords.

Command Default No default behavior or values

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SRST 4.2(1) Cisco Unified SIP SRST 4.2(1)	This command was introduced.
	12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SRST 7.0 Cisco Unified SIP SRST 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines Use this command to display all information configured for each emergency response location.

Examples

The following example shows a sample output, displaying all ERL-related information for ERL 1 and 3.

```
VOICE EMERGENCY RESPONSE SETTINGS
  Callback Number: 6045550103
  Emergency Line ID Number: 6045550155
  Expiry: 2 minutes
  Logging Enabled
EMERGENCY RESPONSE LOCATION 1
  Name: Cisco Systems 1
  Address: 3850 Zanker Rd, San Jose,elin.1.3,elin.4.10
  IP Address 1: 209.165.200.226 IP mask 1: 255.255.255.254
  IP Address 2: 209.165.202.129 IP mask 2: 255.255.0.0
  Emergency Line ID 1: 6045550180
  Emergency Line ID 2:
  Last Caller: 6045550188 [Jan 30 2007 16:05.52 PM]
  Next ELIN For Emergency Call: 6045550166
EMERGENCY RESPONSE LOCATION 3
  Name: Cisco Systems 3
  Address: 225 W Tasman Dr, San Jose,elin.1.3,elin.4.10
  IP Address 1: 209.165.202.133 IP mask 1: 255.255.0.0
  IP Address 2: 209.165.202.130 IP mask 2: 255.0.0.0
  Emergency Line ID 1:
  Emergency Line ID 2: 6045550150
  Last Caller:
  Next ELIN For Emergency Call: 6045550151
```

Related Commands

Command	Description
address	Specifies a comma separated text entry (up to 250 characters) of an ERL's civic address.
elin	Specifies a PSTN number that will replace the caller's extension.
name	Specifies a string (up to 32-characters) used internally to identify or describe the emergency response location.
subnet	Defines which IP phones are part of this ERL.
voice emergency response location	Creates a tag for identifying an ERL for the E911 services.

show voice emergency callers

To display a list of 911 calls made over the last three hours, use the **show emergency callers** command in privileged EXEC mode.

show voice emergency callers

Syntax Description This command has no arguments or keywords.

Command Default No list of 911 calls is displayed.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(15)T	Cisco Unified CME 4.1 Cisco Unified SRST 4.1 Cisco Unified SIP SRST 4.1	This command was introduced. For Cisco Unified CME, this command is supported in SRST fallback mode only.
	12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SRST 4.2(1) Cisco Unified SIP SRST 4.2(1)	This command was added to Cisco Unified CME.
	12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SRST 7.0 Cisco Unified SIP SRST 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines Use this command to display a list of all 911 calls made in the past three hours. The list shows the originating number, the ELIN used, and the time the call was placed.

Examples The following example shows sample output, which includes the originating number, the ELIN used, and the time the call was placed:

```
router# show voice emergency callers
EMERGENCY CALLS CALL BACK TABLE
ELIN                | CALLER                | TIME
6045550181          | 8155550151            | Oct 12 2006 04:05:21
6045550182          | 8155550152            | Oct 12 2006 04:05:21
```

Related Commands	Command	Description
	voice emergency response location	Creates a tag for identifying an ERL for the enhanced 911 service.

show voice emergency zone

To display each emergency response zone's list of locations in priority order, use the **show voice emergency zone** command in user EXEC or privileged EXEC mode.

show voice emergency zone

Syntax Description This command has no arguments or keywords.

Command Default No default behavior or values

Command Modes User EXEC (>)
Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SRST 4.2(1) Cisco Unified SIP SRST 4.2(1)	This command was introduced.
	12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SRST 7.0 Cisco Unified SIP SRST 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines Use this command to display a list of the locations, in priority order, of all configured emergency response zones.

Examples

The following example shows a sample output which displays the ERL locations for emergency response zones 90 and 100.

```
EMERGENCY RESPONSE ZONES
zone 90
  location 4
  location 5
  location 6
  location 7
  location 2147483647
zone 100
  location 1 priority 1
  location 2 priority 2
  location 3 priority 3
```

Related Commands	Command	Description
	location	Identifies locations within an emergency response zone.
	voice emergency response location	Creates a tag for identifying an ERL for the enhanced 911 service.
	voice emergency response zone	Creates an emergency response zone within which ERLs can be grouped.

show voice fac statistics

To display the FAC failure statistics collected by the system, use the **show voice fac statistics** command in privileged EXEC mode.

show voice fac statistics

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	15.1(3)T	Cisco Unified CME 8.5	This command was introduced.

Usage Guidelines Use this command to display the forced authentication code (FAC) success or failure statistics collected by the system.

Examples The following is sample output from this command displaying all statistical information:

```
Router# show voice fac statistics
Voice FAC statistics for failure calls:
  Total basic calls:          5
  Total forward calls:       1
```

Related Commands	Command	Description
	show call active voice	Displays call information for voice calls that are in progress.
	show call history voice	Displays the call history table for voice calls.

show voice hunt-group

To display configuration information associated with one or all voice hunt groups in a Cisco Unified Communications Manager Express (Cisco Unified CME) system, use the **show voice hunt-group** command in privileged EXEC mode.

show voice hunt-group *hunt-group-tag* [**brief**] {**longest-idle** | **parallel** | **peer** | **sequential**}

Syntax Description

<i>hunt-group-tag</i>	(Optional) Unique sequence number that identifies the voice hunt group. Range is 1 to 100.
brief	(Optional) Displays brief information on all voice hunt groups in a Cisco CME system.
longest-idle	(Optional) Displays summary of longest-idle voice hunt groups.
parallel	(Optional) Displays summary of parallel voice hunt groups.
peer	(Optional) Displays summary of peer voice hunt groups.
sequential	(Optional) Displays summary of sequential voice hunt groups.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
12.4(24)T	This command was introduced in a release earlier than Cisco IOS Release 12.4(24)T.
15.2(2)T	This command was modified to add stat collect as a field.

Usage Guidelines

Use the **show voice hunt-group** command to get information about voice hunt group configuration on the gateway as an alternative to the **show running-config** command.

Use the **show voice hunt-group** and **show voice hunt-group brief** commands to display hunt group configuration information for all voice hunt groups in a Cisco Unified CME system. Use **show voice hunt-group** *hunt-group-tag* to display data on a specific hunt-tag configuration created by the **voice hunt-group** command. Use the **longest-idle**, **parallel**, **peer**, or **sequential** keywords to display data on a specific type of voice hunt group configuration created by the **voice hunt-group** command.

Examples

The following is a sample output from the **show voice hunt-group** command, displaying all voice hunt groups configured on the router:

```
Router# show voice hunt-group
Group 1
  type: longest-idle
  preference: 0
  preference (sec): 0
  timeout: 0
  final_number: 1
Group 34
  type: parallel
  pilot number: 3, peer-tag 2147483647
  secondary number: 4, peer-tag 2147483646
```

show voice hunt-group

```

    preference: 0
    preference (sec): 0
    timeout: 0
    final_number:

```

The following is a sample output from the **show voice hunt-group** command, displaying the configuration for all the configured voice hunt groups:

```

Router# show voice hunt-group
Group 5
  type: parallel
  pilot number: 1234, peer-tag 1234
  list of numbers:
    MEMBER      USED_BY      STATE      LOGIN/LOGOUT
    =====
    9498889994   9498889994   DOWN      Logout
    9498889993   9498889994   UP        Login
    *            -            -         -
  secondary number: 5678, peer-tag 5678
  list preference: 5
  preference (sec): 8
  timeout: 180
  final_number: 4444
Group 8
  type: longest-idle
  pilot number: 6666, peer-tag 6666
  list of numbers:
    MEMBER      USED_BY      STATE      LOGIN/LOGOUT
    =====
    5106575902   5106575902   UP        Login
    4088531111   4088531111   UP        Login
    4083911375   4083911375   DOWN      Login
    4089306067   4089306067   DOWN      Logout
    8869395033   8869395033   DOWN      Logout
    88686619633   88686619633   DOWN      -
  preference: 0
  preference (sec): 0
  timeout: 180
  final_number:
  hops: 6
  phone-display: Yes
Group 10
  type: longest-idle
  pilot number: 7777777, peer-tag 7777777
  secondary number: 88888888, peer-tag 88888888
  list of numbers:
    MEMBER      USED_BY      STATE      LOGIN/LOGOUT
    =====
    7654321      7654321      DOWN      Logout
    87654321     87654321     UP        Login
    987654321    987654321    UP        Logout
  preference: 0
  preference (sec): 0
  timeout: 180
  final_number:
  hops: 3
  phone-display: No
Group 15
  type: peer
  pilot number: 56789, peer-tag 56789
  list of numbers:
    MEMBER      USED_BY      STATE      LOGIN/LOGOUT
    =====

```



```

      87654321      87654321      DOWN      Login
      9876         9876         UP         Logout
      87654        87654        DOWN        -
preference: 0
preference (sec): 0
timeout: 180
final_number:
hops: 3
phone-display: Yes

```

The following is a sample output from the **show voice hunt-group** command, displaying information for a particular voice hunt group as specified by the *hunt-group-tag* number:

```

Router# show voice hunt-group 5
Group 5
type: parallel
pilot number: 1234, peer-tag 1234
secondary number: 5678, peer-tag 5678
list of numbers:
  MEMBER      USED_BY      STATE      LOGIN/LOGOUT
  =====
  9498889994   9498889994   UP         Logout
  9498889993   9498889993   DOWN       Login
  *            -            -          -
preference: 5
preference (sec): 8
timeout: 20
final_number: 4444

```

The following is a sample output from the **show voice hunt-group** command, displaying information about all the voice hunt groups of a particular type:

```

Router# show voice hunt-group longest-idle

Group 8
type: longest-idle
pilot number: 6666, peer-tag 6666
list of numbers:
  MEMBER      USED_BY      STATE      LOGIN/LOGOUT
  =====
  5106575902   5106575902   UP         Logout
  4088531111   4088531111   UP         Login
  4083911375   4083911375   DOWN       -
  4089306067   4089306067   UP         Logout
  8869395033   8869395033   -          -
  88686619633   88686619633   UP         Login
preference: 0
preference (sec): 0
timeout: 180
final_number:
hops: 6
phone-display: Yes

Group 10
type: longest-idle
pilot number: 7777777, peer-tag 7777777
secondary number: 88888888, peer-tag 88888888
list of numbers:
  MEMBER      USED_BY      STATE      LOGIN/LOGOUT
  =====
  7654321      7654321      UP         Logout
  87654321     87654321     UP         Login
  987654321     987654321     DOWN       Logout
preference: 0

```

show voice hunt-group

```

preference (sec): 0
timeout: 180
final_number:
hops: 3
phone-display: No

```

The following is a sample output from the **show voice hunt-group** command with the keyword **brief**:

```

Router# show voice hunt-group brief
TAG  TYPE  PILOT  LIST
===  ===
5    PAR   1234   9498889-, 9498889-
      5678   9498889-, 9498889-
8    LON   6666   5106575-, 4088531-, 4083911-, 4089306-, 8869395-,.....
10   LON   7777777 7654321, 8765432-, 9876543-
      8888888- 7654321, 8765432-, 9876543-
15   PER   56789   8765432-, 9876, 87654

```

The following is a sample output from the **show voice hunt-group** command, indicating that call statistics is being collected:

```

Router# show voice hunt-group 1
Group 1
  type: parallel
  pilot number: 5000, peer-tag 2147483647
  list of numbers:
  MEMBER   USED_BY   STATE   LOGIN/LOGOUT
  =====
  5001     5001      UP      Logout
  5002     5002      UP      Login
  5011     5011      DOWN    -
  5012     5012      UP      Logout
  preference: 0
  preference (sec): 0
  timeout: 12
  final_number: 5012
  stat collect: yes
  phone-display: Yes

```

The following is a sample output from the **show voice hunt-group** command when there is no voice hunt group configured:

```

Router# show voice hunt-group
no voice hunt-groups configured
Router# show voice hunt-group brief
no voice hunt-groups configured
Router# show voice hunt-group longest-idle

no voice hunt-groups configured
Router#

```

The following table describes the significant fields shown in the output.

Table 40: show voice hunt-group Field Descriptions

Field	Description
Group	Tag number of voice hunt group.

Field	Description
type	Type of voice hunt group. The available voice hunt group types are: longest-idle, parallel, peer and sequential.
pilot number	Number that callers dial to reach the specified voice hunt group.
secondary-number	Alternate number for the specified voice hunt group.
list of numbers	Numbers of the extensions configured in the voice hunt-group command's hunt-tag identifier.
preference	Preference order for the extension or telephone number associated with a dial peer. Range is 0 to 8. Default is 0.
preference (sec)	Preference order for the secondary pilot number. Range is from 0 to 10, where 0 is the highest preference and 10 is the lowest preference. Default is 9.
timeout	Number of seconds after which a call that is not answered at one number is redirected to the next number in the hunt group list.
final_number	Last number in the voice hunt group, after which a call is no longer redirected.
hops	Number of hops before a call proceeds to the final number.
stat collect	Yes indicates that call statistics are being collected for a voice hunt group.
phone-display	Displays the hunt group information on My Phone Apps service button.
hlog-block	Blocks the hlog functionality of voice hunt group on the phone.
peer-tag	Peer hunting tag.

Related Commands

Command	Description
final (voice hunt-group)	Defines the last extension in a voice hunt group.
hops (voice hunt-group)	Defines the number of times that a call is redirected to the next directory number in a peer voice hunt group list before proceeding to the final directory number.
list (voice hunt-group)	Defines the directory numbers that participate in a directory number hunt group.
pilot (voice hunt-group)	Defines the voice dn that callers dial to reach a Cisco Unified Communications Manager Express (Cisco Unified CME) voice hunt group.
timeout (voice hunt-group)	Sets the number of seconds after which a call that is not answered is redirected to the next number in the hunt-group list and defines the last directory number in the hunt group.
voice hunt-group	Configures voice hunt groups and the associated parameters.

show voice hunt-group statistics

To display call statistics from voice hunt groups, use the **show voice hunt-group statistics** command in privileged EXEC mode.

show voice hunt-group *group-id* **statistics** [**last** *hours* **hours** | **start** *day time* [**to** *day time*]]

Syntax Description

<i>group-id</i>	Identifier for the voice hunt group. Range: 1 to 100.
last	Displays the latest call statistics for a voice hunt group for a specified number of hours, counting backward from the current hour. Range: 1 to 167.
<i>hours</i> hours	Number of hours that the call statistics are displayed.
start	Defines the start of the period for which the call statistics are displayed. Default duration is one hour.
<i>day</i>	Abbreviated day of the week. The following abbreviations are valid: sun, mon, tue, wed, thu, fri, sat.
<i>time</i>	Hour of the day. Range: 0 to 23.
to	(Optional) Defines the time the display of the call statistics ends.

Command Modes

Privileged EXEC (#)

Command History

Release	Modification
15.2(2)T	This command was introduced.

Usage Guidelines

Use the **show voice hunt-group statistics** command to display the average and longest times for a voice hunt group to answer a call, make a call, or put a call on hold. The command can also display the number of answered and abandoned calls, the number of calls forwarded to or answered by voice mail, and the number of error calls.

The output is dependent on call activity. If there is no activity, no data is displayed.

If your Cisco Unified CME system is configured with the basic automatic call distribution (B-ACD) and auto-attendant service, you can enable the collection of call statistics for every voice hunt group with the **voice hunt-group statistics collect** command. Additional data is displayed for all agents combined and for individual agents.



Note

On the day that daylight saving time adjusts the time back by one hour at 2 a.m. each year, the original 1 a.m. to 2 a.m. statistics for that day are lost because they are overwritten by the new 1 a.m. to 2 a.m. statistics.

For remote Cisco Unified SCCP IP phones in voice hunt groups, the hold and resume statistics are not updated.

Examples

The following is a sample output from the **show voice hunt-group statistics** command. The output includes direct calls to a voice hunt group number and calls from queue/B-ACD.

```
Router# show voice hunt-group 1 statistics last 1 h
Wed 04:00 - 05:00
Max Agents: 3
Min Agents: 3
Total Calls: 9
Answered Calls: 7
Abandoned Calls: 2
Average Time to Answer (secs): 6
Longest Time to Answer (secs): 13
Average Time in Call (secs): 75
Longest Time in Call (secs): 161
Average Time before Abandon (secs): 8
Calls on Hold: 2
Average Time in Hold (secs): 16
Longest Time in Hold (secs): 21
Per agent statistics:
Agent: 5012
  From Direct Call:
    Total Calls Answered: 3
    Average Time in Call (secs): 70
    Longest Time in Call (secs): 150
    Totals Calls on Hold: 1
    Average Hold Time (secs): 21
    Longest Hold Time (secs): 21
  From Queue:
    Total Calls Answered: 3
    Average Time in Call (secs): 55
    Longest Time in Call (secs): 78
    Total Calls on Hold: 2
    Average Hold Time (secs): 19
    Longest Hold Time (secs): 26
Agent: 5013
  From Direct Call:
    Total Calls Answered: 3
    Average Time in Call (secs): 51
    Longest Time in Call (secs): 118
    Totals Calls on Hold: 1
    Average Hold Time (secs): 11
    Longest Hold Time (secs): 11
  From Queue:
    Total Calls Answered: 1
    Average Time in Call (secs): 4
    Longest Time in Call (secs): 4
Agent: 5014
  From Direct Call:
    Total Calls Answered: 1
    Average Time in Call (secs): 161
    Longest Time in Call (secs): 161
  From Queue:
    Total Calls Answered: 1
    Average Time in Call (secs): 658
    Longest Time in Call (secs): 658
Queue related statistics:
Total calls presented to the queue: 5
Calls handoff to IOS: 5
Number of calls in the queue: 0
Average time to handoff (secs): 2
Longest time to handoff (secs): 3
Number of abandoned calls: 0
```

show voice hunt-group statistics

```

Average time before abandon (secs): 0
Calls forwarded to voice mail: 0
Calls answered by voice mail: 0
Number of error calls: 0

```

The following is a sample output from the **show voice hunt-group statistics** command. The output focuses on queue-related statistics.

```

Queue related statistics:
  Total calls presented to the queue: 8
  Calls handoff to IOS: 3
  Number of calls in the queue: 1
  Average time to handoff (secs): 10
  Longest time to handoff (secs): 15
  Number of abandoned calls: 4
  Average time before abandon (secs): 7
  Calls forwarded to voice mail: 0
  Calls answered by voice mail: 0
  Number of error calls: 0

```

The following is a sample output from the **show voice hunt-group statistics** command. The output shows that no call statistics were collected from voice hunt group 1 from 2:00 to 4:00 on a Monday.

```

Router# show voice hunt-group 1 stat start Mon 2 to Mon 4
Mon 02:00 - 03:00
  No info
Mon 03:00 - 04:00
  No info
Mon 04:00 - 05:00
  No info

```

The following table describes the significant fields shown in the display.

Table 41: show voice hunt-group statistics Field Descriptions

Field	Description
Abandoned calls	Total number of calls abandoned by hunt group agents. This does not include calls going to the final number.
Answered call	Total number of calls answered by hunt group agents.
Average time in call (secs)	Average length of time that unanswered calls waited before going to an agent.
Average time to answer (secs)	Average length of time that all calls to Cisco Unified CME B-ACD waited before being answered.
Average time in hold (secs)	Average length of time that calls were kept on hold for all agents.
Average hold time (secs)	Average length of time that calls waited on hold for this agent.
Average time to handoff (secs)	Average length of time before a call was handed off to IOS
Calls on hold	Total number of calls that were placed on hold.
Calls handoff to IOS	Total number of calls handed off to IOS.

Field	Description
Calls answered by voice mail	Total number of calls to Cisco Unified CME B-ACD that were answered by voice mail.
Calls forwarded to voice mail	Total number of calls to Cisco Unified CME B-ACD that were forwarded to voice mail.
Longest time to answer (secs)	Longest length of time before calls to Cisco Unified CME B-ACD were answered.
Longest time in call (secs)	Longest length of time that all calls to Cisco Unified CME B-ACD that went to an agent waited in a call queue.
Longest time in hold (secs)	Longest length of time that a call spent between being placed on hold and being picked up by agents.
Longest hold time (secs)	Longest length of time that a call to this agent was spent between being placed on hold and being picked up.
Longest time to handoff (secs)	Longest length of time before a call was handed off to IOS.
Max agent	Maximum number of hunt group agents.
Min agent	Minimum number of hunt group agents.
Number of abandoned calls	Total number of calls to Cisco Unified CME B-ACD that hung up before being answered.
Number of calls in the queue	Total number of calls in the queue.
Number of error calls	Total number of error calls.
Total calls	Total number of direct calls made to the hunt group.
Total calls answered	Total number of calls to Cisco Unified CME B-ACD that were answered by an agent.
Total calls on hold	Total number of calls that were placed on hold for this agent.
Total calls presented to the queue	Total number of calls made to Cisco Unified CME B-ACD.



Note From Cisco Unified CME Release 10.5 onwards, abandoned calls will not include the calls going to the final number. However, the total calls includes calls going to the final number. Use the formula "**Final Calls= Total Calls - Answered Calls - Abandoned Calls**", to calculate the calls going to the final number.

Related Commands

Command	Description
voice hunt-group statistics collect	Enables the collection of call statistics for voice hunt groups.

show voice register all

To display all Cisco Unified Session Initiation Protocol (SIP) Survivable Remote Site Telephony (SRST) or Cisco Unified Communications Manager Express (Cisco Unified CME) configurations and register information, use the **show voice register all** command in privileged EXEC mode.

show voice register all

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco SIP SRST 3.0	This command was introduced.
12.3(4)T	Cisco SIP SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.
12.4(4)T	Cisco CME 3.4 Cisco SIP SRST 3.4	This command was added to Cisco CME.
15.0(1)XA	Cisco SIP SRST 8.0	This command was modified to display the signaling transport protocol.
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SIP SRST 8.1	The output display of this command was modified.
15.2(4)M	Cisco Unified CME 9.1	This command was modified to include Key Expansion Module (KEM) data in the output display.

Usage Guidelines

KEM data are displayed for Cisco Unified CME only. Cisco Unified SRST is unable to gather all the configuration details about KEMs from Cisco Unified CM.

Examples

Cisco Unified SIP SRST

The following is a sample output of the **show voice register all** command:

```
Router# show voice register all
VOICE REGISTER GLOBAL
=====
CONFIG [Version=8.1]
=====
  Version 8.1
  Mode is srst
  Max-pool is 10
  Max-dn is 10
  Outbound-proxy is enabled and will use global configured value
  Security Policy: DEVICE-DEFAULT
  timeout interdigit 10
  network-locale[0] US      (This is the default network locale for this box)
```



```

network-locale[1] US
network-locale[2] US
network-locale[3] US
network-locale[4] US
user-locale[0] US    (This is the default user locale for this box)
user-locale[1] US
user-locale[2] US
user-locale[3] US
user-locale[4] US    Active registrations : 0
Total SIP phones registered: 0
Total Registration Statistics
  Registration requests : 0
  Registration success   : 0
  Registration failed    : 0
  unRegister requests   : 0
  unRegister success     : 0
  unRegister failed      : 0
  Attempts to register
    after last unregister : 0
  Last register request time :
  Last unregister request time :
  Register success time      :
  Unregister success time    :
VOICE REGISTER DN
=====
Dn Tag 1
Config:
  Number is 45111
  Preference is 0
  Huntstop is disabled
  Pool 1 has this DN configured for line 1
Dn Tag 2
Config:
  Number is 45112
  Preference is 0
  Huntstop is disabled
  Pool 2 has this DN configured for line 1
Dn Tag 3
Config:
  Number is 45113
  Preference is 0
  Huntstop is disabled
  Pool 3 has this DN configured for line 1, 2
Dn Tag 4
Config:
Dn Tag 7
Config:
  Number is 451110
  Preference is 0
  Huntstop is disabled
  Pool 1 has this DN configured for line 4
Dn Tag 8
Config:
  Pool 1 has this DN configured for line 3
VOICE REGISTER POOL
=====
Pool Tag 1
Config:
  Mac address is 001B.535C.D410
  Number list 1 : DN 1
  Number list 3 : DN 8
  Number list 4 : DN 7
  Proxy Ip address is 0.0.0.0
  DTMF Relay is disabled

```

show voice register all

```

    kpml signal is disabled
    Lpcor Type is none
    Reason for unregistered state:
        No registration request since last reboot/unregister
Dialpeers created:
Statistics:
    Active registrations : 0
    Total SIP phones registered: 0
    Total Registration Statistics
        Registration requests : 0
        Registration success : 0
        Registration failed : 0
        unRegister requests : 0
        unRegister success : 0
        unRegister failed : 0
        Attempts to register
            after last unregister : 0
        Last register request time :
        Last unregister request time :
        Register success time :
        Unregister success time :
    Pool Tag 2
Config:
    Mac address is 0015.C68E.6D13
    Number list 1 : DN 2
    Proxy Ip address is 0.0.0.0
    DTMF Relay is disabled
    kpml signal is disabled
    Lpcor Type is none
    Reason for unregistered state:
        No registration request since last reboot/unregister
Dialpeers created:
Statistics:
    Active registrations : 0
    Total SIP phones registered: 0
    Total Registration Statistics
        Registration requests : 0
        Registration success : 0
        Registration failed : 0
        unRegister requests : 0
        unRegister success : 0
        unRegister failed : 0
        Attempts to register
            after last unregister : 0
        Last register request time :
        Last unregister request time :
        Register success time :
        Unregister success time :
    Pool Tag 3
Config:
    Mac address is 0021.5553.8998
    Number list 1 : DN 3
    Number list 2 : DN 3
    Proxy Ip address is 0.0.0.0
    DTMF Relay is disabled
    kpml signal is enabled
    Lpcor Type is none
    Reason for unregistered state:
        No registration request since last reboot/unregister
Dialpeers created:
Statistics:
    Active registrations : 0
    Total SIP phones registered: 0
    Total Registration Statistics

```

```

Registration requests : 0
Registration success   : 0
Registration failed    : 0
unRegister requests   : 0
unRegister success     : 0
unRegister failed     : 0
Attempts to register
    after last unregister : 0
Last register request time :
Last unregister request time :
Register success time      :
Unregister success time    :

```

Cisco Unified CME

The following is a sample output of the **show voice register all** command:

```

Router# show voice register all
1) show voice register all
VOICE REGISTER GLOBAL
=====
CONFIG [Version=8.1]
=====
Version 8.1
Mode is cme
Max-pool is 10
Max-dn is 10
Outbound-proxy is enabled and will use global configured value
Security Policy: DEVICE-DEFAULT
Source-address is 8.3.3.5 port 5060
Time-format is 12
Date-format is M/D/Y
Time-zone is 5
Hold-alert is disabled
Mwi stutter is disabled
Mwi registration for full E.164 is disabled
Forwarding local is enabled
Privacy is enabled
Privacy-on-hold is disabled
Dst auto adjust is enabled
    start at Apr week 1 day Sun time 02:00
    stop  at Oct week 8 day Sun time 02:00
Max redirect number is 5
IP QoS DSCP:
    ef (the MS 6 bits, 46, in ToS, 0xB8) for media
    cs3 (the MS 6 bits, 24, in ToS, 0x60) for signal
    af41 (the MS 6 bits, 34, in ToS, 0x88) for video
    default (the MS 6 bits, 0, in ToS, 0x0) for service
Telnet Level: 0
Tftp path is flash:
Generate text file is disabled
Tftp files are created, current syncinfo 0001140473454008
OS79XX.TXT is not created
timeout interdigit 10
network-locale[0] US      (This is the default network locale for this box)
network-locale[1] US
network-locale[2] US
network-locale[3] US
network-locale[4] US
user-locale[0] US        (This is the default user locale for this box)
user-locale[1] US

```

show voice register all

```

user-locale[2] US
user-locale[3] US
user-locale[4] US   Active registrations   : 0
Total SIP phones registered: 0
Total Registration Statistics
  Registration requests   : 0
  Registration success    : 0
  Registration failed     : 0
  unRegister requests    : 0
  unRegister success     : 0
  unRegister failed      : 0
  Attempts to register
    after last unregister : 0
  Last register request time :
  Last unregister request time :
  Register success time      :
  Unregister success time    :
VOICE REGISTER DN
=====
Dn Tag 1
Config:
  Number is 45111
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  Pool 1   has this DN configured for line 1
Dn Tag 2
Config:
  Number is 45112
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  call-forward b2bua noan 999 timeout 8
  after-hour exempt
  Pool 2   has this DN configured for line 1
  Pool 7   has this DN configured for line 1
Dn Tag 3
Config:
  Number is 45113
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  call-forward b2bua all 87687
  Pool 3   has this DN configured for line 1, 2
Dn Tag 4
Config:
  Auto answer is disabled
Dn Tag 7
Config:
  Number is 451110
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  after-hour exempt
  Pool 1   has this DN configured for line 4
Dn Tag 8
Config:
  Auto answer is disabled
  call-forward b2bua all 678
  after-hour exempt
  Pool 1   has this DN configured for line 3
VOICE REGISTER TEMPLATE
=====
Temp Tag 1

```

```

Config:
  Attended Transfer is enabled
  Blind Transfer is enabled
  Semi-attended Transfer is enabled
  Conference is enabled
  Caller-ID block is disabled
  DnD control is enabled
  Anonymous call block is disabled
  Dialplan Tag is 1
  softkey connected  Confrn
  Lpcor type none
  Pool 4 has this template configured
VOICE REGISTER DIALPLAN
=====
Dialplan Tag 1
Config:
  Type is 7905-7912
  Template 1 has this dialplan configured
  Pool 4 has this dialplan configured
VOICE REGISTER POOL
=====
  Pool Tag 1
Config:
  Mac address is 001B.535C.D410
  Type is 7960
  Number list 1 : DN 1
  Number list 3 : DN 8
  Number list 4 : DN 7
  Proxy Ip address is 0.0.0.0
  DTMF Relay is disabled
  Call Waiting is enabled
  DnD is disabled
  Busy trigger per button value is 0
  call-forward phone all is 4566
  call-forward b2bua all 4555
  keep-conference is enabled
  Lpcor Type is none
  Transport type is udp
  service-control mechanism is not supported
  Privacy feature is not configured.
  Privacy button is disabled
  Reason for unregistered state:
    No registration request since last reboot/unregister
Dialpeers created:
Statistics:
  Active registrations : 0
  Total SIP phones registered: 0
  Total Registration Statistics
    Registration requests : 0
    Registration success : 0
    Registration failed : 0
    unRegister requests : 0
    unRegister success : 0
    unRegister failed : 0
    Attempts to register
      after last unregister : 0
    Last register request time :
    Last unregister request time :
    Register success time :
    Unregister success time :
  Pool Tag 2
Config:
  Mac address is 0015.C68E.6D13
  Type is 7960

```

show voice register all

```

Number list 1 : DN 2
Proxy Ip address is 0.0.0.0
DTMF Relay is disabled
Call Waiting is enabled
DnD is disabled
Busy trigger per button value is 0
call-forward phone noan is 9886, timeout 98
keep-conference is enabled
username pool2 password lab
Lpcor Type is none
Transport type is udp
service-control mechanism is not supported
Privacy feature is not configured.
Privacy button is disabled
Reason for unregistered state:
    No registration request since last reboot/unregister
Dialpeers created:
Statistics:
    Active registrations : 0

Total SIP phones registered: 0
Total Registration Statistics
    Registration requests : 0
    Registration success : 0
    Registration failed : 0
    unRegister requests : 0
    unRegister success : 0
    unRegister failed : 0
    Attempts to register
        after last unregister : 0
    Last register request time :
    Last unregister request time :
    Register success time :
    Unregister success time :

Pool Tag 3
Config:
    Mac address is 0021.5553.8998
    Type is 7975
    Number list 1 : DN 3
    Number list 2 : DN 3
    Proxy Ip address is 0.0.0.0
    DTMF Relay is disabled
    Call Waiting is enabled
    DnD is enabled
    Busy trigger per button value is 0
    call-forward phone all is 45112
    call-forward b2bua all 45111
    after-hour exempt
    keep-conference is enabled
    kpml signal is enabled
    Lpcor Type is none
    Transport type is udp
    service-control mechanism is not supported
    Privacy feature is not configured.
    Privacy button is disabled
    Reason for unregistered state:
        No registration request since last reboot/unregister
Dialpeers created:
Statistics:
    Active registrations : 0
    Total SIP phones registered: 0
    Total Registration Statistics
        Registration requests : 0
        Registration success : 0

```

```

Registration failed      : 0
unRegister requests     : 0
unRegister success      : 0
unRegister failed       : 0
Attempts to register
  after last unregister : 0
Last register request time :
Last unregister request time :
Register success time      :
Unregister success time    :
Pool Tag 4
Config:
Mac address is 8989.9867.8769
Proxy Ip address is 0.0.0.0
DTMF Relay is disabled
Call Waiting is enabled
DnD is disabled
Busy trigger per button value is 0
keep-conference is enabled
template is 1
Lpcor Type is none
Transport type is udp
service-control mechanism is not supported
Privacy feature is not configured.
Privacy button is disabled
Reason for unregistered state:
  No registration request since last reboot/unregister
Dialpeers created:
Statistics:
Active registrations      : 0
Total SIP phones registered: 0
Total Registration Statistics
  Registration requests   : 0
  Registration success    : 0
  Registration failed     : 0
  unRegister requests     : 0
  unRegister success      : 0
  unRegister failed       : 0
  Attempts to register
    after last unregister : 0
  Last register request time :
  Last unregister request time :
  Register success time      :
  Unregister success time    :
Pool Tag 7
Config:
Mac address is 0018.BAC8.D2B1
Number list 1 : DN 2
Proxy Ip address is 0.0.0.0
DTMF Relay is disabled
Call Waiting is enabled
DnD is disabled
Busy trigger per button value is 0
keep-conference is enabled
Lpcor Type is none
Transport type is udp
service-control mechanism is not supported
Privacy feature is not configured.
Privacy button is disabled
Reason for unregistered state:
  No registration request since last reboot/unregister
Dialpeers created:
Statistics:
Active registrations      : 0

```

```

Total SIP phones registered: 0
Total Registration Statistics
  Registration requests   : 0
  Registration success    : 0
  Registration failed     : 0
  unRegister requests    : 0
  unRegister success      : 0
  unRegister failed       : 0
  Attempts to register
    after last unregister : 0
  Last register request time :
  Last unregister request time :
  Register success time      :
  Unregister success time    :

```

The following is an example of a partial output of the **show voice register all** command, showing KEM data with the phone type information:

```

Router# show voice register all
Pool Tag 5
Config:
  Mac address is B4A4.E328.4698
  Type is 9971 addon 1 CKEM
  Number list 1 : DN 2
  Number list 2 : DN 3
  Proxy Ip address is 0.0.0.0
  DTMF Relay is disabled
  Call Waiting is enabled
  DnD is disabled
  Video is enabled
  Camera is enabled
  Busy trigger per button value is 0
  keep-conference is enabled
  registration expires timer max is 200 and min is 60
  kpml signal is enabled
  Lpcor Type is none

```

The following is a sample output of the **show voice register all** command, showing the three KEMs configured with phone type 9971:

```

Router# show voice register all
Pool Tag 4
Config:
  Mac address is B4A4.E328.4698
  Type is 9971 addon 1 CKEM 2 CKEM 3 CKEM
  Number list 1 : DN 4
  Number list 2 : DN 5
  Number list 3 : DN 9

```

The following table describes the significant fields shown in this output.

Table 42: show voice register all Field Descriptions

Field	Description
Pool Tag	Shows the assigned tag number of the current voice register pool.
Config	Shows the voice register pool.
Network address and Mask	Shows network address and mask information when the id command is configured.

Field	Description
Number list, Pattern, and Preference	Shows the number command configuration.
Proxy IP address	Shows the proxy command configuration.
Default preference	Shows the default preference value of this pool.
Incoming called number	Shows the incoming called-number command configuration.
Translate outgoing called tag	Shows the translate-outgoing command configuration.
Class of Restriction List Tag	Shows the COR tag.
Incoming corlist name	Shows the cor command configuration.
Application	Shows the application command configuration for this pool.
Dialpeers created	Lists all the dial peers created and their contents. Dial-peer contents differ for each application and are not described here.
Statistics	Shows the registration statistics for this pool.
Active registrations	Shows the current active registrations.
Total Registration Statistics	Shows the total registration statistics for this pool.
Registration requests	Shows the incoming registration requests.
Registration success	Shows the successful registrations.
Registration failed	Shows the failed registrations.
unRegister requests	Shows the incoming unregister/registration expire requests.
unRegister success	Reports the number of successful unregisters.
unRegister failed	Reports the number of failed unregisters.

Related Commands

Command	Description
application (voice register pool)	Selects the session-level application for the dial peer associated with an individual Cisco Unified SIP IP phone in a Cisco Unified CME environment or for a group of phones in a Cisco Unified SIP SRST environment.
cor (voice register pool)	Configures a class of restriction on the VoIP dial peers associated with directory numbers.
id (voice register pool)	Explicitly identifies a locally available, individual Cisco Unified SIP IP phone or, when running Cisco Unified SIP SRST, a set of Cisco Unified SIP IP phones.

Command	Description
incoming called-number (dial peer)	Specifies a digit string that can be matched by an incoming call to associate the call with a dial peer.
number (voice register pool)	Indicates the E.164 phone numbers that the registrar permits to handle the Register message from a Cisco Unified SIP IP phone.
proxy (voice register pool)	Autogenerates additional VoIP dial peers to reach the main proxy whenever a Cisco Unified SIP IP phone registers with a Cisco Unified SIP SRST gateway.
show sip-ua status registrar	Displays all the SIP endpoints currently registered with the contact address.
show voice register dial-peers	Displays details of all dynamically created VoIP dial peers associated with the Cisco Unified SIP SRST or Cisco Unified CME register event.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
translate-outgoing (voice register pool)	Allows an explicit setting of translation rules on the VoIP dial peer to modify a phone number dialed by any Cisco Unified IP phone user.

show voice register credential

To display configuration information associated with a credential file used for authorization, use the **show voice register credential** command in privileged EXEC mode.

show voice register credential

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(11)XJ	Cisco Unified CME 4.1	This command was introduced.
12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.

Examples

The following is sample output from this command:

```
Router# show voice register credential
username: Jsmith, password: 1234abc, service: PRESENCE , file index 3
username: Ksample, password: xyz1234, service: PRESENCE , file index 3
username: Mmore, password: updwssc, service: PRESENCE , file index 3
username: Sstove, password: 12bms, service: PRESENCE , file index 3
username: Yjones, password: 3571lvrus, service: PRESENCE , file index 5
username: Yjones2, password: 55rrtuv, service: PRESENCE OOD_REFERER , file index 5
username: vtemp, password: 1234567, service: PRESENCE , file index 5
```

The table contains descriptions of fields shown in the output, listed in order of appearance.

Table 43: show voice register credential Field Descriptions

Field	Description
username	Username that is authorized.
password	Password that is authorized.
service	Type of service for which the credential file is used; presence or Out-of-dialog REFER (OOD-R).
file index	Identification number of the credential file defined with the authenticate command.

Related Commands

Command	Description
authenticate (voice register global)	Defines the authenticate mode for SIP phones in a Cisco Unified CME system.
credential load	Reloads a credential file into Flash memory.

Command	Description
show voice register all	Displays all Cisco Unified CME and Cisco Unified SIP SRST configurations and register information.

show voice register dial-peers

To display details of all dynamically created VoIP dial peers associated with the Cisco Unified Session Initiation Protocol (SIP) Survivable Remote Site Telephony (SRST) or Cisco Unified CallManager Express (Cisco Unified CME) register event, use the **show voice register dial-peers** command in privileged EXEC mode.

show voice register dial-peers [*pool tag*]

Syntax Description

<i>pool tag</i>	Number of entries in attempted registrations table. Size range from 0 to 50.
-----------------	--

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco SIP SRST 3.0	This command was introduced.
12.3(4)T	Cisco SIP SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.
12.4(4)T	Cisco CME 3.4 Cisco SIP SRST 3.4	This command was added to Cisco CME.
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SIP SRST 8.1	This command was modified. Pool tag keyword-argument was added. Command output display was also modified to display dial-peers specific to a pool.

Usage Guidelines

Use this command to display the dial-peers associated with a pool. To display the dynamic dial-peers associated with a specific pool, use the pool keyword followed by the pool tag. When using the pool keyword, you must specify the pool tag.

Examples

Cisco Unified CME and Cisco Unified SIP SRST

The following is a sample output from this command displaying all dial-peers:

```
Router#show voice register dial-peers
Dial-peers for Pool 1
dial-peer voice 40001 voip
 destination-pattern 45111
 session target ipv4:8.3.3.111:5060
 session protocol sipv2
 call-fwd-all 4555
 after-hours-exempt FALSE
dial-peer voice 40002 voip
 destination-pattern 45113
 session target ipv4:8.33.33.111:5060
 session protocol sipv2
 after-hours-exempt FALSE
Dial-peers for Pool 2
```

show voice register dial-peers

```

dial-peer voice 40003 voip
destination-pattern 45112
session target ipv4:8.33.33.112:5060
session protocol sipv2
call-fwd-noan-timeou 8
call-fwd-noan          999
after-hours-exempt    TRUE

```

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying all statistical information related to pool 1:

```

Router# show voice register dial-peers pool 1
Dial-peers for Pool 1:
dial-peer voice 40004 voip
destination-pattern 1000
redirect ip2ip
session target ipv4:9.13.18.40:19633
session protocol sipv2
dtmf-relay rtp-nte sip-notify
digit collect kpml
codec g711ulaw bytes 160
after-hours-exempt FALSE
dial-peer voice 40001 voip
destination-pattern 2000
redirect ip2ip
session target ipv4:9.13.18.40:19634
session protocol sipv2
dtmf-relay rtp-nte sip-notify
digit collect kpml
codec g711ulaw bytes 160

```

after-hours-exempt FALSE**Related Commands**

Command	Description
show sip-ua status registrar	Displays all the SIP endpoints currently registered with the contact address.
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.

show voice register dialplan

To display all configuration information for a specific SIP dial plan, use the **show voice register dialplan** command in privileged EXEC mode.

show voice register dialplan {*tag* | **all**}

Syntax Description

<i>tag</i>	Number that identifies the SIP dialplan. Range: 1 to 24.
all	(Optional) Displays all the dialplans defined in a system.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(11)XJ	Cisco Unified CME 4.1	This command was introduced.
12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
15.1(2)T	Cisco Unified CME 8.1	This command was modified. All keyword was added. Pools and templates that have dialplan configured are also displayed in the output.

Usage Guidelines

Use this command to verify the configuration of SIP dial plans. You define a dial plan with the **voice register dialplan** command and assign it to a SIP phone with the **dialplan** command.

In Cisco Unified CME 8.1 and later, **show voice register dialplan** command also displays the pools and templates that have the dialplan configured. The pools which have the dialplan configured by virtue of inclusion of a template is also displayed as part of the pool list display. If a dialplan is configured under both template and pool, the dialplan under the pool takes precedence and the pool is displayed.

When used with the **all** keyword, the **show voice register dialplan** command displays configuration information for all the dialplans defined in a system.

Examples

The following is sample output from this command displaying information for dialplan 1:

```
Router# show voice register dialplan 1
Dialplan Tag 1
Config:
  Type is 7905-7912
  Template 1 has this dialplan configured
  Pool 4 has this dialplan configured
```

The following is a sample output from this command displaying information for all the dialplans configured in a system:

```
Router# show voice register dialplan all
Dialplan Tag 1
Config:
  Type is 7905-7912
```

```

Pattern 1 is 9879, timeout is 0, user option is phone, button is default
Pattern 24 is 908, timeout is 0, user option is phone, button is default
Dialplan Tag 2
Config:
Type is 7940-7960-others
Pattern 3 is 9845, timeout is 0, user option is phone, button is default
Pattern 20 is 9098, timeout is 0, user option is phone, button is default

```

The table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 44: show voice register dialplan Field Descriptions

Field	Description
Config	List of configuration options defined for this SIP dial plan.
Dialplan Tag	Tag number of the requested SIP dial plan.
Pattern	Dial pattern defined for a SIP dial plan with the pattern command in voice register dialplan configuration mode.
Type	Phone type defined for a SIP dial plan with the type command.

Related Commands

Command	Description
dialplan	Assigns a dial plan to a SIP phone.
pattern (voice register dialplan)	Defines a dial pattern for a SIP dial plan.
show voice register all	Displays all Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
type (voice register dialplan)	Defines a phone type for a SIP dial plan.
voice register dialplan	Enters voice register dialplan configuration mode to define a dial plan for SIP phones.
voice register pool	Enters voice register pool configuration mode for SIP phones.

show voice register dn

To display all configuration information associated with a specific voice register dn, use the **show voice register dn** command in privileged EXEC mode.

show voice register dn {*tag* | **all**}

Syntax Description

<i>tag</i>	Tag number of the voice register dn for which to display information. Range is 1 to 750.
all	(Optional) Displays configuration information associated with all voice register dns defined in a system.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Version	Modification
12.4(4)T	Cisco CME 3.4 and Cisco SIP SRST 3.4	This command was introduced.
15.1(2)T	Cisco CME 8.1 and Cisco SIP SRST 8.1	This command was modified. The display output now shows pools that have DNs configured under them. All keyword was added to show configuration information for all voice register dns defined in system.

Usage Guidelines

In Cisco Unified CME 8.1 and Cisco Unified SIP SRST 8.1, the show voice register dn command displays the pools that have the DNs configured under them. When used with all keyword, the show voice register dn command displays configuration information for all the DNs defined in a system.

Examples

Cisco Unified SIP CME

The following is a sample output from this command:

```
Router# show voice register dn 1
Dn Tag 1
Config:
  Number is 11
  Preference is 10
  Huntstop is enabled
  Translation-profile incoming saaa
  Allow watch is enabled
  Pool 1      has this DN configured for line 1
```

Cisco Unified SIP SRST

The following is a sample output from this command:

```
Router# show voice register dn 2
Dn Tag 1
Config:
```

```

Number is 11
Preference is 10
Huntstop is enabled
Translation-profile incoming saaa
Allow watch is enabled
Pool 1      has this DN configured for line 1

```

Cisco Unified SIP SRST

The following is a sample output from this command displaying information for all the dns:

```

Dn Tag 1
Config:
  Number is 11
  Preference is 10
  Huntstop is enabled
  Translation-profile incoming saaa
  Allow watch is enabled
  Pool 1      has this DN configured for line 1
Dn Tag 2
Config:
  Number is 12
  Preference is 1
  Huntstop is enabled
  Allow watch is enabled
  Pool 2      has this DN configured for line 1, 2

```

Cisco Unified SIP CME

The following is a sample output from this command displaying information for all the dns:

```

Router# show voice register dn all
Dn Tag 1
Config:
  Number is 45111
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
Dn Tag 2
Config:
  Number is 45112
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  call-forward b2bua noan 999 timeout 8
  after-hour exempt
  Pool 2      has this DN configured for line 1
  Pool 7      has this DN configured for line 1
Dn Tag 3
Config:
  Number is 45113
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  call-forward b2bua all 87687
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  call-forward b2bua all 87687

```

```

Pool 1      has this DN configured for line 1
Pool 3      has this DN configured for line 1, 2
Dn Tag 4
Config:
  Auto answer is disabled
Dn Tag 7
Config:
  Number is 451110
  Preference is 0
  Huntstop is disabled
  Auto answer is disabled
  after-hour exempt
  Pool 1      has this DN configured for line 4
Dn Tag 8
Config:
  Auto answer is disabled
  call-forward b2bua all 678
  after-hour exempt
  Pool 1      has this DN configured for line 3

```

The following table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 45: show voice register dn Field Descriptions

Field	Description
Auto answer	Status of auto-answer feature defined with the auto-answer command.
Config	List of configuration options defined for this voice register dn.
Dn Tag	Tag number of the requested voice register dn.
Huntstop	Status of huntstop behavior defined with the huntstop command.
Number	Telephone or extension number set with the number command in voice register dn configuration mode.
Preference	Preference order set with the preference command in voice register dn configuration mode.

Related Commands

Command	Description
show voice register pool	Displays all configuration information associated with a particular voice register pool.
show voice register dn all	Displays information associated with all the dns configured in a system.
voice register dn	Enters voice register dn configuration mode to define an extension for a SIP phone line.

show voice register global

To display all global configuration parameters associated with Cisco Unified SIP IP phones, use the **show voice register global** command in privileged EXEC mode.

show voice register global

Syntax Description This command has no arguments or keywords.

Command Default Privileged EXEC (#)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)T	Cisco CME 3.4 Cisco SIP SRST 3.4	This command was introduced.
	15.0(1)XA	Cisco SIP SRST 8.0	This command was modified to display the signaling transport protocol.
	15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SIP SRST 8.1	This command was modified to include global statistics in the output display.
	15.2(2)T	Cisco Unified CME 9.0	This command was modified to include conference hardware in the output display.

Examples

Cisco Unified CME

The following is a sample output from the **show voice register global** command used in Cisco Unified CME:

```
Router# show voice register global
CONFIG [Version=8.1]
=====
Version 8.1
Mode is cme
Max-pool is 10
Max-dn is 10
Outbound-proxy is enabled and will use global configured value
Security Policy: DEVICE-DEFAULT
Source-address is 8.3.3.5 port 5060
Time-format is 12
Date-format is M/D/Y
Time-zone is 5
Hold-alert is disabled
Mwi stutter is disabled
Mwi registration for full E.164 is disabled
Forwarding local is enabled
Privacy is enabled
Privacy-on-hold is disabled
Dst auto adjust is enabled
  start at Apr week 1 day Sun time 02:00
  stop  at Oct week 8 day Sun time 02:00
Max redirect number is 5
IP QoS DSCP:
```

```

ef (the MS 6 bits, 46, in ToS, 0xB8) for media
cs3 (the MS 6 bits, 24, in ToS, 0x60) for signal
af41 (the MS 6 bits, 34, in ToS, 0x88) for video
default (the MS 6 bits, 0, in ToS, 0x0) for service
Telnet Level: 0
Tftp path is flash:
Generate text file is disabled
Tftp files are created, current syncinfo 0001140473454008
OS79XX.TXT is not created
timeout interdigit 10
network-locale[0] US      (This is the default network locale for this box)
network-locale[1] US
network-locale[2] US
network-locale[3] US
network-locale[4] US
user-locale[0] US      (This is the default user locale for this box)
user-locale[1] US
user-locale[2] US
user-locale[3] US
user-locale[4] US      Active registrations   : 0
Total SIP phones registered: 0
Total Registration Statistics
  Registration requests   : 0
  Registration success    : 0
  Registration failed     : 0
  unRegister requests    : 0
  unRegister success      : 0
  unRegister failed      : 0
  Attempts to register
    after last unregister : 0
  Last register request time :
  Last unregister request time :
  Register success time      :
  Unregister success time    :

```

The following is a sample output from the **show voice register global** command. The output shows that hardware conferencing is enabled.

```

Router# show voice register global
CONFIG [Version=8.7]
=====
Version 8.7
Mode is cme
Max-pool is 50
Max-dn is 100
Outbound-proxy is enabled and will use global configured value
Security Policy: DEVICE-DEFAULT
Forced Authorization Code Refer is enabled
Source-address is 1.5.40.20 port 5060
Time-format is 12
Date-format is M/D/Y
Time-zone is 5
Hold-alert is disabled
Mwi stutter is disabled
Mwi registration for full E.164 is disabled
Forwarding local is enabled
Video is enabled
Camera is enabled
Privacy is enabled
Privacy-on-hold is disabled
Conference hardware is enabled
Dst auto adjust is enabled

```

```

start at Apr week 1 day Sun time 02:00
stop  at Oct week 8 day Sun time 02:00

```

Cisco Unified SIP SRST

The following is a sample output from the **show voice register global** command used in Cisco Unified SIP SRST:

```

Router# show voice register global
CONFIG [Version=8.1]
=====
Version 8.1
Mode is srst
Max-pool is 10
Max-dn is 10
Outbound-proxy is enabled and will use global configured value
Security Policy: DEVICE-DEFAULT
timeout interdigit 10
network-locale[0] US      (This is the default network locale for this box)
network-locale[1] US
network-locale[2] US
network-locale[3] US
network-locale[4] US
user-locale[0] US      (This is the default user locale for this box)
user-locale[1] US
user-locale[2] US
user-locale[3] US
user-locale[4] US   Active registrations   : 0
Total SIP phones registered: 0
Total Registration Statistics
  Registration requests   : 0
  Registration success    : 0
  Registration failed     : 0
  unRegister requests     : 0
  unRegister success      : 0
  unRegister failed       : 0
  Attempts to register
    after last unregister : 0
  Last register request time :
  Last unregister request time :
  Register success time :
  Unregister success time :

```

The following table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 46: show voice register global Field Descriptions

Field	Description
Conference hardware	Shows whether the Cisco Unified SIP IP phone will perform local mixing on its own or request Cisco Unified CME to perform hardware conferencing using its DSP resource.
Date-format	Value of date-format command.
DST auto adjust	Setting of dst auto-adjust command.
Forwarding local	Setting of forwarding local command.

Field	Description
Generate text file	Setting of text file command.
Hold-alert	Setting of hold-alert command.
Load	Value of load command.
Max-dn	Reports the maximum number of SIP voice register directory numbers (DNs) supported by the Cisco Unified SIP CME or Cisco Unified SIP SRST router as configured with the max-dn command. The maximum possible number is platform-dependent.
Max-pool	Reports the maximum number of SIP voice register pools supported by the Cisco Unified SIP SRST or Cisco Unified CME router as configured with the max-pool command. The maximum possible number is platform-dependent.
Max redirect number	Maximum number of redirects set with the max-redirect command.
Mode	Reports the mode as configured with the mode command. Value can be either Cisco Unified CME or Cisco Unified SIP SRST.
MWI registration	Setting of mw i command.
MWI stutter	Setting of mw i stutter command.
Time-format	Value of time-format command.
Time-zone	Number of the timezone selected with the timezone command.
TFTP path	Directory location of provisioning files for Cisco Unified SIP IP phones that is specified with the tftp-path command.
Version	Reports the Cisco Unified SIP SRST or Cisco Unified CME version number.

Related Commands

Command	Description
show sip-ua status registrar	Displays all the Cisco Unified SIP IP phones currently registered with the contact address.
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register dial-peers	Displays details of all dynamically created VoIP dial peers associated with the Cisco Unified SIP SRST or Cisco Unified CME register event.
voice register global	Enters voice register global configuration mode to set global parameters for all supported Cisco Unified SIP IP phones in a Cisco Unified CME or Cisco Unified SIP SRST environment.

show voice register hfs

To display the HTTP File-Fetch Server (HFS) file bindings of firmware files accessible to Cisco Unified SIP IP phones, use the **show voice register hfs** command in privileged EXEC mode.

show voice register hfs

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Privileged EXEC

Command History	Release	Modification
	15.2(1)T	This command was introduced.

Usage Guidelines Use the **show voice register hfs** command with Cisco Unified CME 8.8 or a later version.

This command displays the bindings of firmware files that are accessible to Cisco Unified SIP IP phones using the HFS download service.

Examples

The following is a sample output from the **show voice register hfs** command:

```
Router(config)# show voice register hfs
Fetch Service Enabled = Y
  App enabled port = 6970
  Use default port = N
  Registered session-id = 19

Default home path = flash:/
  Ongoing fetches from home = 0

HTTP File Server Bindings
  No. of bindings = 11
  No. of url table entries = 9
  No. of alias table entries = 9
```

Related Commands	Command	Description
	create profile (voice register global)	Generates the configuration profile files required for SIP phones.
	hfs enable	Enables the HFS download service on an IP Phone in a Cisco Unified CME system.

show voice register pool

To display all configuration information associated with a specific voice register pool, use the **show voice register pool** command in privileged EXEC mode.

show voice register pool {*pool-tag* | **all**} [**brief**]

Syntax Description

<i>pool-tag</i>	Tag number of the voice register pool for which information is displayed. Range is 1 to 262. Note The maximum number of pools is version and platform dependent.
all	Displays the information of all the voice register pools.
brief	(Optional) Displays brief information of all voice register pools.

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco SIP SRST	This command was introduced.
12.3(4)T	Cisco SIP SRST	This command was integrated into Cisco IOS Release 12.3(4)T.
12.4(4)T	Cisco CME 3.4 Cisco SIP SRST 3.4	This command was added to Cisco CME.
12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SIP SRST 4.2(1)	This command was modified to include emergency response location information in the output display.
12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SIP SRST 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.
15.0(1)XA	Cisco Unified CME 8.0	This command was modified to include logical partitioning class of restriction (LPCOR) information in the output display.
15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.
15.1(2)T	Cisco Unified CME 8.1	This command was modified. The all and brief keywords were added. Voice-class stun-usage information is displayed in the output.
15.2(2)T	Cisco Unified CME 9.0	This command was modified to include conference admin, conference add mode, and conference drop mode in the output display.
15.2(4)M	Cisco Unified CME 9.1 Cisco Unified SIP SRST 9.1	This command was modified to include Key Expansion Module (KEM) data in the output display.

Cisco IOS Release	Cisco Product	Modification
Cisco IOS XE Everest 16.6.1	Unified SRST 12.0	This command was modified to include the IPv6 address in the output display for Unified SRST.

Examples

Cisco Unified CME

The following is a sample output of the **show voice register pool** command, displaying information for voice register pool 33 in Cisco Unified CME:

```
Router# show voice register pool 33

Pool Tag 33
Config:
  Mac address is 0009.B7F7.532E
  Type is 7960
  Number list 1 : DN 1
  Number list 2 : DN 2
  Number list 3 : DN 3
  Proxy Ip address is 0.0.0.0
  DTMF Relay is disabled
  Call Waiting is enabled
  DnD is disabled
  Busy trigger per button value is 0
  keep-conference is enabled
  template is 1
  Emergency response location 3
  Lpcor Type is local
  Lpcor Incoming is sip_group
  Lpcor Outgoing is sip_group

  Transport type is udp
  service-control mechanism is not supported
  Privacy feature is not configured.
  Privacy button is disabled

Dialpeers created:

Statistics:
  Active registrations : 0

Total SIP phones registered: 0
Total Registration Statistics
  Registration requests : 0
  Registration success : 0
  Registration failed : 0
  unRegister requests : 0
  unRegister success : 0
  unRegister failed : 0
```

The following is a sample output of the **show voice register pool** command. The output shows that a meet-me hardware conference administrator has been assigned, the conference creator or any of the participants can add a new participant, and the conference creator can terminate the active video hardware conference by hanging up.

```
Router# show voice register pool 15
Pool Tag 15
```

```

Config:
  Mac address is 1C17.D340.81F0
  Type is 9951
  Number list 1 : DN 15
  Proxy Ip address is 0.0.0.0
  Current Phone load version is Cisco-CP9951/9.0.1
  DTMF Relay is enabled, sip-notify
  Call Waiting is enabled
  DnD is disabled
  Video is enabled
  Camera is enabled
  Busy trigger per button value is 0
  feature-button 5 DnD
  feature-button 6 MeetMe
  keep-conference is enabled
  registration expires timer max is 86400 and min is 60
  template is 1
  kpml signal is enabled
  Lpcor Type is none
  Transport type is udp
  service-control mechanism is supported
  registration Call ID is 1c17d340-81f00002-6c48fe8e-03013c10@1.5.40.105
  Registration method: per line
  Privacy feature is not configured.
  Privacy button is disabled
  active primary line is: 3915
  contact IP address: 1.5.40.105 port 5060
  Phone SIS Version: 5.0.0
  GW SIS Version: 1.0.0
  conference admin: yes
  conference add mode: all
  conference drop mode: creator
  paging-dn: config 0 [multicast] effective 0 [multicast]
...

```

The following is an example of a partial output of the **show voice register pool all** command, showing KEM data with the phone type information:

```

Router# show voice register pool all
Pool Tag 5
Config:
  Mac address is B4A4.E328.4698
  Type is 9971 addon 1 CKEM
  Number list 1 : DN 2
  Number list 2 : DN 3
  Proxy Ip address is 0.0.0.0
  DTMF Relay is disabled
  Call Waiting is enabled
  DnD is disabled
  Video is enabled
  Camera is enabled
  Busy trigger per button value is 0
  keep-conference is enabled
  registration expires timer max is 200 and min is 60
  kpml signal is enabled
  Lpcor Type is none

```

The following is a sample output of the **show voice register pool all** command, showing the three KEMs configured with phone type 9971:

```

Router# show voice register pool all
Pool Tag 4
Config:

```

show voice register pool

```

Mac address is B4A4.E328.4698
Type is 9971 addon 1 CKEM 2 CKEM 3 CKEM
Number list 1 : DN 4
Number list 2 : DN 5
Number list 3 : DN 9

```

Cisco Unified SIP SRST

The following is a sample output of the **show voice register pool** command, displaying all information for voice register pool 1 in Cisco Unified SIP SRST:

```

Router# show voice register pool 1

Pool Tag 1
Config:
  Network address is 192.168.0.0, Mask is 255.255.0.0
  Number list 1 : Pattern is 50.., Preference is 2
  Proxy Ip address is 0.0.0.0
  Default preference is 2
  Incoming called number is
  Translate outgoing called tag is 1
  Class of Restriction List Tag: default
  Incoming corlist name is allowall
  Application is default.new

Dialpeers created:

dial-peer voice 40007 voip
  application default.new
  corlist incoming allowall
  preference 2
  incoming called-number 5001
  destination-pattern 5001
  redirect ip2ip
  session target ipv4:192.168.0.3
  session protocol sipv2
  translate-outgoing called 1
  voice-class codec 1

Statistics:
  Active registrations : 2

Total Registration Statistics
  Registration requests : 48
  Registration success : 48
  Registration failed : 0
  unRegister requests : 46
  unRegister success : 46
  unRegister failed : 0

Emergency response location 6

```

The following is a sample output of the **show voice register pool brief** command, showing an IPv6 source address configured on a Cisco SIP IP Phone:

```

Router# show voice register pool brief
Pool ID                               IP Address                               Ln DN  Number  State
====  =====

```

```

1      8.0.0.0                                     UNREGISTERED
2      2001:420:54FF:13::312:0   2001:420:54FF:13::312:1   10001$   REGISTERED

```

voice class stun usage

The following is a sample output of the **show voice register pool** command, displaying voice-class stun-usage information for voice register pool 51:

```

Router# show voice register pool 51
Pool Tag 51
Config:
  Mac address is 0011.209F.5D60
  Type is 7960
  Number list 1 : DN 51
  Proxy Ip address is 0.0.0.0
  Current Phone load version is Cisco-SIPGateway/IOS-12.x
  DTMF Relay is disabled
  Call Waiting is enabled
  DnD is disabled
  Busy trigger per button value is 0
  keep-conference is enabled
  template is 10
  Lpcor Type is none

Transport type is udp
  service-control mechanism is not supported
  registration Call ID is 2BA38EE3-17D311DB-800BCD81-A9AD11F0
  Privacy feature is not configured.
  Privacy button is disabled
  active primary line is: 16263646
  contact IP address: 192.168.0.87 port 5060
  Reason for unregistered state:
    No registration request since last reboot/unregister
    voice-class stun-usage is enabled. tag is 1
Dialpeers created:
Dial-peers for Pool 51:
Statistics:
  Active registrations : 0
  Total SIP phones registered: 0
  Total Registration Statistics
    Registration requests : 2
    Registration success : 2
    Registration failed : 0
    unRegister requests : 2
    unRegister success : 2
    unRegister failed : 0
    Attempts to register
      after last unregister : 0
  Last register request time : 13:43:27.839 IST Tue Apr 20 2010

```

The following table contains descriptions of significant fields shown in the Cisco Unified CME and Cisco Unified SIP SRST output, listed in alphabetical order.

Table 47: show voice register pool Field Descriptions

Field	Description
Active registrations	Shows the current active registrations.
Application	Shows the application command configuration for this pool.

Field	Description
Call Waiting	Shows the call-waiting command configuration.
Class of Restriction List Tag	Shows the COR tag.
Conference add mode	Shows the current setting of the hardware conference privilege for adding participants.
Conference admin	Shows whether the Cisco Unified SIP IP phone is assigned as the hardware conference administrator or not.
Conference drop mode	Shows who can terminate an active ad-hoc hardware conference by hanging up.
Config	Shows the voice register pool.
Default preference	Shows the default preference value of this pool.
Dialpeers created	Lists all the dial peers created and their contents. Dial-peer contents differ for each application and are not described here.
DnD	Shows the setting of the dnd-control command.
DTMF Relay	Shows the setting of the dtmf-relay command.
Emergency response location	Shows the ephone's emergency response location to which an emergency response team is dispatched when an emergency call is made.
Incoming called number	Shows the incoming called-number command configuration.
Incoming corlist name	Shows the cor command configuration.
keep-conference	Shows the status of the keep-conference command.
Lpcor Incoming	Shows the setting of the lpcor incoming command.
Lpcor Outgoing	Shows the setting of the lpcor outgoing command.
Lpcor Type	Shows the setting of the lpcor type command.
Mac address	Shows the MAC address of the Cisco Unified SIP IP phone as defined by the id command.
Network address and Mask	Shows network address and mask information when the id command is configured.
Number list, Pattern, and Preference	Shows the number command configuration.
Pool Tag	Shows the assigned tag number of the current pool.
Proxy IP address	Shows the proxy command configuration; that is, the IP address of the external SIP server.
Registration failed	Shows the failed registrations.

Field	Description
Registration requests	Shows the incoming registration requests.
Registration success	Shows the successful registrations.
Statistics	Shows the registration statistics for this pool.
Template	Shows the template-tag number for the template applied to the Cisco Unified SIP IP phone.
Total Registration Statistics	Shows the total registration statistics for this pool.
Translate outgoing called tag	Shows the translate-outgoing command configuration.
Type	Shows the phone type identified for the Cisco Unified SIP IP phone using the type command.
unRegister failed	Reports the number of failed unregisters.
unRegister requests	Shows the incoming unregister/registration expiry requests.
unRegister success	Reports the number of successful unregisters.
Username Password	Shows the values within the authentication credential.

Related Commands

Command	Description
application (voice register pool)	Selects the session-level application for the dial peer associated with an individual Cisco Unified SIP IP phone in a Cisco Unified CME environment or for a group of phones in a Cisco Unified SIP SRST environment.
call-waiting (voice register pool)	Enables the call-waiting option on a SIP phone.
cor (voice register pool)	Configures a class of restriction on the VoIP dial peers associated with directory numbers.
dnd-control (voice register template)	Enables the Do-Not-Disturb (DND) soft key on SIP phones.
dtmf-relay (voice register pool)	Specifies the list of dual-tone multifrequency (DTMF) relay methods that can be used to relay DTMF audio tones between SIP endpoints.
id (voice register pool)	Explicitly identifies a locally available, individual Cisco Unified SIP IP phone or, when running Cisco Unified SIP SRST, a set of Cisco Unified SIP IP phones.
incoming called-number (dial peer)	Specifies a digit string that can be matched by an incoming call to associate the call with a dial peer.
keep-conference (voice register pool)	Allows IP phone conference initiators to exit from conference calls and keep the remaining parties connected.

Command	Description
lpcor incoming	Associates an incoming call with a logical partitioning class of restriction (LPCOR) resource-group policy.
lpcor outgoing	Associates an outgoing call with an LPCOR resource-group policy.
lpcor type	Specifies the LPCOR type for an IP phone.
number (voice register pool)	Indicates the E.164 phone numbers that the registrar permits to handle the Register message from a Cisco Unified SIP IP phone.
proxy (voice register pool)	Autogenerates additional VoIP dial peers to reach the main proxy whenever a Cisco Unified SIP IP phone registers with a Cisco Unified SIP SRST gateway.
show sip-ua status registrar	Displays all the Cisco Unified SIP IP phones registered with the contact address.
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register dial-peer	Displays details of all dynamically created VoIP dial peers associated with the Cisco Unified CME or Cisco Unified SIP SRST register event.
translate-outgoing (voice register pool)	Allows an explicit setting of translation rules on the VoIP dial peer to modify a phone number dialed by any Cisco Unified IP phone user.
type (voice register pool)	Defines a phone type for a SIP phone.
voice register pool	Enters voice register pool configuration mode for Cisco Unified SIP IP phones.

show voice register pool after-hour-exempt

To display the details of a phone that has after-hour-exempt enabled on it, use the **show voice register after-hour-exempt** command in privileged EXEC mode.

show voice register after-hour-exempt

Syntax Description

This command has no arguments or keywords.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Version	Modification
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines

Use this command to display the details of a phone that has after-hour-exempt enabled. Individual phones can be exempted from call blocking using the after-hour exempt.

Cisco Unified CME

The following is a sample output from this command displaying information for phones with after-hour-exempt:

```
Router# show voice register pool after-hour-exempt
Pool ID          IP Address      Ln DN   Number      State
=====
1      001B.535C.D410  8.3.3.111      3 8         451110      UNREGISTERED
                                     4 7         451112      UNREGISTERED
2      0015.C68E.6D13      1 2         45112       UNREGISTERED
3      0021.5553.8998      1 3         45113       UNREGISTERED
                                     2 3         45113       UNREGISTERED
7      0018.BAC8.D2B1      1 2         45112       UNREGISTERED
```

Cisco Unified SRST

The following is a sample output from this command displaying information for phones with after-hour-exempt:

```
Router# show voice register pool after-hour-exempt
Pool ID          IP Address      Ln DN   Number      State
=====
1      9.13.18.40      9.13.18.40      1 1         1000        REGISTERED
                                     2 2         2000        REGISTERED
                                     3 3         3000        REGISTERED
                                     4 4         4000        REGISTERED
                                     5 5         5000        UNREGISTERED
                                     6 6         6000        UNREGISTERED
                                     7 7         7000        UNREGISTERED
```

The table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 48: show voice register pool after-hour exempt field descriptions

Field	Description
DN	Directory number of the phone.
IP Address/port	IP address and port number of the phones.
LN	Line number of the phone.
Number	Number of the phones that have after-hour exempt enabled.
Pool	Shows the current pool.
State	Registration state.

Related Commands

Command	Description
after-hour exempt(voice register pool)	Specifies that an IP phone does not have any of its outgoing calls blocked although call blocking is defined.
show voice register all	Displays all Cisco SIP SRST and Cisco CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
voice register pool	Enters voice register pool configuration mode for SIP phones.

show voice register pool attempted-registrations

To display the details of phones that attempt to register with Cisco Unified CME or Cisco Unified SRST and fail, use the **show voice register pool attempted-registrations** command in privileged EXEC mode.

show voice register pool attempted-registrations

Syntax Description	This command has no arguments or keywords.
---------------------------	--

Command Modes	Privileged EXEC
----------------------	-----------------

Command History	Cisco IOS Release	Version	Modification
	15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines	Use this command to display the details of the phones that attempt to register with Cisco Unified CME or Cisco Unified SRST and fail. If the phone registers successfully after some time, the attempted registration entry will still show up in the attempted-registration table. Use the clear voice register attempted-registrations command to remove the entry from the attempted registration table.
-------------------------	---

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying information for show voice register pool attempted-registrations:

```
Router# show voice register pool attempted-registrations
Phones that have attempted registrations and have failed:
  MAC address: 001b.535c.d410
  IP address  : 8.3.3.111
  Attempts    : 5
  Time of first attempt : *10:49:51.542 UTC Wed Oct 14 2009
  Time of latest attempt: *10:50:00.886 UTC Wed Oct 14 2009
  Reason for failure   :
    No pool match for the registration request
  MAC address: 0015.c68e.6d13
  IP address  : 8.33.33.112
  Attempts    : 4
  Time of first attempt : *10:49:53.418 UTC Wed Oct 14 2009
  Time of latest attempt: *10:50:00.434 UTC Wed Oct 14 2009
  Reason for failure   :
    No pool match for the registration request
  MAC address: 0009.43E9.0B35
  IP address  : 9.13.40.83
  Attempts    : 1
  Time of first attempt : *10:49:57.866 UTC Wed Oct 14 2009
  Time of latest attempt: *10:49:57.866 UTC Wed Oct 14 2009
  Reason for failure   :
    No pool match for the registration request
```

The following is a sample output from this command displaying information for show voice register pool attempted-registrations when none of the phones fail:

```
Router# show voice register pool attempted-registrations
Phones that have attempted registrations and have failed: NONE
```

 show voice register pool attempted-registrations**Related Commands**

Command	Description
attempted-registrations size	Allows to set the size of the table that stores information related to SIP phones that attempt to register and fail.
clear voice register attempted-registrations	Clears entries from the attempted-registration table.

show voice register pool cfa

To display the voice register pool details of a phone that has Call Forward All (CFA) enabled, use the **show voice register pool cfa** command in privileged EXEC mode.

show voice register pool cfa

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Cisco Product	Modification
	15.1(2)T	Cisco Unified CME 8.1	This command was introduced.

Usage Guidelines Use this command to display the voice register pool details of the phone with CFA feature enabled. When Call Forward All feature is enabled on Cisco Unified SIP IP phones such as 7940, 7941, 7941GE, 7942, 7945, 7960, 7961, 7961GE, 7962, 7965, 7970, 7971, 7975 through the CFA phone button. The **show voice register pool cfa** command displays only the call forward all B2BUA details.

The **show voice register pool cfa** command also displays the line number and DN number if available under the pool configuration. If call-forward-all is configured under both pool and DN, the configuration under DN takes precedence.

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying all statistical information:

```
Router# show voice register pool cfa
Pool  Ln  DN   Number  Call Forward All Number
=====
1      2    8      678
      0    1  45111  4555
      4    7  451110 4555
3      1    3  45113  87687
      2    3  45113  87687
```

The table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Field	Description
Call Forward All Number	Number to which the calls are forwarded.
DN	Voice register DN tag of the line.
LN	Line number of the telephone number.
Pool	Tag ID of the pool.

Related Commands	Command	Description
	call forward b2bua all	Enables call forward all.

Command	Description
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
show voice register pool detail all	Displays the details of all the pools defined in the system.

show voice register pool connected

To display the details of SIP phones that are in connected state, use the **show voice register pool connected** command in privileged EXEC mode.

show voice register pool connected [brief]

Syntax Description	<i>brief</i> (Optional) Displays brief details of SIP phones that are in connected state.		
Command Modes	Privileged EXEC		
Command History	Cisco IOS Release	Cisco Product	Modification
	15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.
Usage Guidelines	Use this command to display the details of the phone that are currently in connected state (in conversation). The output for show voice register pool connected command shows details of both calls originating from the SIP phones and calls made towards SIP phones. When used with brief keyword, the show voice register pool connected command displays a brief detail of phones in connected state.		

Cisco Unified CME and Cisco Unified SRST

The following is sample output from this command displaying all statistical information:

```
Router# show voice register pool connected
Outbound calls from SIP line phones:
Pool tag: 1
=====
MAC Address      : 001B.535C.D410
Contact IP       : 8.3.3.111
Phone Number     : 45111
Remote Number    : 45112
Call 2
SIP Call ID      : 001b535c-d4100010-79612b5a-336b0db5@8.3.3.111
State of the call : STATE_ACTIVE (7)
Substate of the call : SUBSTATE_NONE (0)
Calling Number    : 45111
Called Number     : 45112
Bit Flags         : 0xC0401C 0x100 0x4
CC Call ID       : 7
Source IP Address (Sig ) : 8.3.3.5
Destn SIP Req Addr:Port : [8.3.3.111]:5060
Destn SIP Resp Addr:Port : [8.3.3.111]:50076
Destination Name   : 8.3.3.111
Number of Media Streams : 1
Number of Active Streams: 1
RTP Fork Object    : 0x0
Media Mode         : flow-through
Media Stream 1
State of the stream : STREAM_ACTIVE
Stream Call ID      : 7
Stream Type         : voice-only (0)
Stream Media Addr Type : 1
Negotiated Codec    : g729r8 (20 bytes)
Codec Payload Type   : 18
```

show voice register pool connected

```

Negotiated Dtmf-relay      : inband-voice
Dtmf-relay Payload Type   : 0
QoS ID                    : -1
Local QoS Strength        : BestEffort
Negotiated QoS Strength   : BestEffort
Negotiated QoS Direction  : None
Local QoS Status          : None
Media Source IP Addr:Port : [8.3.3.5]:17580
Media Dest IP Addr:Port   : [8.3.3.111]:26298
Options-Ping      ENABLED:NO    ACTIVE:NO
Inbound calls to SIP line phones:

Pool tag: 2
=====
MAC Address       : 0015.C68E.6D13
Contact IP        : 8.33.33.112
Phone Number      : 45112
Remote Number     : 45111
Call 3
SIP Call ID       : 4DA52F97-ADA311DE-8019803A-FF3E4CBC@8.3.3.5
State of the call  : STATE_ACTIVE (7)
Substate of the call : SUBSTATE_NONE (0)
Calling Number     : 45111
Called Number      : 45112
Bit Flags          : 0xC04018 0x100 0x80
CC Call ID         : 8
Source IP Address (Sig) : 8.3.3.5
Destn SIP Req Addr:Port : [8.33.33.112]:5060
Destn SIP Resp Addr:Port : [8.33.33.112]:5060
Destination Name    : 8.33.33.112
Number of Media Streams : 1
Number of Active Streams: 1
RTP Fork Object     : 0x0
Media Mode          : flow-through
Media Stream 1
State of the stream  : STREAM_ACTIVE
Stream Call ID       : 8
Stream Type          : voice-only (0)
Stream Media Addr Type : 1
Negotiated Codec     : g729r8 (20 bytes)
Codec Payload Type    : 18
Negotiated Dtmf-relay : inband-voice
Dtmf-relay Payload Type : 0
QoS ID               : -1
Local QoS Strength    : BestEffort
Negotiated QoS Strength : BestEffort
Negotiated QoS Direction : None
Local QoS Status      : None
Media Source IP Addr:Port : [8.3.3.5]:16384
Media Dest IP Addr:Port   : [8.33.33.112]:30040

```

The following is sample output from this command displaying brief statistical information:

```

Router# show voice register pool connected brief
Pool IP Address      Number      Remote Number
=====
1    8.3.3.111        45111        45112
Inbound calls to SIP line phones:
Pool IP Address      Number      Remote Number
=====
2    8.33.33.112      45112        45111

```


Related Commands

Command	Description
show sip-ua calls	Displays active user agent client (UAC) and user agent server (UAS) information on SIP calls
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.

show voice register pool ip

To display the details of a SIP phone with a specific IP address, use the **show voice register pool ip** command in privileged EXEC mode.

show voice register pool ip *ip-address*

Syntax Description

<i>ip-address</i>	IPv4 address of the SIP phone .
-------------------	---------------------------------

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines

Use this command to display the details of a phone with a specific IP-address. When the pool ID is configured as a mac address or an IP address the registered pools contain the IP address information. The pool information is displayed if the IP addresses match.

When the pool ID is IP and the pool is unregistered, IP address configured under pool is compared with the input IP. When the pool ID is network contact, the IP address of each phone that is registered is compared with the input IP address.

Cisco Unified CME and Cisco Unified SRST

The following is sample output from this command displaying all statistical information:

```
Router# show voice register pool ip 8.3.3.111
Pool ID          IP Address      Ln DN   Number      State
=====
1      001B.535C.D410 8.3.3.111      1 1    45111      REGISTERED
                                4 7    451110     UNREGISTERED
```

The table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 49: show voice register pool ip field descriptions

Field	Description
DN	Voice register DN tag of the line.
ID	Phone identification (ID) address.
IP Address	IP address of the SIP phone.
LN	Line number of the telephone number.
Number	Number of the phones that have a mac address.
Pool	Tag ID of the pool.

Field	Description
State	Registration state of the line.

Related Commands

Command	Description
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.

show voice register pool mac

To display the details of voice register pool associated with a specific phone type, use the **show voice register pool mac** command in privileged EXEC mode.

show voice register pool mac H.H.H

Syntax Description

<i>H.H.H</i>	MAC address of the SIP phone attempting to register.
--------------	--

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines

Use this command to display the details of the phone with the mac address H.H.H. The command displays only the pools that are configured with an ID as mac.

Cisco Unified CME and Cisco Unified SRST

The following is sample output from this command displaying all statistical information:

```
Router# show voice register pool mac 001B.535C.D410
Pool ID          IP Address      Ln DN   Number      State
=====
1      001B.535C.D410  8.3.3.111      1 1    45111      REGISTERED
                                     4 7    451110     UNREGISTERED
```

The table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 50: show voice register pool mac field descriptions

Field	Description
DN	Voice register DN tag of the line.
ID	Phone identification (ID) address.
IP Address	IP address of the SIP phone.
LN	Line number of the telephone number.
Number	Number of the phones that have a mac address.
Pool	Tag ID of the pool.
State	Registration state of the line.

Related Commands

Command	Description
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.

show voice register pool on-hold

To display the details of phones that are currently on-hold, use the **show voice register pool oh-hold** command in privileged EXEC mode.

show voice register pool on-hold [brief]

Syntax Description

<i>brief</i>	(Optional) Displays brief details of SIP phones that are currently on-hold.
--------------	---

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Version	Modification
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines

Use this command to display the details of the phone that are currently on-hold. The show voice register pool on-hold command output also displays a field to show if the hold was a locally initiated hold (initiated on the phone) or if the hold was initiated on the remote end. When used with brief keyword, the show voice register pool on-hold command displays a brief information of the phones that are currently put on hold by the remote caller or have put the remote caller on hold. The “Hold-Origin” field specifies the type of the hold, which can be either remote or local. Local indicates that the call is placed on hold by the local phone and remote indicates that call is placed on hold by the remote phone. In case of double-hold, the hold origin will display the value “Local and Remote”.

Examples

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying information for phones ringing in a voice register pool:

```
Router# show voice register pool on-hold brief
Outbound calls from SIP line phones:
Pool IP Address      Number      Remote Number      Hold Origin
=====
1      8.3.3.111      45111      45112      Remote & Local
Inbound calls to SIP line phones:
Pool IP Address      Number      Remote Number      Hold Origin
=====
2      8.33.33.112      45112      45111      Remote & Local
```

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying information for phones on-hold:

```
Router# show voice register pool on-hold
Outbound calls from SIP line phones:
Pool tag: 1
```

```

=====
MAC Address      : 001B.535C.D410
Contact IP       : 8.3.3.111
Phone Number     : 45111
Remote Number    : 45112
Local Hold       : CALL HOLD Pressed on SIP Phone
Call 4
SIP Call ID      : 001b535c-d4100010-79612b5a-336b0db5@8.3.3.111
  State of the call      : STATE_ACTIVE (7)
  Substate of the call   : SUBSTATE_NONE (0)
  Calling Number         : 45111
  Called Number          : 45112
  Bit Flags              : 0xC0401C 0x10100 0x4
  CC Call ID             : 7
  Source IP Address (Sig): 8.3.3.5
  Destn SIP Req Addr:Port : [8.3.3.111]:5060
  Destn SIP Resp Addr:Port: [8.3.3.111]:50076
  Destination Name       : 8.3.3.111
  Number of Media Streams : 1
  Number of Active Streams: 1
  RTP Fork Object        : 0x0
  Media Mode             : flow-through
Media Stream 1
  State of the stream    : STREAM_ACTIVE
  Stream Call ID         : 7
  Stream Type            : voice-only (0)
  Stream Media Addr Type : 1
  Negotiated Codec       : g729r8 (20 bytes)
  Codec Payload Type     : 18
  Negotiated Dtmf-relay  : inband-voice
  Dtmf-relay Payload Type : 0
  QoS ID                 : -1
  Local QoS Strength     : BestEffort
  Negotiated QoS Strength : BestEffort
  Negotiated QoS Direction : None
  Local QoS Status       : None
  Media Source IP Addr:Port: [8.3.3.5]:17580
  Media Dest IP Addr:Port : [8.3.3.111]:26298
Options-Ping      ENABLED:NO    ACTIVE:NO
Inbound calls to SIP line phones:
Pool tag: 2
=====
MAC Address      : 0015.C68E.6D13
Contact IP       : 8.33.33.112
Phone Number     : 45112
Remote Number    : 45111
Remote Hold      : SIP Phone has received CALL HOLD
Call 5
SIP Call ID      : 4DA52F97-ADA311DE-8019803A-FF3E4CBC@8.3.3.5
  State of the call      : STATE_ACTIVE (7)
  Substate of the call   : SUBSTATE_NONE (0)
  Calling Number         : 45111
  Called Number          : 45112
  Bit Flags              : 0xC04018 0x4100 0x80
  CC Call ID             : 8
  Source IP Address (Sig): 8.3.3.5
  Destn SIP Req Addr:Port : [8.33.33.112]:5060
  Destn SIP Resp Addr:Port: [8.33.33.112]:5060
  Destination Name       : 8.33.33.112
  Number of Media Streams : 1
  Number of Active Streams: 1
  RTP Fork Object        : 0x0
  Media Mode             : flow-through
Media Stream 1

```

show voice register pool on-hold

```

State of the stream      : STREAM_ACTIVE
Stream Call ID          : 8
Stream Type              : voice-only (0)
Stream Media Addr Type  : 1
Negotiated Codec         : g729r8 (20 bytes)
Codec Payload Type       : 18
Negotiated Dtmf-relay    : inband-voice
Dtmf-relay Payload Type  : 0
QoS ID                   : -1
Local QoS Strength       : BestEffort
Negotiated QoS Strength  : BestEffort
Negotiated QoS Direction : None
Local QoS Status         : None
Media Source IP Addr:Port : [8.3.3.5]:16384
Media Dest IP Addr:Port  : [8.33.33.112]:30040
Options-Ping             ENABLED:NO    ACTIVE:NO

```

Related Commands

Command	Description
show voice register all	Displays all Cisco SIP SRST and Cisco CME configurations and register information.
show sip-ua calls	Displays active user agent client (UAC) and user agent server (UAS) information on SIP calls
show voice register pool	Displays all configuration information associated with a particular voice register pool.

show voice register pool phone-load

To display the details of phone-loads associated with phones that are registered to Cisco Unified CME, use the **show voice register pool phone-load** command in privileged EXEC mode.

show voice register pool phone-load

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Version	Modification
	15.1(2)T	Cisco Unified CME 8.1	This command was introduced.

Usage Guidelines Use this command to display the details of the phone-loads associated with phones that are registered with Cisco Unified CME. The phone-load information is taken from the REGISTER message sent by the phone.

Example

The following is a sample output from this command displaying information for voice register pool phone-load:

```
Router# show voice register pool phone-load
Pool  Device Name      Current Version Previous Version
====  =====
1      SEP001B535CD410 Cisco-CP7960G/8.0
```

Related Commands	Command	Description
	load(voice register global)	Associates a type of Cisco Unified IP phone with a phone firmware file.
	show voice register all	Displays all Cisco SIP SRST and Cisco CME configurations and register information.
	show voice register pool	Displays all configuration information associated with a particular voice register pool.
	voice register pool	Enters voice register pool configuration mode for SIP phones.

show voice register pool registered

To display the details of phones that successfully register to Cisco Unified Communications Manager Express (Cisco Unified CME), use the **show voice register pool registered** command in privileged EXEC mode.

show voice register pool registered

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC (#)

Command History	Cisco IOS Release	Version	Modification
	15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.
	15.2(4)M	Cisco Unified CME 9.1 Cisco Unified SIP SRST 9.1	This command was modified to display Key Expansion Module (KEM) details with the phone type information.

Usage Guidelines Use the **show voice register pool registered** command to display the details of phones that are successfully registered to Cisco Unified CME and Cisco Unified Survivable Remote Site Telephony (Cisco Unified SRST).

Cisco Unified CME

The following is a sample output displaying information for a registered voice register pool in Cisco Unified CME:

```
Router# show voice register pool registered
Pool Tag 1
Config:
  Mac address is 001B.535C.D410
  Type is 7960
  Number list 1 : DN 1
  Number list 3 : DN 8
  Number list 4 : DN 7
  Proxy Ip address is 0.0.0.0
  Current Phone load version is Cisco-CP7960G/8.0
  DTMF Relay is disabled
  Call Waiting is enabled
  DnD is disabled
  Busy trigger per button value is 0
  call-forward phone all is 4566
  call-forward b2bua all 4555
  keep-conference is enabled
  Lpcor Type is none
  Transport type is udp
  service-control mechanism is supported
  registration Call ID is 001b535c-d410790d-17a6877e-5d04bbc5@8.3.3.111
  Privacy feature is not configured.
  Privacy button is disabled
  active primary line is: 45111
  contact IP address: 8.3.3.111 port 5060
Dialpeers created:
```

```

Dial-peers for Pool 1:
dial-peer voice 40001 voip
destination-pattern 45111
session target ipv4:8.3.3.111:5060
session protocol sipv2
call-fwd-all 4555
after-hours-exempt FALSE
Statistics:
Active registrations : 1
Total SIP phones registered: 1
Total Registration Statistics
Registration requests : 1
Registration success : 1
Registration failed : 0
unRegister requests : 0
unRegister success : 0
unRegister failed : 0
Attempts to register
after last unregister : 0
Last register request time : *11:40:32.263 UTC Wed Oct 14 2009
Last unregister request time :
Register success time : *11:40:32.267 UTC Wed Oct 14 2009
Unregister success time :

```

The following is a sample output displaying information for a registered voice register pool with a Cisco Unified 9971 Session Initiation Protocol (SIP) IP phone attached to a Cisco SIP IP Phone CKEM 36-Button Line Expansion Module:

```

Router# show voice register pool registered
Pool Tag 5
Config:
Mac address is B4A4.E328.4698
Type is 9971 addon 1 CKEM
Number list 1 : DN 2
Number list 2 : DN 3
Proxy Ip address is 0.0.0.0
DTMF Relay is disabled
Call Waiting is enabled
DnD is disabled
Video is enabled
Camera is enabled
Busy trigger per button value is 0
keep-conference is enabled
registration expires timer max is 200 and min is 60
kpml signal is enabled
Lpcor Type is none

```

Cisco Unified SRST

The following is a sample output displaying information for a registered voice register pool in Cisco Unified SRST:

```

Router# show voice register pool registered
Pool Tag 1
Config:
Ip address is 9.13.18.40, Mask is 255.255.0.0
Number list 1 : DN 1
Number list 2 : DN 2
Number list 3 : DN 3
Number list 4 : DN 4
Number list 5 : DN 5

```

show voice register pool registered

```

Number list 6 : DN 6
Number list 7 : DN 7
Proxy Ip address is 0.0.0.0
DTMF Relay is enabled, rtp-nte, sip-notify
kpml signal is enabled
Lpcor Type is none
Dialpeers created:
Dial-peers for Pool 1:
dial-peer voice 40004 voip
destination-pattern 1000
redirect ip2ip
session target ipv4:9.13.18.40:19633
session protocol sipv2
dtmf-relay rtp-nte sip-notify
digit collect kpml
codec g711ulaw bytes 160
after-hours-exempt FALSE
dial-peer voice 40001 voip
destination-pattern 2000
redirect ip2ip
session target ipv4:9.13.18.40:19634
session protocol sipv2
dtmf-relay rtp-nte sip-notify
digit collect kpml
codec g711ulaw bytes 160
after-hours-exempt FALSE
dial-peer voice 40002 voip
destination-pattern 3000
redirect ip2ip
session target ipv4:9.13.18.40:19635
session protocol sipv2
dtmf-relay rtp-nte sip-notify
digit collect kpml
codec g711ulaw bytes 160
after-hours-exempt FALSE
dial-peer voice 40003 voip
destination-pattern 4000
redirect ip2ip
session target ipv4:9.13.18.40:19636
session protocol sipv2
dtmf-relay rtp-nte sip-notify
digit collect kpml
codec g711ulaw bytes 160
after-hours-exempt FALSE
Statistics:
Active registrations : 4
Total SIP phones registered: 1
Total Registration Statistics
Registration requests : 4
Registration success : 4
Registration failed : 0
unRegister requests : 0
unRegister success : 0
unRegister failed : 0
Attempts to register
after last unregister : 0
Last register request time : .05:22:55.604 UTC Tue Oct 6 2009
Last unregister request time :
Register success time : .05:22:55.604 UTC Tue Oct 6 2009
Unregister success time :

```

The following table contains descriptions of significant fields shown in the **show voice register pool registered** command output, listed in alphabetical order.

Table 51: show voice register pool registered Field Descriptions

Field	Description
Active registrations	Shows the current active registrations.
Application	Shows the application command configuration for this pool.
Call Waiting	Shows the setting of the call-waiting command.
Class of Restriction List Tag	Shows the COR tag.
Config	Shows the voice register pool.
Current phone-load	Shows the current version of the phone load.
Default preference	Shows the default preference value of this pool.
Dialpeers created	Results in a list of all dial peers created and their contents. Dial-peer contents differ for each application and are not described here.
DnD	Shows the setting of the dnd-control command.
DTMF Relay	Shows the setting of the dtmf-relay command.
Emergency response location	Shows the ephone's emergency response location to which an emergency response team is dispatched when an emergency call is made.
Incoming called number	Shows the incoming called-number command configuration.
Incoming corlist name	Shows the cor command configuration.
keep-conference	Shows the status of the keep-conference command.
Lpcor Incoming	Shows the setting of the lpcor incoming command.
Lpcor Outgoing	Shows the setting of the lpcor outgoing command.
Lpcor Type	Shows the setting of the lpcor type command.
Mac address	Shows the MAC address of this SIP phone as defined by the id command.
Network address and Mask	Shows network address and mask information when the id command is configured.
Number list, Pattern, and Preference	Shows the number command configuration.
Pool Tag	Shows the assigned tag number of the current pool.
Previous phone-load	Shows the version of the previous phone load.
Proxy IP address	Shows the proxy command configuration; that is, the IP address of the external SIP server.

Field	Description
Registration failed	Shows the failed registrations.
Registration requests	Shows the incoming registration requests.
Registration success	Shows the successful registrations.
Statistics	Shows the registration statistics for this pool.
statistics time-stamps	Shows the registration statistics for this pool with specific time stamps.
Template	Shows the template-tag number for the template applied to this SIP phone.
Total Registration Statistics	Shows the total registration statistics for this pool.
Translate outgoing called tag	Shows the translate-outgoing command configuration.
Type	Shows the phone type identified for this SIP phone using the type command.
unRegister failed	Reports the number of failed unregisters.
unRegister requests	Shows the incoming unregister/registration expiry requests.
unRegister success	Reports the number of successful unregisters.
Username Password	Shows the values within the authentication credential.

Related Commands

Command	Description
application (voice register pool)	Selects the session-level application for the dial peer associated with an individual Cisco Unified SIP IP phone in a Cisco Unified CME environment or for a group of phones in a Cisco Unified SIP SRST environment.
call-waiting (voice register pool)	Enables the call-waiting option on a SIP phone.
cor (voice register pool)	Configures a class of restriction on the VoIP dial peers associated with directory numbers.
dnd-control (voice register template)	Enables the Do-Not-Disturb (DND) soft key on SIP phones.
dtmf-relay (voice register pool)	Specifies the list of dual-tone multifrequency (DTMF) relay methods that can be used to relay DTMF audio tones between SIP endpoints.
id (voice register pool)	Explicitly identifies a locally available, individual Cisco Unified SIP IP phone or, when running Cisco Unified SIP SRST, a set of Cisco Unified SIP IP phones.
incoming called-number (dial peer)	Specifies a digit string that can be matched by an incoming call to associate the call with a dial peer.

Command	Description
keep-conference (voice register pool)	Allows IP phone conference initiators to exit from conference calls and keep the remaining parties connected.
lpcor incoming	Associates an incoming call with a logical partitioning class of restriction (LPCOR) resource-group policy.
lpcor outgoing	Associates an outgoing call with an LPCOR resource-group policy.
lpcor type	Specifies the LPCOR type for an IP phone.
number (voice register pool)	Indicates the E.164 phone numbers that the registrar permits to handle the Register message from a Cisco Unified SIP IP phone.
proxy (voice register pool)	Autogenerates additional VoIP dial peers to reach the main proxy whenever a Cisco Unified SIP IP phone registers with a Cisco Unified SIP SRST gateway.
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register dial-peers	Displays details of all dynamically created VoIP dial peers associated with the Cisco Unified SIP SRST or Cisco Unified CME register event.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
show voice register pool unregistered	Displays the details of voice register pools that do not have any phones registered.
translate-outgoing (voice register pool)	Allows an explicit setting of translation rules on the VoIP dial peer to modify a phone number dialed by any Cisco Unified IP phone user.
type (voice register pool)	Defines a phone type for a SIP phone.
voice register pool	Enters voice register pool configuration mode for SIP phones.

show voice register pool remote

To display the details of phones that are at a remote location, use the **show voice register pool remote** command in privileged EXEC mode.

show voice register pool remote

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Version	Modification
	15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines Use this command to display the details of the phones that are at remote location and do not have an address resolution protocol (ARP) entry. If the pool id is MAC or IP, the entire pool detail is displayed in a brief format. If the pool id is network, only the line details with remote contact IP address are displayed. In Cisco Unified SRST, if the pool id is IP and if the pool is not registered, the configured IP is checked to see if it is a remote IP.

Cisco Unified CME

The following is a sample output from this command displaying information for remote phones:

```
Router# show voice register pool remote
Pool ID              IP Address      Ln DN  Number      State
=====
1    001B.535C.D410  8.3.3.111      1 1  45111      REGISTERED
                                     3 8  UNREGISTERED
                                     4 7  451110     UNREGISTERED
2    8.3.3.112      1 2  45112      REGISTERED
3    8.3.0.0         1 3  45113      REGISTERED
```

Cisco Unified SRST

The following is a sample output from this command displaying information for remote phones:

```
Router# show voice register pool remote
Pool ID              IP Address      Ln DN  Number      State
=====
1    001B.535C.D410  8.33.33.111    1 1  45111      REGISTERED
                                     3 8  UNREGISTERED
                                     4 7  451110     UNREGISTERED
2    8.33.33.112    8.33.33.112    1 2  45112      REGISTERED
3    8.3.0.0         8.3.44.116     1 3  45113      REGISTERED
```

The table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Related Commands

Command	Description
show voice register all voice register all	Displays all Cisco SIP SRST and Cisco CME configurations and register information.
show voice register dial-peer	Displays details of all dynamically created VoIP dial peers associated with the Cisco SIP SRST or Cisco CME register event.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
voice register pool	Enters voice register pool configuration mode for SIP phones.

show voice register pool ringing

To display the details of phones that are currently in ringing state, use the **show voice register pool ringing** command in privileged EXEC mode.

show voice register pool ringing [brief]

Syntax Description

<i>brief</i>	(Optional) Displays brief details of SIP phones that are currently in ringing state.
--------------	--

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Version	Modification
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines

Use this command to display the details of the phone that are currently in ringing state. When used with the **brief** keyword, the **show voice register pool ringing brief** command only displays information related to calls that are bound towards the SIP phones.

Examples

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying information for phones ringing in a voice register pool:

```
Router# show voice register pool ringing brief
Pool IP Address      Number      Remote Number
=====
2      8.33.33.112      45112      45111
```

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying information for phones ringing in a voice register pool:

```
Router# show voice register pool ringing
Pool tag: 2
=====
MAC Address       : 0015.C68E.6D13
Contact IP        : 8.33.33.112
Phone Number      : 45112
Remote Number     : 45111
Call 1
SIP Call ID       : COB5DA7-ADA311DE-8011803A-FF3E4CBC@8.3.3.5
State of the call  : STATE_REC'D_PROCEEDING (4)
Substate of the call : SUBSTATE_PROCEEDING_PROCEEDING (2)
Calling Number     : 45111
Called Number      : 45112
Bit Flags          : 0xC00018 0x100 0x280
CC Call ID         : 5
```

```

Source IP Address (Sig ) : 8.3.3.5
Destn SIP Req Addr:Port : [8.33.33.112]:5060
Destn SIP Resp Addr:Port : [8.33.33.112]:5060
Destination Name       : 8.33.33.112
Number of Media Streams : 1
Number of Active Streams : 1
RTP Fork Object        : 0x0
Media Mode             : flow-through
Media Stream 1
  State of the stream   : STREAM_ACTIVE
  Stream Call ID        : 5
  Stream Type           : voice+dtmf (1)
  Stream Media Addr Type : 1
  Negotiated Codec      : No Codec      (0 bytes)
  Codec Payload Type    : 255 (None)
  Negotiated Dtmf-relay : inband-voice
  Dtmf-relay Payload Type : 0
  QoS ID                : -1
  Local QoS Strength    : BestEffort
  Negotiated QoS Strength : BestEffort
  Negotiated QoS Direction : None
  Local QoS Status      : None
  Media Source IP Addr:Port : [8.3.3.5]:16882

```

Related Commands

Command	Description
show sip-ua calls	Displays active user agent client (UAC) and user agent server (UAS) information on SIP calls
show voice register all	Displays all Cisco SIP SRST and Cisco CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.

show voice register pool telephone-number

To display the details of a phone line with a specific telephone-number, use the **show voice register pool telephone-number** command in privileged EXEC mode.

show voice register pool telephone-number number

Syntax Description

<i>number</i>	Number identifying a specific phone.
---------------	--------------------------------------

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines

Use this command to display the details of the phone line with the specified telephone-number. If the line is registered, the contact ip address will be displayed. When the phone line is not registered and the pool ID type is network IP, the IP address is not displayed. When the phone line is not registered but some other line is registered for the same pool with MAC or IP address, then the IP address is displayed.

Cisco Unified CME

The following is a sample output from this command displaying all statistical information:

```
Router# show voice register pool telephone number 45112
Pool ID          IP Address      Ln DN  Number      State
=====
2      0015.C68E.6D13      1  2    45112      UNREGISTERED
7      0018.BAC8.D2B1      1  2    45112      UNREGISTERED
```

Cisco Unified SRST

```
Router# show voice register pool telephone-number 1000
Pool ID          IP Address      Ln DN  Number      State
=====
1      9.13.18.40      1  1    1000      REGISTERED
```

The table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 52: show voice register pool telephone number field descriptions

Field	Description
DN	Directory number of the phone.
ID	Phone identification (ID) address.
IP Address	IP address and port number of the phones

Field	Description
LN	Line number of the phone.
Number	Number of the phones.
Pool	Shows the current pool.
State	Registration state.

Related Commands

Command	Description
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
show voice register pool detail all	Displays the details of all the pools defined in the system.

show voice register pool type

To display the details of voice register pools associated with a specific phone type, use the **show voice register pool type** command in privileged EXEC mode.

show voice register pool type *type*

Syntax Description

<i>type</i>	3911, 3951, 7905, 7906, 7911, 7912, 7940, 7941, 7941GE, 7942, 7945, 7960, 7961, 7961GE, 7962, 7965, 7970, 7971, 7975, 7800 Series, 8800 Series, ATA (Cisco SIP Phone ATA), ATA-191, CKEM (Cisco SIP Key Expansion Module), CP-8800-Audio (Cisco SIP Key Expansion Module), CP-8800-Video (Cisco SIP Key Expansion Module), P100 (PingTel Xpressa 100), P600 (Polycom SoundPoint 600).
-------------	---

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Cisco Product	Modification
15.1(2)T	Cisco Unified CME 8.1	This command was introduced.
15.2(4)M	Cisco Unified CME 9.1	This command was modified to add CKEM as a value for the <i>type</i> argument to display the details of voice register pools associated with all the phones configured with KEMs.
15.3(3)M	Cisco Unified CME 10.0	This command was enhanced to display the properties for new sip phone models configured using SIP fast track feature. New keyword option all was added to display all the phone models being used in the system along with the associated pools and registration details.
Cisco IOS XE Gibraltar 16.10.1a	Unified CME 12.5	This command was modified to add CP-8800-Audio and CP-8800-Video as values for the <i>type</i> argument to display the details of voice register pools associated with A-KEMs and V-KEMs.
Cisco IOS XE Gibraltar 16.10.1a	Unified CME 12.5	This command was modified to add ATA-191 as the value for the <i>type</i> argument to display the details of voice register pools associated with Cisco ATA 191.

Usage Guidelines

Use the **show voice register pool type** command to display the details of voice register pools associated with a specific phone type.

The **show voice register pool type** command only takes the configured value of the phone type into consideration.

The CKEM value is available for Cisco Unified CME only and is not available for Cisco Unified SRST.

Examples

The following is a sample output of the **show voice register pool type** command for a Cisco Unified 7960 SIP IP phone, displaying all statistical information:

```

Router# show voice register pool type 7960
Pool ID          IP Address      Ln DN  Number      State
=====
1      001B.535C.D410  8.3.3.111      1  1  45111      REGISTERED
                                     4  7  451110     UNREGISTERED
2      0015.C68E.6D13                1  2  45112      UNREGISTERED

```

The following is a sample output of the **show voice register pool type** command, showing all the phones configured with CP-8800-Audio:

```

Router# show voice register pool type CP-8800-Audio
Pool ID          IP Address      Ln DN  Number      State
=====
2      38ED.18AF.8993  8.55.0.199      1  2  7001$      REGISTERED

```

The following is a sample output of the **show voice register pool type** command, showing all the 8865 phones configured with CP-8800-Video:

```

Router# show voice register pool type CP-8800-Video
Pool ID          IP Address      Ln DN  Number      State
=====
4      00CC.FC99.8973  8.55.0.88       1  1  5001$      REGISTERED

```

The following is a sample output of the **show voice register pool type** command, showing all the phones configured with CKEM:

```

Router# show voice register pool type CKEM
Pool ID          IP Address      Ln DN  Number      State
=====
4      B4A4.E328.4698  9.45.31.111      1  4  5589$      REGISTERED

```

The following is a sample output of the **show voice register pool type** command for a Cisco Unified 7821 SIP IP phone configured using SIP fast track feature, displaying all statistical information:

```

Router# show voice register pool type 7821
FastTrack Phone Model : 7821
Pooltype(index) representing the phone model : 48
Reference pooltype to inherit the properties from : 6921
Number of lines supported : 2 (inherited from 6921)
Number of addon modules supported : 0 (inherited from 6921)
Default session transport : UDP (inherited from 6921)
Description(helpstring) : Cisco IP Phone 7821
Phone supports GSM : NO (inherited from 6921)
Phone supports Telnet access : NO (inherited from 6921)
Phone supports firmware download from CME : YES (inherited from 6921)
Phone specific XML tags :
<maxNumCalls>12</maxNumCalls> (inherited from 6921)
<busyTrigger>12</busyTrigger> (inherited from 6921)
Phone family : RTL_PHONES
Pool ID          IP Address      Ln DN  Number      State
=====
6      D824.BD27.9EAC  9.44.29.44      1  6  4080$      REGISTERED

```

The following is a sample output of the **show voice register pool type all** command, showing all the phone models used in the system:

```

Router# show voice register pool type all
Builtin Phone Model : 9971

```

show voice register pool type

```

Pool ID          IP Address      Ln DN  Number      State
=====
3    A418.7529.93B0  9.44.29.41  1 3    4012$      REGISTERED
9    001E.7A25.D4EE  1 9    4006      UNREGISTERED

```

Builtin KEM Module : CKEM

```

Pool ID          IP Address      Ln DN  Number      State
=====
8    1234.1234.1234  1 1      4000      UNREGISTERED

```

Builtin Phone Model : Jabber-MAC

```

Pool ID          IP Address      Ln DN  Number      State
=====
1    0021.5553.19D1  1 1    4010      UNREGISTERED

```

FastTrack Phone Model : 8900

Pooltype(index) representing the phone model : 52

Reference pooltype to inherit the properties from : 8945

Number of lines supported : 4

Number of addon modules supported : 0 (inherited from 8945)

Default session transport : UDP (inherited from 8945)

Description(helpstring) : Cisco SIP Phone 8945

Phone supports GSM : NO (inherited from 8945)

Phone supports Telnet access : NO (inherited from 8945)

Phone supports firmware download from CME : YES

Phone specific XML tags :

<maxNumCalls>24</maxNumCalls>

<busyTrigger>24</busyTrigger>

Phone family : GUMBO_PHONES

```

Pool ID          IP Address      Ln DN  Number      State
=====
7    D824.BD27.9EBD  9.44.29.45  1 7    4022$      REGISTERED

```

Router#

Related Commands

Command	Description
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.

show voice register pool type summary

To display the total count of registered and unregistered phones for each Session Initiation Protocol (SIP) phone type , use the **show voice register pool type summary** command in privileged EXEC mode.

show voice register pool type summary

Syntax Description	This command has no arguments or keywords.		
Command Default	This command has no default behavior or values.		
Command Modes	Privileged EXEC (#)		
Command History	Cisco IOS Release	Cisco Product	Modification
	15.4(3) M	Cisco Unified CME 10.5	This command was introduced.
Usage Guidelines	Use this command to view the count of the phones configured, registered and unregistered in the SIP mode.		

Example

The following is a sample output of the **show voice register pool type summary** command:

```
router# show voice register pool type summary
=====
PhoneType           Configured   Registered   Unregistered
=====
7970                 1            1            0
8941                 4            3            1
Unknown Phone type   4            0            4
=====
Total Phones         9            4            5
=====
```

show voice register pool unregistered

To display the details of the voice registration pools that do not have any phones registered, use the **show voice register pool unregistered** command in privileged EXEC mode.

show voice register pool unregistered

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Version	Modification
	15.1(2)T	Cisco Unified CME 8.1 Cisco Unified SRST 8.1	This command was introduced.

Usage Guidelines Use this command to display the details of the pools that do not have any active registrations. In Cisco Unified SRST, if multiple phones are trying to register through the same pool and if one phone successfully registers and the others do not, the pool is not considered as an unregistered pool, as it does have an active registration of the registered phone.

Examples

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying information for pools with no active registration:

```
Router# show voice register pool unregistered
Pool Tag: 2
MAC Address           : 0015.C68E.6D13
No. of attempts to register: 0
Unregister time       :
Last register request time :
Reason for state unregister:
    No registration request since last reboot/unregister
Pool Tag: 3
MAC Address           : 0021.5553.8998
No. of attempts to register: 0
Unregister time       :
Last register request time :
Reason for state unregister:
    No registration request since last reboot/unregister
Pool Tag: 4
MAC Address           : 8989.9867.8769
No. of attempts to register: 0
Unregister time       :
Last register request time :
Reason for state unregister:
    No registration request since last reboot/unregister
```

Related Commands

Command	Description
show voice register all	Displays all Cisco SIP SRST and Cisco CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
show voice register pool registered	Displays details of phones that successfully register to Cisco Unified CME or Cisco Unified SRST.
voice register pool	Enters voice register pool configuration mode for SIP phones.

show voice register profile

To display the content of configuration files that are in ASCII text format, use the **show voice register profile** command in privileged EXEC mode.

show voice register profile text tag

Syntax Description

<i>tag</i>	Unique identifier for voice register profile to be displayed. Range is 1–500.
------------	---

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Version	Modification
12.4(4)T	Cisco CME 3.4	This command was introduced.

Usage Guidelines

Use this command to display ASCII configuration files for the Cisco IP Phone 7905 and 7905G, Cisco IP Phone 7912 and 7912G, Cisco ATA-186, or Cisco ATA-188. To generate ASCII text files, use the **file text** command.

Examples

The following is sample output from this command displaying information in the configuration profile for voice register pool 4:

```
Router# show voice register profile text 4
  Pool Tag: 4
#txt
AutoLookUp:0
DirectoriesUrl:0
...
CallWaiting:1
CallForwardNumber:0
Conference:1
AttendedTransfer:1
BlindTransfer:1
...
SIPRegOn:1
UseTftp:1
UseLoginID:0
UIPassword:0
NTPIP:0.0.0.0
UID:2468
...
```

The following table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 53: show voice register profile Field Descriptions

Field	Description
Attended Transfer	Setting of soft key for attended transfer in a SIP phone template as defined by using the transfer-attended command. “1” indicates that the soft key is enabled; “0” indicates that the soft key is disabled.

Field	Description
Auto Lookup	1 indicates that Auto Lookup is enabled. 0 indicates that it is disabled.
Blind Transfer	Setting of soft key for blind transfer in a SIP phone template as defined by using the transfer-blind command. “1” indicates that the soft key is enabled; “0” indicates that the soft key is disabled.
Call Waiting	Setting of the call-waiting option on a SIP phone as defined by using the call-waiting command. “1” indicates that the soft key is enabled; “0” indicates that the soft key is disabled.
Call Forward Number	Number to which incoming calls are forwarded
Conference	Setting of soft key for conference in a SIP phone template as defined by using the conference command. “1” indicates that the soft key is enabled; “0” indicates that the soft key is disabled.
Directories URL	1 indicates that the Directories feature button for the phone is enabled. 0 indicates that it is disabled.
NTPIP	IP address for the NTP source
Pool tag	Pool tag of the configuration file being requested.
SIP Reg On	1 indicates that the registration with external proxy server for the phone is enabled. 0 indicates that it is disabled.
UI Password	1 indicates that the UI password is enabled on the phone. 0 indicates that it is disabled.
UID	Authentication credential for SIP phone.
Use Login ID	1 indicates that “use login id” for phone is enabled. 0 indicates that it is disabled.

Related Commands

Command	Description
create profile (voice register global)	Generates the configuration profiles required for SIP phone.
file text (voice register global)	Generates ASCII text files for the Cisco IP Phone 7905 and 7905G, Cisco IP Phone 7912 and 79012G, Cisco ATA-186, or Cisco ATA-188.
reset (voice register global)	Performs a complete reboot of all SIP phones associated with a Cisco CME router.
voice register global	Enters voice register global configuration mode in order to set global parameters for all supported Cisco SIP phones in a Cisco CME or Cisco SIP SRST environment.

show voice register session-server

To display the call details of the registered session servers, use the **show voice register session-server** command in privileged EXEC mode.

show voice register session-server

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC (#)

Command History	Release	Modification
	12.4(22)T	This command was introduced in a release earlier than Cisco IOS Release 12.4(22)T.

Examples

The following is sample output from the **show voice register session-server** command:

```
Router# show voice register session-server
Feature server 2, keepalive 60, register-uri CISCO-80NVCGATW_1259887561000
Session reg_number 569, refID 9B2783C0
Route point voice_reg_pool 28 reg_number 570
Route point voice_reg_pool 9 reg_number 571
Route point voice_reg_pool 19 reg_number 572
Route point voice_reg_pool 22 reg_number 573
Subscription sub_id 1133, calledNumber 1242
Subscription sub_id 1135, calledNumber 1054
Subscription sub_id 1138, calledNumber 1155
Subscription sub_id 1140, calledNumber 1188
Subscription sub_id 1142, calledNumber 261
Subscription sub_id 1146, calledNumber 1055
Subscription sub_id 1147, calledNumber 1100
Subscription sub_id 1149, calledNumber 1025
Subscription sub_id 1152, calledNumber 264
Subscription sub_id 1154, calledNumber 267
Subscription sub_id 1156, calledNumber 1185
Subscription sub_id 1157, calledNumber 1218
Subscription sub_id 1160, calledNumber 1056
Subscription sub_id 1161, calledNumber 263
Subscription sub_id 1163, calledNumber 1186
Subscription sub_id 1165, calledNumber 1243
Subscription sub_id 1167, calledNumber 1053
Subscription sub_id 1169, calledNumber 1120
Subscription sub_id 1171, calledNumber 1154
Subscription sub_id 1173, calledNumber 265
```

The following table describes the significant fields shown in this output.

Table 54: show voice register session-server Field Descriptions

Field	Definition
Feature server	The number of active feature servers.
keepalive	Interval, in seconds, at which the peer sends keepalive messages. The range is from 1 to 60 seconds. The default is 60 seconds.

Field	Definition
register-uri	The registered Uniform Resource Identifier (URI) for the server.
Session reg_number	The registered number of the session.
Route point voice_reg_pool	Denotes the registered virtual device for application redirection.
Subscription sub_id	The subidentification number of the subscription.

show voice register statistics

To display statistics associated with the registration event, use the **show voice register statistics** command in privileged EXEC mode.

show voice register statistics [{global | pool tag}]

Syntax Description

global	(Optional) Displays aggregate statistics associated with the SIP phone registration event.
pool tag	(Optional) Displays registration pool statistics associated with a specific pool tag. The maximum number of pools is version and platform dependent. Type ? to display a list of values.

Command Modes

Privileged EXEC

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco SIP SRST 3.0	This command was introduced.
12.3(4)T	Cisco SIP SRST 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.
12.4(4)T	Cisco CME 3.4 Cisco SIP SRST 3.4	This command was added to Cisco CME.
15.1(2)T	Cisco CME 8.1 Cisco SIP SRST 8.1	This command was modified. The global and pool keywords and tag argument were added. The output display was also modified to show more information about pools in unregistered state and time-stamps of registration event.

Usage Guidelines

When using the **show voice register statistics** command, you can verify that the number of Registration and unRegister successes for global statistics are the sum of the values in the individual pools. Because some Registrations fail even before matching a voice register pool, for Registration and unRegister failed statistics the value is not the sum of the values in the individual pools. Immediate failures are accounted in the global statistics.

In Cisco Unified CME 8.1 and Cisco Unified SIP SRST 8.1, the time-stamps for the events is displayed along with other registration related statistics. The command output also displays the reason for pools in unregistered state. Use the show voice register statistics command with pool tag keyword to display registration pool statistics associated with a specific pool.

When using the global keyword, the show voice register command output displays the aggregate statistics associated with SIP phone registration. The output of this command also displays the attempted-registrations table.

Examples

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying all statistical information:


```

Router# show voice register statistics
Sample Output:
Global statistics
  Active registrations      : 2
  Total SIP phones registered: 2
  Total Registration Statistics
    Registration requests   : 3
    Registration success    : 2
    Registration failed     : 1
    unRegister requests     : 0
    unRegister success      : 0
    unRegister failed       : 0
    Attempts to register
      after last unregister : 1
    Last Register Request Time : *11:42:31.783 UTC Wed Sep 16 2009
    Last Unregister Request Time :
    Register Success Time      : *11:11:56.707 UTC Wed Sep 16 2009
    Unregister Success Time    :
Register pool 1 statistics
  Active registrations      : 1
  Total SIP phones registered: 1
  Total Registration Statistics
    Registration requests   : 1
    Registration success    : 1
    Registration failed     : 0
    unRegister requests     : 0
    unRegister success      : 0
    unRegister failed       : 0
    Attempts to register
      after last unregister : 0
    Last Register Request Time : *11:11:54.615 UTC Wed Sep 16 2009
    Last Unregister Request Time :
    Register Success Time      : *11:11:54.623 UTC Wed Sep 16 2009
    Unregister Success Time    :
Register pool 2 statistics
  Active registrations      : 1
  Total SIP phones registered: 1
  Total Registration Statistics
    Registration requests   : 1
    Registration success    : 1
    Registration failed     : 0
    unRegister requests     : 0
    unRegister success      : 0
    unRegister failed       : 0
    Attempts to register
      after last unregister : 0
    Last Register Request Time : *11:11:56.707 UTC Wed Sep 16 2009
    Last Unregister Request Time :
    Register Success Time      : *11:11:56.707 UTC Wed Sep 16 2009
    Unregister Success Time    :

```

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying all statistical information:

```

Router# show voice register statistics global
Global Statistics:
  Active registrations      : 1

```

show voice register statistics

```

Total SIP phones registered: 2
Total Registration Statistics
  R egistration requests   : 97715
  Registration success     : 3
  Registration failed      : 97712
  unRegister requests     : 1
  unRegister success       : 1
  unRegister failed        : 0
  Attempts to register
    after last unregister : 97712
  Last register request time : *06:45:11.127 UTC Wed Oct 14 2009
  Last unregister request time : *11:56:22.179 UTC Tue Oct 13 2009
  Register success time      : *12:10:37.263 UTC Tue Oct 13 2009
  Unregister success time    : *11:56:22.182 UTC Tue Oct 13 2009
Phones that have attempted registrations and have failed:
MAC address: 001b.535c.d410
IP address : 8.3.3.111
Attempts   : 97712
Time of first attempt : *12:20:32.775 UTC Tue Oct 13 2009
Time of latest attempt: *06:46:14.815 UTC Wed Oct 14 2009
Reason for failure    :
  Unauthorized registration request

```

Cisco Unified CME and Cisco Unified SRST

The following is a sample output from this command displaying all statistical information associated with pool 1:

```

Router# show voice register statistics pool 1
Pool 1 Statistics:
  Active registrations   : 0
  Total SIP phones registered: 1
  Total Registration Statistics
    Registration requests : 2
    Registration success   : 2
    Registration failed    : 0
    unRegister requests    : 1
    unRegister success      : 1
    unRegister failed       : 0
    Attempts to register
      after last unregister : 0
    Last register request time : *12:10:37.259 UTC Tue Oct 13 2009
    Last unregister request time : *11:56:22.179 UTC Tue Oct 13 2009
    Register success time      : *12:10:37.263 UTC Tue Oct 13 2009
    Unregister success time    : *11:56:22.182 UTC Tue Oct 13 2009
  Reason for unregistered state:
    No registration request since last reboot/unregister

```

The following table describes the significant fields shown in this output.

Table 55: show voice register statistics Field Descriptions

Field	Description
Statistics:	Used with the all , pool , and statistics keywords. Shows the registration statistics for this pool.

Field	Description
Active registrations	Used with the all , pool , and statistics keywords. Shows the current active registrations.
Last Register Request Time	Used with all , pool , and statistics keywords. Shows details such as day, date, and time when the phones requested to register the last time.
Last unRegister Request Time	Used with all , pool , and statistics keywords. Shows details such as day, date, and time when the phones requested to unregister the last time.
Total Registration Statistics	Used with the all , pool , and statistics keywords. Shows the total registration statistics for this pool.
Registration requests	Used with the all , pool , and statistics keywords. Shows the incoming registration requests.
Registration success	Used with the all , pool , and statistics keywords. Shows the successful registrations.
Registration failed	Used with the all , pool , and statistics keywords. Shows the failed registrations.
unRegister requests	Used with the all , pool , and statistics keywords. Shows the incoming unregister/registration expire requests.
unRegister success	Used with the all , pool , and statistics keywords. Reports the number of successful unregisters.
unRegister failed	Used with the all , pool , and statistics keywords. Reports the number of failed unregisters.
Global statistics	Used with the statistics keyword. Details all active registrations.
Register pool <i>number</i> statistics	Used with the statistics keyword. Details specific pool statistics.

Related Commands

Command	Description
show voice register all	Displays all Cisco Unified SIP SRST and Cisco Unified CME configurations and register information.
show voice register pool	Displays all configuration information associated with a particular voice register pool.
show voice register pool attempted-registrations	Displays the details of phones that attempt to register with Cisco Unified CME or Cisco Unified SRST and fail.

show voice register template

To display all configuration information associated with a Cisco Unified SIP IP phone template, use the **show voice register template** command in privileged EXEC mode.

show voice register template {*template-tag* | **all**}

Syntax Description

<i>template-tag</i>	Number of the template for which to display information. Range is 1 to 5.
all	Displays all configuration information associated with all the Cisco Unified SIP IP phone templates.

Command Modes

Privileged EXEC (#)

Command History

Cisco IOS Release	Version	Modification
12.4(4)T	Cisco CME 3.4	This command was introduced.
12.4(15)XY	Cisco Unified CME 4.2(1)	This command was modified to include emergency response location (ERL) information assigned to a Cisco Unified SIP IP phone in the output display.
12.4(20)T	Cisco Unified CME 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.
15.0(1)XA	Cisco Unified CME 8.0	This command was modified to include logical partitioning class of restriction (LPCOR) information in the output display.
15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.
15.1(2)T	Cisco Unified CME 8.1	This command was modified. All keyword was added. Pools that have the template defined are also displayed in the output. Voice-class stun-usage information is displayed in the output.
15.2(2)T	Cisco Unified CME 9.0	This command was modified to include conference admin, conference add mode, and conference drop mode in the output display.

Usage Guidelines

Use the **show voice register template** command to display all configuration information associated with a Cisco Unified SIP IP phone template defined in a system. Use the **all** keyword with the **show voice register template** command to display the details of all the templates defined in the system. A maximum of 10 templates can be configured and hence, the details of a maximum of 10 templates are displayed in the output.

Examples

The following is a sample output from the **show voice register template** command displaying information for a voice register template:

```

Router# show voice register template 1

Temp Tag 1
Config:
  Attended Transfer is enabled
  Blind Transfer is enabled
  Semi-attended Transfer is enabled
  Conference is enabled
  Caller-ID block is disabled
  DnD control is enabled
  Anonymous call block is disabled
  Voicemail is 56789, timeout 15
  softkey connected  Confrn Endcall Hold Trnsfer
  softkey hold  Newcall Resume
  softkey idle  Cfdall Newcall Redial
  softkey seized  Cfdall Endcall Redial
  Emergency response location 6
  Lpcor type local
  Lpcor incoming sccp_phonel
  Lpcor outgoing sccp_phonel

```

The following is a sample output from the **show voice register template** command displaying voice-class stun-usage information for voice register template 10:

```

Router# show voice register template 10

Temp Tag 10
Config:
  Attended Transfer is enabled
  Blind Transfer is enabled
  Semi-attended Transfer is enabled
  Conference is enabled
  Caller-ID block is disabled
  DnD control is enabled
  Anonymous call block is disabled
  softkey connected  Park Confrn Endcall Hold Trnsfer
  voice-class stun-usage is enabled. tag is 1
  Lpcor type none
  Pool 2 has this template configured
  Pool 3 has this template configured
  Pool 5 has this template configured
  Pool 6 has this template configured
  Pool 7 has this template configured
  Pool 8 has this template configured
  Pool 9 has this template configured
  Pool 10 has this template configured
  Pool 11 has this template configured
  Pool 50 has this template configured

```

The following is a sample output from the **show voice register template** command. The output shows that a hardware conference administrator has been assigned, only the conference creator can add a new participant, and the conference creator can terminate the active video hardware conference by hanging up.

```

Router# show voice register template 5

Temp Tag 5
Config:
  Attended Transfer is enabled
  Blind Transfer is enabled
  Semi-attended Transfer is enabled
  Conference softkey is enabled

```

```

Caller-ID block is disabled
DnD control is enabled
Video is disabled
Camera is enabled
Anonymous call block is disabled
Lpcor type none
paging-dn 0 [multicast]
conference admin: yes
conference add mode: creator

```

conference drop mode: creator

The following table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 56: show voice register template Field Descriptions

Field	Description
Anonymous call block	Status of anonymous caller blocking defined with the anonymous block command.
Attended Transfer	Status of attended transfer soft key defined with the transfer-attended command.
Blind Transfer	Status of blind transfer soft key defined with the transfer-blind command.
Caller-ID block	Status of caller-id feature defined with the caller-id block command.
Conference	Status of conference soft key defined with the conference command.
Conference admin	Shows whether the Cisco Unified SIP IP phone is assigned as the hardware conference administrator or not.
Conference add mode	Current setting of hardware conference privilege for adding participants.
Conference drop mode	Shows who can terminate an active ad-hoc hardware conference by hanging up.
Config:	List of configuration options defined for this template.
Dnd controls	Status of Do-Not-Disturb soft key defined with the dnd-control command.
Emergency response location	The ephone's emergency response location to which an emergency response team is dispatched when an emergency call is made.
Lpcor incoming	Setting of the lpcor incoming command.
Lpcor outgoing	Setting of the lpcor outgoing command.
Lpcor type	Setting of the lpcor type command.
Temp Tag	Tag number of the requested template.
VAD	Status of voice activity detection defined with the vad command.
Voicemail	Voice-mail extension and timeout value defined with the voice-mail command.

Related Commands

Command	Description
show voice register all	Displays all voice register information, including statistics, pools, and dial peers.
voice register template	Enters voice register template configuration mode and defines a template of common parameters for Cisco Unified SIP IP phones.

show voice register tftp-bind

To display the current configuration files accessible to SIP phones, use the **show voice register tftp-bind** command in privileged EXEC mode.

show voice register tftp-bind

Syntax Description This command has no arguments or keywords.

Command Modes Privileged EXEC

Command History	Cisco IOS Release	Version	Modification
	12.4(4)T	Cisco CME 3.4	This command was introduced.

Usage Guidelines This command provides a list of configuration files that are accessible to SIP phones using TFTP.

Examples The following is sample output from this command:

```
Router(config)# show voice register tftp-bind
tftp-server SIPDefault.cnf url system:/cme/sipphone/SIPDefault.cnf
tftp-server syncinfo.xml url system:/cme/sipphone/syncinfo.xml
tftp-server SIP0009B7F7532E.cnf url system:/cme/sipphone/SIP0009B7F7532E.cnf
tftp-server SIP000ED7DF7932.cnf url system:/cme/sipphone/SIP000ED7DF7932.cnf
tftp-server SIP0012D9EDE0AA.cnf url system:/cme/sipphone/SIP0012D9EDE0AA.cnf
tftp-server gk123456789012 url system:/cme/sipphone/gk123456789012
tftp-server gk123456789012.txt url system:/cme/sipphone/gk123456789012.txt
```

The following table contains descriptions of significant fields shown in this output, listed in alphabetical order.

Table 57: show voice register tftp-bind Field Descriptions

Field	Description
ata<mac-address>	Cisco SIP configuration profile for a particular Cisco ATA-186 or Cisco ATA-188 as indicated by the <mac-address>. This file is generated by using the create profile command .
ata<mac-address>.txt	ASCII text file of a Cisco SIP configuration profile for a particular Cisco ATA-186 or Cisco ATA-188 as indicated by the <mac-address>. This file is generated by using the file text command .
gk<mac-address>	Cisco SIP configuration profile for a particular Cisco IP Phone 7912 or Cisco IP Phone 7912G as indicated by the <mac-address>. This file is generated by using the create profile command .
gk<mac>.txt	ASCII text file of a Cisco SIP configuration profile for a particular Cisco IP Phone 7912 or Cisco IP Phone 7912G as indicated by the <mac-address>. This file is generated by using the file text command .

Field	Description
Id<mac-address>	Cisco SIP configuration profile for a particular Cisco IP Phone 7905 or Cisco IP Phone 7912G as indicated by the <mac-address>. This file is generated by using the create profile command .
Id<mac-address>.txt	ASCII text file of a Cisco SIP configuration profile for a particular Cisco IP Phone 7905 or Cisco IP Phone 7912G as indicated by the <mac-address>. This file is generated by using the file text command .
SIPDefault.cnf	Configuration file to be shared by all Cisco SIP IP Phone 7940s and Cisco SIP IP Phone 7960s. This file is automatically generated by the router through the source-address and is placed in router memory. The SIPDefault.cnf file contains the IP address that the phones use to register for service, using the Session Initiation Protocol (SIP).
SIP<mac-address>.cnf	Cisco SIP configuration profile for a particular Cisco IP Phone 7940 or Cisco IP Phone 7960 as indicated by the <mac-address>. This file is generated by using the create profile command .
syncinfo.xml	Configuration file to be shared by all Cisco SIP IP Phone 7940s and Cisco SIP IP Phone 7960s. This file is generated by using the create profile command .

Related Commands

	Description
create profile (voice register global)	Generates the configuration profiles required for SIP phones.
reset (voice register dn)	Performs a complete reboot of one phone associated with a Cisco CME router.
reset (voice register pool)	Performs a complete reboot of one or all phones associated with a Cisco CME router.
text file (voice register global)	Generates an ASCII format text file of the Cisco SIP configuration profile for Cisco IP Phone 7905s and 7905Gs, Cisco IP phone 7912s and 7912Gs, Cisco ATA-186s, and Cisco ATA-188s.
tftp-path (voice register global)	Specifies the directory to which the provisioning file for SIP phones in a Cisco CallManager Express (Cisco CME) system will be written.
voice register global	Enters voice register global configuration mode in order to set global parameters for all supported Cisco SIP phones in a Cisco CME or Cisco SIP SRST environment.

shutdown(telephony-service)

To shut down the Skinny Client Control Protocol (SCCP) server listening socket, use the **shutdown** command in telephony-service configuration mode. To enable service, use the **no** form of this command.

shutdown
no shutdown

Syntax Description This command has no arguments or keywords.

Command Default No shutdown is enabled

Command Modes Telephony-service configuration (config-telephony)
Group configuration (conf-tele-group)
Call-manager-fallback configuration (config-ccm-fallback)

Command History	Cisco IOS Release	Cisco Product	Modification
	15.1(1)T	Cisco Unified CME 8.0 Cisco Unified SRST 8.0	This command was introduced

Usage Guidelines The shutdown command allows you to shut down the SCCP server listening sockets when you want to change or remove the IP address set up on your system. For example, If you have IPv6 address and you want to change the IP address set up to dual stack (IPv4 and IPv6) you can use the shutdown command.

Examples

The following example shows SCCP server listening sockets being shut down under telephony-service.

```
Router(config-telephony)#shut down
shutdown
```

The following example shows SCCP server listening sockets being shut down for group 2 (under group mode) in telephony service.

```
Router(config-telephony)#group 2
Router(conf-tele-group)#shutdown
```

The following example shows SCCP server listening sockets being shut down under call-manager-fallback mode.

```
Router(config-telephony)#group 2
Router(conf-cm-fallback)#shutdown
```

Related Commands

Command	Description
protocol -mode	Allows you to configure a preferred IP address mode for SCCP IP phones.
ip source address	Identifies the IP address and port through which IP phones communicate with a Cisco Unified CME router.

sip-prefix

To add "SIP_" prefix in the locale names while populating the configuration files for this phone type in fast track mode, use the **sip-prefix** command in global configuration mode. To disable, use the **no** form of this command.

sip-prefix
no sip-prefix

Syntax Description This command has no arguments or keywords.

Command Default sip-prefix is enabled.

Command Modes Router (config-register-pooltype) #sip-prefix

Command History	Cisco IOS Release	Cisco Product	Modification
	15.4(3)M	Cisco Unified CME 10.5	This command was introduced

Usage Guidelines The sip-prefix command allows you to add "SIP_" prefix in the locale names of the configuration files. For example, DX650 phones do not require "SIP_" prefix in their locale names. However, other phone models require "SIP_" prefix in locale names. Use this command while adding new phones in fast-track mode based on their locale file format.

Examples The following example shows how to configure "SIP_" prefix on the endpoint Cisco Unified IP Phone 7811.

```
Router(config)#voice register pool-type 7811
Router(config-register-pooltype) #sip-prefix
```

Related Commands	Command	Description
	num -lines	Defines number of lines supported by the phone.
	phoneload -support	Defines the phone support for Phoneload.
	reference -pooltype	Reference pooltype to inherit the properties used in fast-track configuration.

snr

To enable Single Number Reach (SNR) on an extension of an SCCP IP phone, use the **snr** command in ephone-dn configuration mode. To disable SNR on the extension, use the **no** form of this command.

```
snr e164-number delay seconds timeout seconds [ cfwd-noan extension-number ]
no snr
```

Syntax Description

<i>e164-number</i>	E.164 telephone number to ring if IP phone extension does not answer.
delay <i>seconds</i>	Sets the number of seconds that the call rings the IP phone before ringing the remote phone. Range: 0 to 10. Default: disabled.
timeout <i>seconds</i>	Sets the number of seconds that the call rings after the configured delay. Call continues to ring for this length of time on the IP phone even if the remote phone answers the call. Range: 5 to 60. Default: disabled.
cfwd-noan <i>extension-number</i>	(Optional) Forwards the call to this target number if the phone does not answer after both the delay and timeout seconds have expired. This is typically the voice mail number. Note This option is not supported for calls from FXO trunks because the calls connect immediately.

Command Default

Single Number Reach is not enabled on the extension.

Command Modes

Ephone-dn configuration (config-ephone-dn)

Command History

Release	Cisco Product	Modification
12.4(22)YB	Cisco Unified CME 7.1	This command was introduced.
12.4(24)T	Cisco UnifiedCME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.

Usage Guidelines

This command enables the SNR feature on the extension. The SNR feature allows users to answer incoming calls on their desktop IP phone or at a remote destination and to pick up in-progress calls on the desktop phone or the remote destination without losing the connection. If an incoming call to this extension is answered immediately, the call is treated as a normal call.

If the call is not answered within the number of seconds set with the **delay** keyword, Cisco Unified CME rings the remote number while continuing to ring the SNR extension. If the call is answered by the desktop IP phone within the number of seconds set with the **timeout** keyword, the call to the remote number is disconnected. If the call is answered on the IP phone, the user can send the call to the remote phone by pressing the Mobility soft key.

If the call is not answered by the IP phone within the number of seconds set with the **timeout** keyword, the ringing call appearance on the IP phone is deleted. This call is marked as hold state on the IP phone. If the user answers the call on the remote phone, the user can pull back the call to the IP phone by pressing the Resume soft-key.

Examples

The following example shows extension 1001 is enabled for SNR. After a call rings at this number for 5 seconds, the call also rings at the remote number 4085550133. The call continues ringing on both phones for 15 seconds. If the call is not answered after a total of 20 seconds, the call no longer rings and is forwarded to the voice-mail number 2001.

```
ephone-dn 10
 number 1001
 mobility
 snr 4085550133 delay 5 timeout 15 cfwd-noan 2001
```

Related Commands

Command	Description
mobility	Enables the Mobility feature on an extension of an SCCP IP phone.
number	Associates a telephone or extension number with an ephone-dn.
softkeys connected	Modifies the order and type of soft keys that display on an IP phone during the connected call state.
softkeys idle	Modifies the order and type of soft keys that display on an IP phone during the idle call state.

snr (voice register dn)

To enable the Single Number Reach (SNR) feature on an extension of a Cisco Unified SIP IP phone, use the **snr** command in voice register dn configuration mode. To disable the SNR feature on the extension, use the **no** form of the command.

```
snr e164-number delay seconds timeout seconds [cfwd-noan extension-number]
no snr
```

Syntax Description

<i>e164-number</i>	E.164 telephone number to call when the Cisco Unified SIP IP phone extension does not answer.
delay <i>seconds</i>	Sets the number of seconds that the Cisco Unified SIP IP phone rings when called. When the time delay is reached, the call is transferred to the PSTN phone and the SNR directory number. Range: 0 to 30. Default: 5.
timeout <i>seconds</i>	Sets the number of seconds that the Cisco Unified SIP IP phone rings after the configured time delay. When the timeout value is reached, no call is displayed on the phone. You have to use the Resume soft key to pull back or the Mobility soft key to send the call to a mobile phone. Range: 30 to 60. Default: 60. Note When the default is enabled, the Cisco Unified SIP IP phone continues to ring for 60 seconds even if the remote phone answers the call.
cfwd-noan <i>extension-number</i>	(Optional) Forwards the call to the extension number when the phone does not answer after both the time delay and timeout values are reached. The extension number is typically the voice mail number. Note This option is not supported for calls from FXO trunks because the calls connect immediately.

Command Default

The SNR feature is not enabled on the extension of a Cisco Unified SIP IP phone.

Command Modes

Voice register dn configuration (config-register-dn)

Command History

Release	Modification
15.2(2)T	This command was introduced.

Usage Guidelines

Use the **snr** command to enable the SNR feature on an extension of a Cisco Unified SIP IP phone.

The SNR feature allows you to answer incoming calls on your desktop IP phones or at a remote destination. It also allows you to pick up in-progress calls on a desktop phone or at a remote destination without losing the connection. If an incoming call to the extension is answered immediately, the call is treated as a normal call.

If the call is not answered within the number of seconds set with the **delay** keyword, Cisco Unified CME rings the remote number while continuing to ring the SNR extension. If the call is answered by the desktop IP phone within the number of seconds set with the **timeout** keyword, the call to the remote number is disconnected. If the call is answered on the IP phone, you can send the call to the remote phone by pressing the Mobility soft key.

If the call is not answered by the IP phone within the number of seconds set with the **timeout** keyword, the call is displayed on the IP phone as being in the hold state. If the user answers the call on the remote phone, the user can pull back the call to the IP phone by pressing the Resume soft key.

Examples

The following example shows that extension 1004 is enabled for SNR. After a call rings at this number for one second, the call also rings at the remote number 9900. The call continues ringing on both phones for 10 seconds. If the call is not answered after a total of 11 seconds, the call no longer rings and is forwarded to the voice-mail number 1007.

```
Router(config)# voice register dn 3
Router(config-register-dn)# number 1004
Router(config-register-dn)# name John Smith
Router(config-register-dn)# mobility
Router(config-register-dn)# snr calling-number local
Router(config-register-dn)# snr 9900 delay 1 timeout 10 cfwd-noan 1007
Router(config-register-dn)# snr ring-stop
Router(config-register-dn)# snr answer-too-soon 2
```

Related Commands

Command	Description
mobility (voice register dn)	Enables the Mobility feature on an extension of a Cisco Unified SIP IP phone.
snr answer-too-soon (voice register dn)	Sets the time in which SNR calls are prevented from being diverted to the voice mailbox of a mobile phone.
snr calling-number local (voice register dn)	Replaces the calling party number displayed on the configured mobile phone with the local SNR number.
snr ring-stop (voice register dn)	Ends the ringing on a Cisco Unified SIP IP phone after the Single SNR call is answered on the configured mobile phone.

snr answer-too-soon

To set the SNR answer to soon timer, use the `snr answer-too-soon` command in `ephone-dn` mode. To reset the default, use the `no` form of the command.

snr answer-too-soon time
no snr answer-too-soon

Syntax Description

<i>time</i>	Time, in seconds. Range: 1 to 5.
-------------	----------------------------------

Command Default

No answer too soon timer is set.

Command Modes

Ephone-dn configuration (`config-ephone-dn`)

Command History

Cisco IOS Release	Cisco Product	Modification
15.1(3)T	Cisco Unified CME 8.5	This command was introduced.

Usage Guidelines

Use this command to enable timer for answering the call on an SNR mobile phone. You can set a timer from 1 to 5 seconds. If the call is answered within the timer, the mobile leg is disconnected.

Examples

```
Router(config)#ephone-dn 10
Router(config-ephone-dn)#snr answer-too-soon 4
```

Related Commands

Command	Description
snr	Enables SNR on the extension of an SCCP IP phone.

snr answer-too-soon (voice register dn)

To set the time in which Single Number Reach (SNR) calls are prevented from being diverted to the voice mailbox of a mobile phone, use the **snr answer-too-soon** command in voice register dn configuration mode. To allow SNR calls to be diverted to the voice mailbox, use the **no** form of the command.

snr answer-too-soon *time*
no snr answer-too-soon

Syntax Description

<i>time</i>	Time, in seconds. Range: 1 to 5.
-------------	----------------------------------

Command Default

No answer-too-soon time is set. Calls may be diverted to the voice mailbox when a user's mobile phone is not answered or is turned off.

Command Modes

Voice register dn configuration (config-register-dn)

Command History

Release	Modification
15.2(2)T	This command was introduced.

Usage Guidelines

Use the **snr answer-too-soon** command to set the time in which SNR calls are prevented from being diverted to the voice mailbox of a mobile phone. When the call is diverted to the voice mailbox within the set time, the mobile phone call leg is disconnected.

Examples

The following example shows how SNR calls are prevented from being diverted to the voice mailbox of a mobile phone for 2 seconds:

```
Router(config)# voice register dn 3
Router(config-register-dn)# number 1004
Router(config-register-dn)# name John Smith
Router(config-register-dn)# mobility
Router(config-register-dn)# snr calling-number local
Router(config-register-dn)# snr 9900 delay 1 timeout 10
Router(config-register-dn)# snr ring-stop
Router(config-register-dn)# snr answer-too-soon 2
```

Related Commands

Command	Description
snr (voice register dn)	Enables the SNR feature on an extension of a Cisco Unified SIP IP phone.

snr calling-number local

To replace the calling-party number with the single number reach (SNR) extension number in calls forwarded to the remote phone, use the **snr calling-number local** command in ephone-dn configuration mode. To reset to the default, use the **no** form of this command.

snr calling-number local
no snr calling-number local

Syntax Description This command has no arguments or keywords.

Command Default Calling-party number is not replaced.

Command Modes Ephone-dn configuration (config-ephone-dn)

Command History	Cisco IOS Release	Cisco Product	Modification
	15.0(1)XA	Cisco Unified CME 8.0	This command was introduced.
	15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Usage Guidelines This command replaces the original calling party number with the SNR extension number (local number) in the caller ID display for SNR calls forwarded to the remote phone. When the call is forwarded to the remote phone, such as a mobile phone, the caller ID shows the SNR number that the caller dialed, not the number of the original calling party.

Examples The following example shows that the original calling party number is replaced by the SNR extension number 1234 when the call is forwarded to the mobile phone:

```
ephone-dn 1
 number 1234
 mobility
 snr 4085550123 delay 5 timeout 15 cfwd-noan 2001
 snr calling-number local
```

Related Commands	Command	Description
	calling-number local	Replaces a calling-party number and name with the forwarding-party number and name for all calls.
	mobility	Enables the Mobility feature on an extension of an SCCP IP phone.
	snr	Enables SNR on the extension of an SCCP IP phone.

snr calling-number local (voice register dn)

To replace the calling party number displayed on the configured mobile phone with the local Single Number Reach (SNR) number, use the **snr calling-number local** command in voice register dn configuration mode. To return to the default, use the **no** form of this command.

snr calling-number local
no snr calling-number local

Syntax Description	This command has no arguments or keywords.
---------------------------	--

Command Default	The number of the calling party is displayed on the mobile phone configured to receive SNR calls.
------------------------	---

Command Modes	Voice register dn configuration (config-register-dn)
----------------------	--

Command History	Release	Modification
	15.2(2)T	This command was introduced.

Examples

The following example shows how the **snr calling-number local** command is used to display the local SNR number instead of the calling party's number on the mobile phone:

```
Router(config)# voice register dn 3
Router(config-register-dn)# number 1004
Router(config-register-dn)# name John Smith
Router(config-register-dn)# mobility
Router(config-register-dn)# snr calling-number local
Router(config-register-dn)# snr 9900 delay 1 timeout 10
Router(config-register-dn)# snr ring-stop
Router(config-register-dn)# snr answer-too-soon 2
```

Related Commands	Command	Description
	snr (voice register dn)	Enables the SNR feature on an extension of a Cisco Unified SIP IP phone.

snr mode

To set the mode for the Single Number Reach (SNR) directory number (DN), use the **snr mode** command in ephone-dn configuration mode. To return to the default, use the **no** form of this command.

snr mode [**virtual**]

no snr mode

Syntax Description

virtual	Enables the virtual mode for an SNR DN when it is unregistered or floating.
Note	Virtual mode is activated when the DN state remains up when it should be in the down state.

Command Default

No DN mode is set for the SNR feature.

Command Modes

Ephone-dn configuration (config-ephone-dn)

Command History

Release	Modification
15.2(2)T	This command was introduced.

Usage Guidelines

A virtual SNR DN is a DN not associated with any registered phone but is a number that can be called, have its calls forwarded to a preconfigured mobile phone, or put on an Auto Hold state when the mobile phone answers the call or the time delay is reached. In the Auto Hold state, the DN can either be floating or unregistered. A floating DN is a DN not configured with any phone while an unregistered DN is one associated with phones not registered to a Cisco Unified CME system.

A ringback tone is heard when a call is made to a virtual DN.

To enable the SNR feature, the SNR DN must be in the up state, the Mobility feature must be enabled, and the time delay or timeout value configured with the **snr** command must be reached.

Examples

The following example sets the virtual DN mode for SNR on ephone-dn 1:

```
Router(config)# ephone-dn 1
Router(config-ephone-dn)# snr mode virtual
```

Related Commands

Command	Description
ephone-dn	Enters ephone-dn configuration mode to configure a DN for an IP phone line, intercom line, paging line, voice-mail port, or MWI.
snr	Enables SNR on an extension of a Cisco Unified SCCP IP phone.

snr ring-stop

To stop the IP phone from ringing after the SNR call is answered on a mobile phone, use the `snr ring-stop` command in `ephone-dn` configuration mode. To reset the default value, use the `no` form of the command.

snr ring-stop
no snr ring-stop

Syntax Description This command has no arguments or keywords.

Command Default Phone continues to ring after the SNR call is answered on a mobile phone.

Command Modes Ephone-dn configuration (`conf-ephone-dn`)

Command History	Cisco IOS Release	Cisco Product	Modification
	15.1(3)T	Cisco Unified CME 8.5	This command was introduced.

Usage Guidelines Use this command to stop the IP phone from ringing after the SNR call is answered on a mobile phone.

Examples

```
Router(config-ephone-dn)10  
Router(config-ephone-dn)#snr ring-stop
```

Related Commands	Command	Description
	snr	Enables SNR on the extension of an SCCP IP phone.

snr ring-stop (voice register dn)

To end the ringing on a Cisco Unified SIP IP phone after the Single Number Reach (SNR) call is answered on the configured mobile phone, use the **snr ring-stop** command in voice register dn configuration mode. To allow the Cisco Unified SIP IP phone to continue ringing even after the SNR call has been answered, use the **no** form of the command.

snr ring-stop
no snr ring-stop

Syntax Description This command has no arguments or keywords.

Command Default The Cisco Unified SIP IP phone continues to ring even after the SNR call is answered on a mobile phone.

Command Modes Voice register dn configuration (config-register-dn)

Command History	Release	Modification
	15.2(2)T	This command was introduced.

Examples

The following example shows how to end the ringing on a Cisco Unified SIP IP phone:

```
Router(config)# voice register dn 3
Router(config-register-dn)# number 1004
Router(config-register-dn)# name John Smith
Router(config-register-dn)# mobility
Router(config-register-dn)# snr calling-number local
Router(config-register-dn)# snr 9900 delay 1 timeout 10
Router(config-register-dn)# snr ring-stop
Router(config-register-dn)# snr answer-too-soon 2
```

Related Commands	Command	Description
	snr (voice register dn)	Enables the SNR feature on an extension of a Cisco Unified SIP IP phone.

softkeys alerting

To configure an ephone template for soft-key display during the alerting call stage, use the **softkeys alerting** command in ephone-template configuration mode. To remove a **soft key alerting** configuration, use the **no** form of this command.

softkeys alerting [Acct] [Callback] [Endcall]
no softkeys alerting

Syntax Description

Acct	(Optional) Soft-key name that appears on the IP phone during the alerting call stage. Short for “account code.” Provides access to configured accounts.
Callback	(Optional) Soft-key name that appears on the IP phone during the alerting call stage. Requests callback notification when a busy called line becomes free.
Endcall	(Optional) Soft-key name that appears on the IP phone during the alerting call stage. Ends the current call.

Command Default

The default soft keys for the alerting call stage and the order in which they appear on IP phones are, from first to last, Acct, Callback, and Endcall.

Command Modes

Ephone-template configuration (config-ephone-template)

Command History

Cisco IOS Release	Cisco CME Version	Modification
12.3(11)T	3.2	This command was introduced.

Usage Guidelines

The alerting call stage is when the remote point is being notified of an incoming call, and the status of the remote point is being relayed to the caller as either ringback or busy.

The number and order of soft keys listed in the **softkeys alerting** correspond to the number and order of soft keys that will appear on IP phones.

Examples

In the following example, ephone template 1 is configured for the alerting stage and for the seized and connected call stages:

```
Router(config)# telephony-service
Router(config-telephony)# ephone-template 1
Router(config-ephone-template)# softkeys seized Redial Cfgdall Pickup

Router(config-ephone-template)# softkeys alerting Callback Endcall
Router(config-ephone-template)# softkeys connected Confrn Hold Endcall
```

Related Commands

Command	Description
ephone-template (ephone)	Applies an ephone template to an ephone.
softkeys connected	Configures an ephone template for soft-key display during the connected call stage.

Command	Description
softkeys idle	Configures an ephone template for soft-key display during the idle call stage.
softkeys seized	Configures an ephone template for soft-key display during the seized call stage.

softkeys connected (voice register template)

To modify the soft key display during the connected call state on Cisco Unified SIP IP phones, use the **softkeys connected** command in voice register template configuration mode. To return to the default, use the **no** form of this command.

softkeys connected [**ConfList**] [**Confrn**] [**Endcall**] [**Hold**] [**Park**] [**RmLstC**] [**Trnsfer**] [**iDiver**]
[HLog]
no softkeys connected

Syntax Description

ConfList	(Optional) Lists all the participants in a conference.
Confrn	(Optional) Connects callers to a conference call. This soft key also enables ad-hoc conference creators to initiate a conference.
Endcall	(Optional) Ends the current call.
Hold	(Optional) Places an active call on hold and resumes the call.
Park	(Optional) Places an active call on hold so it can be retrieved from another phone in the system.
RmLstC	(Optional) Removes the last conference participant.
Trnsfer	(Optional) Transfers active calls to another extension.
iDiver	(Optional) Immediately diverts a call to a voice-messaging system.
HLog	(Optional) Soft key that places a phone into not-ready status, in which it does not accept hunt-group calls. You must set the hunt-group logout command to HLog for this softkey to be functional. This key is a toggle; pressing it a second time returns the phone to ready status, in which it is available to receive calls.

Command Default

The default soft keys for the connected call state and the order in which they appear on Cisco Unified SIP IP phones are, from first to last: ConfList, Confrn, Endcall, Hold, Park, RmLstC, Trnsfer, iDiver, and HLog.

Command Modes

Voice register template configuration (config-register-temp)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(11)XJ	Cisco Unified CME 4.1	This command was introduced.
12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
12.4(22)YB	Cisco Unified CME 7.1	The Park keyword was added.
15.1(3)T	Cisco Unified CME 8.5	The iDiver keyword was added.
15.2(2)T	Cisco Unified CME 9.0	This command was modified. The syntax description for the Confrn soft key was updated. The ConfList and RmLastC keywords were added.

Cisco IOS Release	Cisco Product	Modification
Cisco IOS XE Everest 16.4.1 15.6(3)M1	Cisco Unified CME 11.6	HLog Softkey support was introduced.

Usage Guidelines

The connected call state is when the connection to a remote point is established.

The number and order of soft keys used in this command correspond to the number and order of soft keys that appear on Cisco Unified SIP IP phones. Any soft key that is not explicitly specified with this command is disabled.

The ConfList and RmLastC soft keys are added in the connected state when hardware conference is enabled.

This command is not supported on the Cisco Unified 7905, 7912, 7940, and 7960 SIP IP Phones.

Examples

In the following example, Cisco Unified SIP IP phone template 1 is configured for the connected and seized call states:

```
Router(config)# voice register template 1
Router(config-register-temp)# softkeys seized Redial Cfdall EndCall HLog

Router(config-register-temp)# softkeys connected Confn Hold Endcall HLog
```

The following is a sample output from the **show voice register template** command. The output shows that the iDivert soft key is in connected state.

```
Router# show voice register template 1
Temp Tag 1
Config:
  Attended Transfer is enabled
  Blind Transfer is enabled
  Semi-attended Transfer is enabled
  Conference is enabled
  Caller-ID block is disabled
  DnD control is enabled
  Anonymous call block is disabled
  softkeys seized Redial Cfdall EndCall HLog
  softkeys connected Confn Hold Endcall HLog
```

Related Commands

Command	Description
softkeys hold (voice register template)	Modifies the soft key display on Cisco Unified SIP IP phones during the hold call state.
softkeys idle (voice register template)	Modifies the soft key display on Cisco Unified SIP IP phones during the idle call state.
softkeys seized (voice register template)	Modifies the soft key display on Cisco Unified SIP IP phones during the seized call state.
template (voice register pool)	Applies a phone template to a Cisco Unified SIP IP phone.

softkeys connected

To modify the order and type of soft keys that display on an IP phone during the connected call state, use the **softkeys connected** command in ephone-template configuration mode. To reset to the default, use the **no** form of this command.

softkeys connected [Acct] [ConfList] [Confrn] [Endcall] [Flash] [HLog] [Hold] [Join] [LiveRcd] [Mobility] [Park] [RmLstC] [Select] [TrnsfVM] [Trnsfer]
no softkeys connected

Syntax Description

Acct	(Optional) Soft key that provides access to configured accounts.
ConfList	(Optional) Soft key that lists all parties in a conference.
Confrn	(Optional) Soft key that connects callers to a conference call.
Endcall	(Optional) Soft key that ends the current call.
Flash	(Optional) Soft key that provides hookflash functionality for public switched telephony network (PSTN) services on calls connected to the PSTN via a foreign exchange office (FXO) port. Also called “hookflash.”
HLog	(Optional) Soft key that places a phone into not-ready status, in which it does not accept hunt-group calls. You must set the hunt-group logout command to HLog for this soft key to be visible. This key is a toggle; pressing it a second time returns the phone to ready status, in which it is available to receive calls.
Hold	(Optional) Soft key that places an active call on hold and resumes the call.
Join	(Optional) Soft key that joins an established call to conference.
LiveRcd	(Optional) Soft key that enables recording of a call.
Mobility	(Optional) Soft key that forwards the call to the PSTN number defined by the Single Number Reach (SNR) feature.
Park	(Optional) Soft key that places an active call on hold, so it can be retrieved from another phone in the system.
RmLstC	(Optional) Soft key that removes the last party added to the conference. This soft key only works for the conference creator.
Select	(Optional) Soft key that selects a call or a conference on which to take action.
TrnsfVM	(Optional) Soft key that transfers a call to a voice-mail extension number.
Trnsfer	(Optional) Soft key that transfers active calls to another extension.

Command Default

The default soft keys for the connected call state and the order in which they appear on IP phones are, from first to last:

- With HLog support: Hold, EndCall, Trnsfer, Confrn, Acct, Flash, Park, HLog

- Without HLog support: Hold, EndCall, Trnsfer, Confrn, Acct, Flash, Park

Command Modes

Ephone-template configuration (config-ephone-template)

Command History

Cisco IOS Release	Cisco Product	Modification
12.3(11)T	Cisco CME 3.2	This command was introduced.
12.4(4)XC	Cisco Unified CME 4.0	The HLog keyword was added.
12.4(11)XJ	Cisco Unified CME 4.1	The ConfList , Join , RmLstC , and Select keywords were added.
12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
12.4(15)XZ	Cisco Unified CME 4.3	The LiveRed and TrnsfVM keywords were added.
12.4(20)T	Cisco Unified CME 7.0	This command with the LiveRed and TrnsfVM keywords was integrated into Cisco IOS Release 12.4(20)T.
12.4(22)YB	Cisco Unified CME 7.1	The Mobility keyword was added.
12.4(24)T	Cisco UnifiedCME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.

Usage Guidelines

The connected call state is when the connection to a remote point has been established.

Configure the ConfList, Join, and RmLstC soft keys for conferencing functions. These soft keys are supported for hardware-based conferencing only and require the appropriate DSP farm configuration.

**Note**

The ConfList (including the Remove, Update, and Exit soft keys within the ConfList function) and RmLstC soft keys do not work on the Cisco Unified IP Phone 7902, 7935, and 7936.

Examples

In the following example, ephone template 1 modifies the soft keys displayed for the seized, alerting, and connected call states:

```
Router(config)# ephone-template 1
Router(config-ephone-template)# softkeys seized Redial Cfdall Pickup

Router(config-ephone-template)# softkeys alerting Callback Endcall
Router(config-ephone-template)# softkeys connected Confrn Hold Endcall
```

Related Commands

Command	Description
ephone	Enters ephone configuration mode for an IP phone.
ephone-template (ephone)	Applies an ephone template to an ephone.
fxo-hook-flash	Enables display of the Flash soft key.

Command	Description
hunt-group logout	Enables separate handling of DND and HLog functionality for hunt-group agents and the display of the HLog soft key on phones.
softkeys alerting	Modifies the soft-key display for the alerting call state.
softkeys idle	Modifies the soft-key display for the idle call state.
softkeys ringing	Modifies the soft-key display for the ringing call state.
softkeys seized	Modifies the soft-key display for the seized call state.

softkeys hold

To configure an ephone template to modify soft-key display during the call-hold call stage, use the **softkeys hold** command in ephone-template configuration mode. To remove a **softkeys hold** configuration, use the **no** form of this command.

softkeys hold [**Join**] [**Newcall**] [**Resume**] [**Select**]
no softkeys hold

Syntax Description

Join	(Optional) Soft-key name that appears on an IP phone during the hold call stage. Joins an established call to a conference.
Newcall	(Optional) Soft-key name that appears on an IP phone during the hold call stage. Opens a line on a speaker phone to place a new call.
Resume	(Optional) Soft-key name that appears on an IP phone during the hold call stage. Reconnects with the call on hold.
Select	(Optional) Soft-key name that appears on an IP phone during the hold call stage. Selects a call or a conference on which to take action.

Command Default

The default soft keys for the hold call stage and the order in which they appear on IP phones are alphabetical, from first to last, Join, Newcall, Resume, and Select.

Command Modes

Ephone-template configuration (config-ephone-template)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.
12.4(11)XJ2	Cisco Unified CME 4.1	The Join and Select keywords were added.
12.4(15)T	Cisco Unified CME 4.1	This command with the Join and Select keywords was integrated into Cisco IOS Release 12.4(15)T.

Usage Guidelines

You reach the call-hold state by pressing the Hold soft key while you are in the connected state. From the hold state, you can press Resume to return to the connected state or NewCall to start another call, leaving the original call in the call-hold state.

The number and order of soft keys listed in the **softkeys hold** correspond to the number and order of soft keys that will appear on IP phones.

Configure the Join and Select soft keys for conferencing functions. These soft keys are supported for hardware-based conferencing only and require the appropriate DSP farm configuration..

Examples

In the following example, ephone template 1 is configured for the idle, alerting, connected, and hold call stages. It is applied to ephone 25. When ephone 25 has a call on hold, the only soft key that will be available is the Resume soft key.

```

Router(config)# telephony-service
Router(config-telephony)# ephone-template 1

Router(config-ephone-template)# softkeys idle Redial Cfdall Pickup

Router(config-ephone-template)# softkeys alerting Callback Endcall
Router(config-ephone-template)# softkeys connected Confrn Hold Endcall
Router(config-ephone-template)# softkeys hold Resume
Router(config-ephone-template)# exit
Router(config)# ephone 25
Router(config-ephone)# button 1:39
Router(config-ephone)# ephone-template 1

```

Related Commands

Command	Description
ephone	Enters ephone configuration mode for an IP phone.
ephone-template	Declares and names an ephone template to configure IP phone soft-key display and enters ephone-template configuration mode
ephone-template (ephone)	Applies an ephone template to an ephone.
softkeys alerting	Configures an ephone template for soft-key display during the alerting call stage.
softkeys connected	Configures an ephone template for soft-key display during the connected call stage.
softkeys idle	Configures an ephone template for soft-key display during the idle call stage.
softkeys seized	Configures an ephone template for soft-key display during the seized call stage.

softkeys idle

To modify the order and type of soft keys that display on an IP phone during the idle call state, use the **softkeys idle** command in ephone template configuration mode. To reset to the default, use the **no** form of this command.

softkeys idle [**Cfwdall**] [**ConfList**] [**Dnd**] [**Gpickup**] [**HLog**] [**Join**] [**Login**] [**Mobility**] [**Newcall**] [**Pickup**] [**Redial**] [**RmLstC**]
no softkeys idle

Syntax Description

Cfwdall	(Optional) Soft key that forwards all calls.
ConfList	(Optional) Soft key that lists all parties in a conference.
Dnd	(Optional) Soft key that enables the Do-Not-Disturb features. This key is a toggle; pressing it a second time disables DND.
Gpickup	(Optional) Soft key that selectively picks up calls coming into a phone number that is a member of a pickup group.
HLog	(Optional) Soft key that places a phone into not-ready status, in which it does not accept hunt-group calls. You must set the hunt-group logout command to HLog for this soft key to be visible. This key is a toggle; pressing it a second time returns the phone to ready status, in which it is available to receive calls.
Join	(Optional) Soft key that joins an established call to a conference.
Login	(Optional) Soft key that provides personal identification number (PIN)-controlled access to restricted phone features.
Mobility	(Optional) Soft key that enables Single Number Reach (SNR) feature. This key is a toggle; pressing it a second time disables SNR.
Newcall	(Optional) Soft key that opens a line on a speaker phone to place a new call.
Pickup	(Optional) Soft key that selectively picks up calls coming into another extension.
Redial	(Optional) Soft key that redials the last number dialed.
RmLstC	(Optional) Soft key that removes the last party added to the conference. This soft key removes the last party only when the conference creator presses it.

Command Default

The default soft keys for the idle call stage and the order in which they appear on IP phones are:

- FXO Trunk: Redial, NewCall, DoNotDisturb
- With HLog support: Redial, NewCall, CFwdAll, CallPickUp, GrpCallPickUp, DoNotDisturb, Login, HLog
- Without HLog support: Redial, NewCall, CFwdAll, CallPickUp, GrpCallPickUp, DoNotDisturb, Login

Command Modes

Ephone-template configuration (config-ephone-template)

Command History

Cisco IOS Release	Cisco Product	Modification
12.3(11)T	Cisco CME 3.2	This command was introduced.
12.4(4)XC	Cisco Unified CME 4.0	The HLog keyword was added.
12.4(9)T	Cisco Unified CME 4.0	The HLog keyword was integrated into Cisco IOS Release 12.4(9)T.
12.4(11)XJ2	Cisco Unified CME 4.1	The ConfList , Join , and RmLstC keywords were added.
12.4(15)T	Cisco Unified CME 4.1	This command with the ConfList , Join , and RmLstC keywords was integrated into Cisco IOS Release 12.4(15)T.
12.4(22)YB	Cisco Unified CME 7.1	The Mobility keyword was added.
12.4(24)T	Cisco unified CME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.

Usage Guidelines

The idle calling stage occurs before a call is made and after a call is complete.

The number and order of soft keys listed in the **softkeys idle** command correspond to the number and order of soft keys on IP phones.

Configure the ConfList, Join, and RmLstC soft keys for conferencing functions. These soft keys are supported for hardware-based conferencing only and require the appropriate DSP farm configuration.



Note

The ConfList (including the Remove, Update, and Exit soft keys within the ConfList function) and RmLstC soft keys do not work on the Cisco Unified IP Phone 7902 and Cisco Unified IP Phone 7935 and 7936.

Examples

In the following example, ephone template 1 is configured for the idle stage and for the alerting and connected call stages:

```
Router(config)# ephone-template 1
Router(config-ephone-template)# softkeys idle Redial Cfgdall Pickup
Router(config-ephone-template)# softkeys alerting Callback Endcall
Router(config-ephone-template)# softkeys connected Confrn Hold Endcall
```

Related Commands

Command	Description
ephone	Enters ephone configuration mode for an IP phone.
ephone-template	Creates an ephone template.
ephone-template (ephone)	Applies an ephone template to an ephone.
hunt-group logout	Enables separate handling of DND and HLog functionality for hunt-group agents and the display of an HLog soft key on phones.
softkeys alerting	Configures soft-key display during the alerting call state.

Command	Description
softkeys connected	Configures soft-key display during the connected call state.
softkeys seized	Configures soft-key display during the seized call state.

softkeys idle (voice register template)

To modify the soft-key display during the idle call state on SIP phones, use the **softkeys idle** command in voice register template configuration mode. To remove a **softkeys idle** configuration, use the **no** form of this command.

softkeys idle [Cfwdall] [DND] [Gpickup] [Newcall] [Pickup] [Redial] [HLog]
no softkeys idle

Syntax Description

Cfwdall	(Optional) Soft key for “call forward all.” Forwards all calls.
DND	(Optional) Soft key that enables the Do-Not-Disturb feature.
Gpickup	(Optional) Soft key that allows a user to pickup a call that is ringing on another phone.
Newcall	(Optional) Soft key that opens a line on a speakerphone to place a new call.
Pickup	(Optional) Soft key that allows a user to pickup a call that is ringing on another phone that is a member of the same pickup group.
Redial	(Optional) Soft key that redials the last number dialed.
HLog	(Optional) Soft key that places a phone into not-ready status, in which it does not accept hunt-group calls. You must set the hunt-group logout command to HLog for this softkey to be functional. This key is a toggle; pressing it a second time returns the phone to ready status, in which it is available to receive calls.

Command Default

The default soft keys for the idle call state and the order in which they appear on SIP phones are, from first to last, Redial, Newcall, Cfwdall, and HLog.

Command Modes

Voice register template configuration (config-register-temp)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(11)XJ	Cisco Unified CME 4.1	This command was introduced.
12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
12.4(22)YB	Cisco Unified CME 7.1	The DND keyword was added.
12.4(24)T	Cisco Unified CME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.
Cisco IOS XE Everest 16.4.1 15.6(3)M1	Cisco Unified CME 11.6	HLog Softkey support was introduced.

Usage Guidelines

The idle calling state occurs before a call is made and after a call is complete.

The number and order of soft keys used in this command correspond to the number and order of soft keys that appear on SIP phones. Any soft key that is not explicitly specified with this command is disabled if this command is used to change the default soft keys.

This command is not supported on the Cisco Unified IP Phone 7905, 7912, 7940, or 7960.

Examples

In the following example, SIP phone template 1 is configured for the idle and connected call states:

```
Router(config)# voice register template 1
Router(config-register-template)# softkeys idle Redial Cfdall HLog
Router(config-register-template)# softkeys connected Confrn Hold Endcall HLog
```

Related Commands

Command	Description
softkeys connected (voice register template)	Modifies the soft-key display on SIP phones during the connected call state.
softkeys hold (voice register template)	Modifies the soft-key display on SIP phones during the hold call state.
softkeys idle (voice register template)	Modifies the soft-key display on SIP phones during the idle call state.
softkeys seized (voice register template)	Modifies the soft-key display on SIP phones during the seized call state.
template (voice register pool)	Applies a phone template to a SIP phone.

softkeys personal-conf-user (voice register template)

To enable a personal user softkey template for Cisco IP Conference Phones 7832 and 8832, use the **softkeys personal-conf-user** command in voice register template configuration mode. To switch to a public user softkey template, use the **no** form of this command.

softkeys personal-conf-user
no softkeys personal-conf-user

Command Default

By default, the CLI command **softkeys personal-conf-user** is disabled. Hence, the Cisco IP Conference Phones 7832 and 8832 support the public user softkey template if the command is not configured.

Command Modes

Voice register template configuration (config-register-temp)

Command History

Cisco IOS Release	Cisco Product	Modification
Cisco IOS XE Fuji 16.9.1	Unified CME 12.3	A personal and public softkey template support was introduced for new Softkeys introduced as part of Unified CME 12.3 Release for Cisco IP Conference Phone 7832 and 8832.

Usage Guidelines

The CLI command **softkeys personal-conf-user** is an optional configuration that is required only when the phone template is applied to Cisco IP Conference Phones 7832 and 8832. If no configuration is provided, then the default configuration of public user softkey template is applied. When the CLI command is enabled, the personal softkey template is applied to the conference phone (Only for Cisco IP Conference Phone 7832 and 8832). When the command is not enabled, the public softkey template is applied to the conference phone (Only for Cisco IP Conference Phone 7832 and 8832).

As compared to public softkey user template, the following softkeys are additionally supported in a personal user softkey template for various phone states:

- Messages
- CfdwAll
- DND
- Redial

Examples

In the following example, Cisco IP Conference Phone 7832 is configured for the personal softkeys template:

```
Router(config)# voice register template 7
Router(config-register-template)# softkeys personal-conf-user
```

Related Commands

Command	Description
softkeys connected (voice register template)	Modifies the soft-key display on SIP phones during the connected call state.

Command	Description
softkeys hold (voice register template)	Modifies the soft-key display on SIP phones during the hold call state.
softkeys idle (voice register template)	Modifies the soft-key display on SIP phones during the idle call state.
softkeys seized (voice register template)	Modifies the soft-key display on SIP phones during the seized call state.
template (voice register pool)	Applies a phone template to a SIP phone.

softkeys remote-in-use

To modify the order and type of soft keys that display on the IP phone during the remote-in-use call state, use the **softkeys remote-in-use** command in ephone-template configuration mode. To reset to the default, use the **no** form of this command.

softkeys remote-in-use [CBarge] [Newcall]
no softkeys remote-in-use

Syntax Description	CBarge	(Optional) Soft key that allows a user to barge into a call on a shared octo-line directory number.
	Newcall	(Optional) Soft key that opens a line on a speakerphone to place a new call.

Command Default The default soft keys for the remote-in-use call state and the order in which they appear on IP phones are Newcall, CBarge.

Command Modes Ephone-template configuration (config-ephone-template)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(15)XZ	Cisco Unified CME 4.3	This command was introduced.
	12.4(20)T	Cisco Unified CME 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines The remote-in-use call state is when another phone is connected to a call on an octo-line directory number shared by this phone.

Examples

In the following example, ephone template 1 modifies the soft keys displayed for the alerting, connected, and remote-in-use call states:

```
Router(config)# ephone-template 1
Router(config-ephone-template)# softkeys alerting Callback Endcall
Router(config-ephone-template)# softkeys connected Confrn Hold Endcall
Router(config-ephone-template)# softkeys remote-in-use CBarge Newcall
```

Related Commands	Command	Description
	ephone-template (ephone)	Applies an ephone template to an ephone.
	softkeys alerting	Modifies the soft-key display for the alerting call stage.
	softkeys idle	Modifies the soft-key display for the idle call stage.
	softkeys seized	Modifies the soft-key display for the seized call stage.

softkeys remote-in-use (voice register template)

To modify the soft-key display during the remote-in-use call state on SIP shared-line phones, use the **softkeys remote-in-use** command in voice register template configuration mode. To reset to the default, use the **no** form of this command.

softkeys remote-in-use [**Barge**] [**Newcall**] [**cBarge**]
no softkeys remote-in-use

Syntax Description	Barge	(Optional) Soft key that allows a user to join a call on a shared line.
	Newcall	(Optional) Soft key that opens a line on a phone to place a new call.
	cBarge	(Optional) Soft key that allows a user to join a call on a shared line and to turn the call into a conference call.

Command Default The default soft keys for the remote-in-use call state and the order in which they appear on SIP phones are Barge, Newcall, cBarge.

Command Modes Voice register template configuration (config-register-temp)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(22)YB	Cisco Unified CME 7.1	This command was introduced.
	12.4(24)T	Cisco Unified CME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.

Usage Guidelines The remote-in-use call state is when another phone is connected to a call on a directory number shared by this phone.

Examples In the following example, SIP phone template 1 modifies the soft keys displayed for the alerting, connected, and remote-in-use call states:

```
Router(config)# voice register template 1
Router(config-register-temp)# softkeys alerting Callback Endcall
Router(config-register-temp)# softkeys connected Confrn Hold Endcall
Router(config-register-temp)# softkeys remote-in-use CBarge Newcall
```

Related Commands	Command	Description
	softkeys alerting (voice register template)	Modifies the soft-key display on SIP phones during the alerting call state.
	softkeys idle (voice register template)	Modifies the soft-key display on SIP phones during the idle call state.

Command	Description
softkeys seized (voice register template)	Modifies the soft-key display on SIP phones during the seized call state.
template (voice register pool)	Applies a phone template to a SIP phone.

softkeys ringin (voice register template)

To modify the soft-key display during the ringing call state on SIP phones, use the **softkeys ringIn** command in voice register template configuration mode. To remove the **softkeys ringIn** configuration, use the **no** form of this command.

softkeys ringIn [**Answer**] [**DND**] [**iDivert**] [**HLog**]
no softkeys ringIn

Syntax Description

Answer	(Optional) Soft key that picks up an incoming call.
DND	(Optional) Soft key that enables the Do Not Disturb feature.
HLog	(Optional) Soft key that places a phone into not-ready status, in which it does not accept hunt-group calls. You must set the hunt-group logout command to HLog for this soft key to be functional. This key is a toggle; pressing it a second time returns the phone to ready status, in which it is available to receive calls.
iDivert	(Optional) Immediately diverts a call to a voice-messaging system.

Command Default

The following soft keys are displayed in alphabetical order, first to last, on IP phones during the ringIn call state: Answer, Dnd, HLog, and iDivert.

Command Modes

Voice register template configuration (config-register-temp)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(22)YB	Cisco Unified CME 7.1	This command was introduced.
12.4(24)T	Cisco Unified CME 7.1	This command was integrated into Cisco IOS Release 12.4(24)T.
Cisco IOS XE Everest 16.4.1 15.6(3)M1	Cisco Unified CME 11.6	HLog Softkey support was introduced.

Usage Guidelines

Use this command to create a template in which you specify which soft keys are displayed, and in what order, on an IP phone during the ringing call state. The ringing calling state is after a call is received and before the call is connected.

Any soft key that is not explicitly specified with this command is disabled if this command is used to change the default soft keys.

Configure the **Answer** keyword to enable a phone user to answer an incoming call on a line button that is unavailable; for example, if a line button is configured with a dual-line directory number and a call is holding on one channel of the directory number and another call is ringing on the second channel, the phone user can press the Answer soft key to pick up the incoming call on the second channel.

Configure the **DND** keyword to enable the phone user to place the phone into Do-Not-Disturb mode. Configure the Dnd soft key and the **hunt-group logout DND** command to enable the phone user to invoke DND mode and log the phone out of hunt groups in which it is a member.

Configure the **iDivert** keyword to immediately divert a call to a voice-messaging system.

Configure the **HLog** keyword to place a phone into not-ready status, in which it does not accept hunt-group calls.

To apply an voice register template to a phone, configure the **voice register template** command in voice register pool configuration mode.

Examples

In the following example, SIP phone template 1 is configured for the ringing state, and for the alerting and connected call states:

```
Router(config)# voice register template 1
Router(config-register-template)# softkeys ringIn Answer Dnd Hlog iDivert

Router(config-register-template)# softkeys idle Newcall Redial Pickup Cfwdall HLog
Router(config-register-template)# softkeys connected Transfer Hold Endcall HLog
```

Related Commands

Command	Description
softkeys connected (voice register template)	Modifies the soft-key display on SIP phones during the connected call state.
softkeys hold (voice register template)	Modifies the soft-key display on SIP phones during the hold call state.
softkeys idle (voice register template)	Modifies the soft-key display on SIP phones during the idle call state.
softkeys seized (voice register template)	Modifies the soft-key display on SIP phones during the seized call state.

softkeys ringing

To configure an ephone template for soft-key display during the ringing call state, use the **softkeys ringing** command in ephone-template configuration mode. To remove the **softkeys ringing** configuration, use the **no** form of this command.

softkeys ringing [**Answer**] [**Dnd**] [**HLog**]
no softkeys ringing

Syntax Description

Answer	(Optional) Soft-key name that appears on the IP phone during the ringing call state.
Dnd	(Optional) Soft-key name that appears on the IP phone during the ringing call state.
HLog	(Optional) Soft-key name that appears on the IP phone during the ringing call state.

Command Default

The following soft keys are displayed in alphabetical order, first to last, on IP phones during the ringing call state: Answer, Dnd, HLog

Command Modes

Ephone-template configuration (config-ephone-template)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(11)XW	Cisco Unified CME 4.2	This command was introduced.
12.4(15)XY	Cisco Unified CME 4.2(1)	This command was introduced.
12.4(15)XZ	Cisco Unified CME 4.3	This command was introduced.
12.4(20)T	Cisco Unified CME 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines

Use this command in ephone-template configuration mode to create a template in which you can specify which soft keys are displayed, and in what order, on an IP phone during the ringing call state. The ringing calling state is when a call is received and before the call is connected.

Any soft key that is not explicitly configured is disabled.

You can enter any of the keywords in any order. The number and order of soft keys listed in the **softkeys ringing** command corresponds to the number and order of soft keys that will appear on IP phones during the ringing call state.

Configure the **Answer** keyword with this command to enable a phone user to answer an incoming call on a line button that is unavailable; for example, if a line button is configured with a dual-line directory number and a call is holding on one channel of the directory number and another call is ringing on the second channel, the phone user can use the Answer soft key to pick up the incoming call on the second channel.

Configure the **HLog** keyword with this command to *display* the Hlog soft key during the ringing call state. To enable HLog softkey *functionality* during the call ringing state, you must also configure the **hunt-group logout HLog** command. If you configure the Hlog soft key and do not configure the **hunt-group logout HLog** command, the Hlog soft key appears on the phone screen but is not functional. The HLog softkey is a

toggle for enabling or disabling the not-ready status, in which the directory number does not accept hunt-group calls.

Configure the **Dnd** keyword with this command to enable the phone user to place the phone into Do-Not-Disturb mode. Configure the Dnd soft key and the **hunt-group logout DND** command to enable the phone user to invoke DND mode and log the phone out of hunt groups in which it is a member.

To apply an ephone template to phone, configure the **ephone-template (ephone)** command in the ephone configuration mode.

Examples

In the following example, ephone template 1 is configured for the ringing state, and for the alerting and connected call states:

```
Router(config)# telephony-service
Router(config-telephony)# ephone-template 1

Router(config-ephone-template)# softkeys ringing Answer Dnd Hlog

Router(config-ephone-template)# softkeys alerting Callback Endcall
Router(config-ephone-template)# softkeys connected Confrn Hold Endcall
```

Related Commands

Command	Description
dnd feature ring	Allows phone buttons configured with the feature-ring option to not ring when their phones are in do-not-disturb (DND) mode.
ephone-template (ephone)	Applies an ephone template to an ephone.
hunt-group logout	Enables separate handling of DND and HLog functionality for hunt-group agents.
softkeys alerting	Configures an ephone template for soft-key display during the alerting call state.
softkeys connected	Configures an ephone template for soft-key display during the connected call state.
softkeys idle	Configures an ephone template for soft-key display during the idle call state.
softkeys seized	Configures an ephone template for the soft-key display during the seized call state.

softkeys seized

To modify the order and type of soft keys that display on an IP phone during the seized call state, use the **softkeys seized** command in ephone-template configuration mode. To remove a **softkeys seized** configuration, use the **no** form of this command.

softkeys seized [**CallBack**] [**Cfwdall**] [**CWOff**] [**Endcall**] [**Gpickup**] [**HLog**] [**MeetMe**] [**Pickup**] [**Redial**]

no softkeys seized

Syntax Description

CallBack	(Optional) Soft key that requests callback notification when a busy called line becomes free.
Cfwdall	(Optional) Soft key that forwards all calls.
CWOff	(Optional) Soft key that disables Call Waiting.
Endcall	(Optional) Soft key that ends the current call.
Gpickup	(Optional) Soft key that selectively picks up calls coming into a phone number that is a member of a pickup group.
HLog	(Optional) Soft key that places a phone into not-ready status, in which it does not accept hunt-group calls. You must set the hunt-group logout command to HLog for this soft key to be visible. This key is a toggle; pressing it a second time returns the phone to ready status, in which it is available to receive calls.
MeetMe	(Optional) Soft key that initiates a meet-me conference.
Pickup	(Optional) Soft key that selectively picks up calls to another extension.
Redial	(Optional) Soft key that redials the last number dialed.

Command Default

The default soft keys for the seized call stage and the order in which they appear on IP phones are:

- With HLog support: Redial, EndCall, CFwdAll, CallPickUp, GrpCallPickUp, CallBack, HLog
- Without HLog support: Redial, EndCall, CFwdAll, CallPickUp, GrpCallPickUp, CallBack

Command Modes

Ephone-template configuration (config-ephone-template)

Command History

Cisco IOS Release	Cisco Product	Modification
12.3(11)T	Cisco CME 3.2	This command was introduced.
12.4(4)XC	Cisco Unified CME 4.0	The HLog keyword was added.
12.4(9)T	Cisco Unified CME 4.0	The HLog keyword was integrated into Cisco IOS Release 12.4(9)T.
12.4(11)XJ2	Cisco Unified CME 4.1	The MeetMe keyword was added.
12.4(15)T	Cisco Unified CME 4.1	The MeetMe keyword was integrated into Cisco IOS Release 12.4(15)T.

Cisco IOS Release	Cisco Product	Modification
15.0(1)XA	Cisco Unified CME 8.0	This command was modified. The CWOff keyword was added.
15.1(1)T	Cisco Unified CME 8.0	This command was integrated into Cisco IOS Release 15.1(1)T.

Usage Guidelines

The seized calling stage is when a caller is attempting a call and has not yet been connected.

The number and order of soft keys listed in the **softkeys seized** command correspond to the number and order of soft keys on IP phones.

You must configure the MeetMe soft key to initiate a meet-me conference. Use this soft key for hardware conferencing only.

Examples

In the following example, ephone template 1 modifies the soft keys in the seized, alerting, and connected call states:

```
Router(config)# telephony-service
Router(config-telephony)# ephone-template 1

Router(config-ephone-template)# softkeys seized Redial Cfdall Pickup

Router(config-ephone-template)# softkeys alerting Callback Endcall
Router(config-ephone-template)# softkeys connected Confrn Hold Endcall
```

Related Commands

Command	Description
ephone	Enters ephone configuration mode for an IP phone.
ephone-template (ephone)	Applies an ephone template to an ephone.
hunt-group logout	Enables separate handling of DND and HLog functionality for hunt-group agents and the display of an HLog soft key on phones.
softkeys alerting	Modifies the soft keys that display during the alerting call stage.
softkeys connected	Modifies the soft keys that display during the connected call stage.
softkeys idle	Modifies the soft keys that display during the idle call stage.

softkeys seized (voice register template)

To modify the soft key display for the seized call state on Cisco Unified SIP IP phones, use the **softkeys seized** command in voice register template configuration mode. To return to the default, use the **no** form of this command.

softkeys seized [Cfwdall] [Endcall] [Gpickup] [MeetMe] [Pickup] [Redial]
no softkeys seized

Syntax Description	
Cfwdall	(Optional) Appears on the Cisco Unified SIP IP phone during the seized call state. Short for “Call forward all.” Forwards all calls.
Endcall	(Optional) Appears on the Cisco Unified SIP IP phone during the seized call state. Ends the current call.
Gpickup	(Optional) Appears on the Cisco Unified SIP IP phone during the seized call state. Short for “Group call pick up.” Selectively picks up calls coming into a phone number that is a member of a pickup group.
MeetMe	(Optional) Appears on the Cisco Unified SIP IP phone during the seized call state. Short for “MeetMe conference.” Initiates a meet-me conference.
Pickup	(Optional) Appears on the Cisco Unified SIP IP phone during the seized call state. Short for “Call pick up.” Selectively picks up calls coming into another extension.
Redial	(Optional) Appears on the Cisco Unified SIP IP phone during the seized call state. Redials the last number dialed.

Command Default The default soft keys for the seized call state and the order in which they appear on Cisco Unified SIP IP phones are, from first to last: Cfwdall, Endcall, Gpickup, MeetMe, Pickup, and Redial.

Command Modes Voice register template configuration (config-register-template)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(11)XJ	Cisco Unified CME 4.1	This command was introduced.
	12.4(15)T	Cisco Unified CME 4.1	This command was integrated into Cisco IOS Release 12.4(15)T.
	15.2(2)T	Cisco Unified CME 9.0	This command was modified. The MeetMe keyword was added.

Usage Guidelines The seized calling state is when a caller goes offhook before any other action is taken.

The number and order of soft keys used in this command correspond to the number and order of soft keys that appear on Cisco Unified SIP IP phones. Any soft key that is not explicitly specified with this command is disabled.

The MeetMe soft key is added in the seized state when hardware conference is enabled.

This command is not supported on the Cisco Unified 7905, 7912, 7940, and 7960 SIP IP phones.

Examples

In the following example, Cisco Unified SIP IP phone template 1 is configured for the seized and connected call states:

```
Router(config)# voice register template 1
Router(config-register-template)# softkeys seized Redial Cfdall
Router(config-register-template)# softkeys connected Confrn Hold Endcall
```

Related Commands

Command	Description
softkeys connected (voice register template)	Configures a Cisco Unified SIP IP phone template for soft key display during the connected call state.
softkeys hold (voice register template)	Configures a Cisco Unified SIP IP phone template for soft key display during the hold call state.
softkeys idle (voice register template)	Configures a Cisco Unified SIP IP phone template for soft key display during the idle call state.
template (voice register pool)	Applies a template to a Cisco Unified SIP IP phone.

source-addr

To specify the IP address of the certification authority proxy function (CAPF) server on the Cisco Unified CME router, use the **source-addr** command in CAPF-server configuration mode. To return to the default, use the **no** form of this command.

source-addr *ip-address*
no source-addr

Syntax Description

<i>ip-address</i>	IP address of the Cisco Unified CME router.
-------------------	---

Command Default

No IP address is entered for the CAPF server in the router configuration.

Command Modes

CAPF-server configuration (config-capf-server)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines

This command is used with Cisco Unified CME phone authentication.

Examples

The following example identifies the IP address for the CAPF server as 10.10.10.1:

```
Router(config)# capf-server
Router(config-capf-server)# source address 10.10.10.1
Router(config-capf-server)# trustpoint-label server25
Router(config-capf-server)# cert-oper upgrade all
Router(config-capf-server)# cert-enroll-trustpoint server12 password 0 x8oWiet
Router(config-capf-server)# auth-mode auth-string
Router(config-capf-server)# auth-string generate all
Router(config-capf-server)# port 3000
Router(config-capf-server)# keygen-retry 5
Router(config-capf-server)# keygen-timeout 45
Router(config-capf-server)# phone-key-size 2048
```

source-address (voice register global)

To identify the IP address and port through which SIP phones communicate with a Cisco CallManager Express (Cisco Unified CME) router, use the **source-address** command in voice register global configuration mode. To disable the router from receiving messages from SIP phones, use the **no** form of this command.

source-address *ip-address* [**port** *port* | **secondary** *ip-address*]
no source-address *ip-address*

Syntax Description	<i>ip-address</i>	Preexisting router IP address, typically one of the addresses of the Ethernet port of the router.
	port <i>port</i>	(Optional) TCP/IP port number to use for SIP. Range is 2000 to 9999. Default is 5060 for SIP phones.
	secondary <i>ip-address</i>	Secondary router for Cisco Unified CME. TCP/IP port number is same as the primary Cisco Unified CME router.

Command Default Port number for SIP: 5060

Command Modes Voice register global configuration (config-register-global)

Command History	Cisco IOS Release	Version	Modification
	12.4(4)T	Cisco CME 3.4	This command was introduced.
	Cisco IOS XE Everest 16.4.1	Cisco Unified CME 11.6	This command was modified to add the keyword: secondary .

Usage Guidelines This command is a mandatory command. The Cisco CallManager Express router cannot communicate with the Cisco CME phones if the IP address is not provided. If the port number is not provided, the SIP default port for is 5060. The IP address is usually the IP address of the Ethernet port to which the phones are connected.

This command enables a router to receive messages from Cisco IP phones through the specified IP address and port.

For systems using ITS V2.1, Cisco CME 3.0, or later versions, the IP phones receive their initial configuration information and phone firmware from the TFTP server associated with the router. The TFTP server address obtained by the Cisco IP phones points to the router IP address. The Cisco IP phones transfer a configuration file called SIPDefault.cnf. This file is automatically generated by the router through the **source-address** and is placed in router memory. The SIPDefault.cnf file contains the IP address that the phones, using the Session Initiation Protocol (SIP), use to register for service. This IP address corresponds to a valid Cisco Unified CME router IP address (and may be the same as the router TFTP server address).

Examples

The following example shows how to set the IP source address and port:

```
Router(config)# voice register global
Router(config-register-global)# source-address 10.6.21.4 port 6000 secondary 10.6.50.6
```

source-address (voice register global)**Related Commands**

Command	Description
create profile (voice register global)	Generates the configuration profiles required for SIP phones.
file text (voice register global)	Generates ASCII text files for SIP phones.
tftp-path (voice register global)	Specifies the directory to which the provisioning file for SIP phones in a Cisco CallManager Express (Cisco Unified CME) system will be written.
voice register global	Enters voice register global configuration mode in order to set global parameters for all supported Cisco SIP phones in a Cisco Unified CME or Cisco SIP SRST environment.

speed-dial

To create speed-dial definitions for a Cisco Unified IP phone or analog phone that uses an analog telephone adaptor (ATA) in a Cisco Unified CME system, use the **speed-dial** command in ephone or ephone-template configuration mode. To disable a speed-dial definition, use the **no** form of this command.

speed-dial *speed-tag* *digit-string* [*label* *label-text*]

no speed-dial *speed-tag*

Syntax Description	<i>speed-tag</i>	Unique sequence number that identifies a speed-dial definition during configuration tasks. Range is from 1 to 33.
	<i>digit-string</i>	Digits to be dialed when the speed-dial button is pressed on an IP phone or the digits to be dialed when the associated code is entered from an analog phone with an ATA device. For IP phones, if the first character of this string is the plus sign (+), this speed-dial number is locked and cannot be changed at the phone. If the only character in this string is a pound sign (#), a user-programmable speed-dial button with no speed-dial number attached is defined.
	label <i>label-text</i>	(Optional) String that contains identifying text to be displayed next to the speed-dial button. Enclose the string in quotation marks if the string contains a space.

Command Default No speed-dial definitions are created.

Command Modes Ephone configuration (config-ephone)
Ephone-template configuration (config-ephone-template)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.1(5)YD	Cisco ITS 1.0	This command was introduced
	12.2(8)T	Cisco ITS 2.0	This command was integrated into Cisco IOS Release 12.2(8)T.
	12.2(15)ZJ	Cisco CME 3.0	The number of speed-dial definitions that can be created was increased from 4 to 33. The ability to program speed-dial numbers at the phone and the ability to lock speed-dial numbers were introduced.
	12.3(4)T	Cisco CME 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.
	12.3(11)XL	Cisco CME 3.2.1	This command was modified to allow IP phones to access more speed-dial numbers than the number of available buttons on their phones and to allow analog phones to access up to 33 speed-dial numbers.
	12.3(14)T	Cisco CME 3.3	This command was integrated into Cisco IOS Release 12.3(14)T.
	12.4(4)XC	Cisco Unified CME 4.0	This command was made available in ephone-template configuration mode.

Cisco IOS Release	Cisco Product	Modification
12.4(9)T	Cisco Unified CME 4.0	This command in ephone-template configuration mode was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines

The *speed-tag* argument in this command is a unique identifier for a speed-dial definition on the phone that is being configured.

This command must be followed by a quick reboot of the phone using the **restart** command.

If you use an ephone template to apply a to a phone and you also use the same command in ephone configuration mode for the same phone, the value that you set in ephone configuration mode has priority.

This command defines speed-dial numbers that are local to the ephone that is being configured. The **directory entry** defines additional, systemwide speed-dial numbers.

IP Phones

For IP phones, speed-dial numbers can be defined by administrators using this command and the *digit-string* argument. The numbers are locked if the *digit-string* argument begins with a plus sign (+). Locked numbers cannot be changed at the phone. Speed-dial definitions without speed-dial numbers (those defined with only a pound sign) and speed-dial instances with unlocked *digit-string* arguments can be changed by users at their IP phones. Changes made to speed-dial definitions are saved in the router nonvolatile random-access memory (NVRAM) configuration after a timer-based delay.

On Cisco Unified IP phones, speed-dial definitions are assigned to available extension buttons that have not been assigned to extensions. Speed-dial definitions are assigned in the order of their identifier (tag) numbers. For example, if you define speed-dial 1, it is assigned to the first phone button that is available after the buttons that have been assigned to extensions. If you have used two buttons for extensions on a phone, speed-dial 1 is assigned to the third physical button on the phone. When you define speed-dial 2, it is assigned to the fourth physical button on the phone, and so on.

If more speed-dial definitions are created than are supported by the IP phone setup, the extra speed-dial configurations can be dialed from IP phones using this procedure:

1. With the phone on-hook, an IP phone user presses a two-digit speed-dial code (that is, 05 for the entry with tag 5). A new soft key, Abbr, appears in the phone display.
2. The phone user picks up the phone handset and presses the Abbr soft key. The full telephone number associated with the speed-dial tag is dialed.

Prior to Cisco IOS Releases 12.3(11)XL and 12.3(14)T, speed-dial entries that were in excess of the number of physical phone buttons available were ignored.

Analog Phones

Analog phone users who use a Cisco ATA-186, Cisco ATA-188, or Cisco VG 224 to connect to a Cisco Unified CME system use a different method to access speed-dial numbers. Analog phone users press the asterisk (*) key and the speed-dial identifier (tag number) to dial a speed-dial number. For instance, an analog phone user presses *1 to speed dial the number that has been programmed as speed-dial 1 on that ephone. Analog phones can have up to 33 local speed-dial numbers programmed by the system administrator. The numbers cannot be programmed from the phone.

Prior to Cisco IOS Releases 12.3(11)XL and 12.3(14)T, analog phones were limited to nine speed-dial numbers.)

Examples

The following example sets speed-dial button 2 to dial the phone user's assistant at extension 5001 and locks the setting so that the phone user cannot change it at the phone:

```
Router(config)# ephone 23
Router(config-ephone)# speed-dial 2 +5001 label "Assistant"
```

Related Commands

	Description
directory entry	Adds a systemwide phone directory entry or speed-dial entry.
restart (ephone)	Performs a fast reboot of a single IP phone in a Cisco Unified CME system.
restart (telephony-service)	Performs a fast reboot of one or all phones in a Cisco Unified CME system.
ephone-template (ephone)	Applies template to ephone configuration.

speed-dial (voice logout-profile and voice user-profile)

To create speed-dial definitions in a user profile or logout profile for Extension Mobility in Cisco Unified CME, use the **speed-dial** command in voice user-profile configuration mode or voice logout-profile configuration mode. To disable a speed-dial definition, use the **no** form of this command.

speed-dial *speed-tag number* [*label label*] [*blf*]
no speed-dial *speed-tag*

Syntax Description	<i>speed-tag</i>	Unique sequence number that identifies a speed-dial definition during configuration tasks. Range: 1 to 36.
	<i>number</i>	Digits to be dialed when the speed-dial button is pressed on an IP phone, or the digits to be dialed when the associated code is entered from an analog phone with an analog telephone adapter (ATA) device. For IP phones, if the first character of this string is the plus sign (+), this speed-dial number is locked and cannot be changed at the phone. If the only character in this string is a pound sign (#), a user-programmable speed-dial button with no speed-dial number attached is defined.
	<i>label label</i>	(Optional) String that contains identifying text to be displayed next to the speed-dial button. Enclose the string in quotation marks if the string contains a space.
	<i>blf</i>	(Optional) Enables Busy Lamp Field (BLF) monitoring for a speed-dial number.

Command Default No speed-dial definition is created.

Command Modes Voice logout-profile configuration (config-logout-profile)
Voice user-profile configuration (config-user-profile)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(11)XW	Cisco Unified CME 4.2	This command was introduced.
	12.4(15)XY	Cisco Unified CME 4.2(1)	This command was introduced.
	12.4(15)XZ	Cisco Unified CME 4.3	This command was introduced.
	12.4(20)T	Cisco Unified CME 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines Use this command in voice user-profile configuration mode to create a speed-dial definition in a user profile for Extension Mobility. A user profile is downloaded to the IP phone when a user is logged into an IP phone that is registered in Cisco Unified CME and enabled for Extension Mobility.

Use this command in voice logout-profile configuration mode to create a speed-dial definition in a logout profile for Extension Mobility. A logout profile is downloaded to the IP phone when no user is logged into an IP phone that is registered in Cisco Unified CME and enabled for Extension Mobility.

For button appearance, Extension Mobility will associate directory numbers and then associates speed-dial definitions in the logout profile or user profile to phone buttons in a sequential manner. If the profile contains

more directory and speed-dial numbers than there are buttons on the physical phone to which the profile is downloaded, the remaining numbers in the profile are ignored.

On Cisco Unified IP phones, speed-dial definitions are assigned to available extension buttons that have not been assigned to extensions. Speed-dial definitions are assigned in the order of their identifier (tag) numbers, from 1 to 36.

Examples

The following example shows the configuration for a user profile to be downloaded when the a phone user logs into a Cisco Unified IP phone that is enabled for Extension Mobility. The lines and speed-dial buttons in this profile that are configured on an IP phone after the user logs in depend on the phone type. For example, if the user logs into a Cisco Unified IP Phone 7970, all buttons are configured according to voice-user profile1. However, if the phone user logs into a Cisco Unified IP Phone 7960, all six lines are mapped to phone buttons and the speed dial is ignored because there is no button available for speed dial.

```
pin 12345
user me password pass123
number 2001 type silent-ring
number 2002 type beep-ring
number 2003 type feature-ring
number 2004 type monitor-ring
number 2005,2006 type overlay
number 2007,2008 type cw-overly
speed-dial 1 3001
speed-dial 2 3002 blf
```

Related Commands

Command	Description
logout-profile	Enables Cisco Unified IP phone for Extension Mobility and assigns a logout profile to this phone.
reset (voice logout-profile and voice user-profile)	Performs complete reboot of all IP phones on which a particular logout-profile or user-profile is downloaded.

speed-dial (voice register pool)

To create a speed-dial definition for a Cisco Unified SIP IP phone or analog phone that uses an analog telephone adaptor (ATA) in a Cisco Unified Communications Manager Express (Cisco Unified CME) system, use the **speed-dial** command in voice register pool configuration mode. To disable a speed-dial definition, use the **no** form of this command.

speed-dial *speed-tag* *digit-string* [**label** *label-text*]

no speed-dial *speed-tag*

Syntax Description

<i>speed-tag</i>	Unique sequence number that identifies a speed-dial definition during configuration tasks. Range is 1 to 113.
<i>digit-string</i>	Digits to be dialed when the speed-dial button is pressed on an IP phone or the digits to be dialed when the associated code is entered from an analog phone with an ATA device. For IP phones, if the first character of this string is a plus sign (+), this speed-dial number is locked and cannot be changed at the phone. If the only character in this string is a pound sign (#), a user-programmable speed-dial button with no speed-dial number attached is defined.
label <i>label-text</i>	(Optional) Text string that appears next to the speed-dial button. Enclose the string in quotation marks if the string contains a space.

Command Default

No speed-dial definition is created.

Command Modes

Voice register pool configuration (config-register-pool)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)T	Cisco CME 3.4	This command was introduced.
15.2(4)M	Cisco Unified CME 9.1	This command was modified to increase the number of speed-dial configuration to 113.

Usage Guidelines

The **speed-dial** command creates a speed-dial definition for a Cisco Unified SIP IP phone being configured in Cisco Unified CME.

The *speed-tag* argument is a unique identifier for a speed-dial definition on the phone that is being configured. On Cisco Unified IP phones, speed-dial definitions are assigned to available extension buttons that have not been assigned to extensions. Speed-dial definitions are assigned in the order of their identifier numbers.

For example, if you define speed-dial 1, it is assigned to the first phone button that is available after the buttons that are assigned to extensions. If you used two buttons for extensions on a phone, speed-dial 1 is assigned to the third physical button on the phone. When you define speed-dial 2, it is assigned to the fourth physical button on the phone.

For Cisco Unified IP phones, speed-dial numbers can be assigned by the administrator using the *digit-string* argument and can be locked if the *digit-string* argument begins with a plus sign (+). Locked numbers cannot be changed at the phone. Speed-dial instances without speed-dial numbers (those defined with only a pound

sign) and speed-dial instances with unlocked *digit-string* arguments can be changed by users at their Cisco Unified IP phones.

If more speed-dial definitions are created than are supported by the IP phone setup, the extra speed-dial configurations are ignored.

Changes made to speed-dial buttons are saved in the router's NVRAM configuration after a timer-based delay.

Analog phone users who use a Cisco ATA-186 or Cisco ATA-188 to connect to Cisco Unified CME systems use a different method to access speed-dial numbers. Instead of pressing a speed-dial button, phone users with ATA devices press the asterisk (*) key and a *speed-tag* number (speed-dial identifier) to dial a speed-dial number. For instance, a phone user with a Cisco ATA-186 presses *1 to dial the number that has been programmed as speed-dial 1 on that phone.

Phones with ATA devices are limited to a maximum of nine speed-dial numbers that must be programmed by the system administrator. The numbers cannot be programmed from the phone. With phones that use ATA devices, system administrators must be sure to tell phone users when speed-dial numbers have been programmed for their phones.

After you configure the **speed-dial** command, restart the phone using the **reset** command.

Examples

The following example shows how to set speed-dial button 2 to dial the head office at extension 5001 and lock the setting so that the phone user cannot change it at the phone:

```
Router(config)# voice register pool 23
Router(config-register-pool)# speed-dial 2 +5001 label "Head Office"
```

The following example shows how to set speed-dial button 13 to dial the sales office extension number (222):

```
Router(config)# voice register pool 3
Router(config-register-pool)# speed-dial 13 222 label "Sales Office"
```

Related Commands

Command	Description
reset (voice register global)	Performs a complete reboot of all SIP phones associated with a Cisco Unified CME router.
reset (voice register pool)	Performs a complete reboot of a specific SIP phone associated with a Cisco Unified CME system.
voice register pool	Enters voice register pool configuration mode for SIP phones.

srst dn line-mode

To specify line mode for the ephone-dns that are automatically created in Survivable Remote Site Telephony (SRST) mode on a Cisco Unified CME router, use the **srst dn line-mode** command in telephony-service configuration mode. To return to the default, use the **no** form of this command.

srst dn line-mode {**dual** | **dual-octo** | **octo** | **single**}

no srst dn line-mode

Syntax Description

dual	SRST fallback ephone-dns are dual-line.
dual-octo	SRST fallback ephone-dns are dual-line or octo-line, depending on the phone type.
octo	SRST fallback ephone-dns are octo-line.
single	SRST fallback ephone-dns are single-line.

Command Default

Default is single-line mode.

Command Modes

Telephony-service configuration (config-telephony)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.
12.4(15)XZ	Cisco Unified CME 4.3	The dual-octo and octo keywords were added.
12.4(20)T	Cisco Unified CME 7.0	This command with the dual-octo and octo keywords was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines

This command specifies whether ephone-dns that are created during fallback are dual-line, single-line, or octo-line ephone-dns. It applies only to the ephone-dns that are “learned” automatically from ephone configuration information, and not to ephone-dns that are manually configured in Cisco Unified CME.

If you use the **dual-octo** keyword, the type of ephone-dn that Cisco Unified CME in SRST mode creates depends on the phone type. It creates dual-line ephone-dns if the phone type is a Cisco Unified IP Phone 7902 or 7920, or an analog phone connected to the Cisco VG224 or Cisco ATA. It creates octo-line ephone-dns for all other phone types.

Use the **show telephony-service ephone-dn** command to display Cisco Unified CME parameters for ephone-dns.

Examples

The following example specifies dual-line mode for all SRST fallback ephone-dns.

```
telephony-service
 srst dn line-mode dual
```

Related Commands

Command	Description
show telephony-service ephone-dn	Displays parameters for ephone-dns.
srst mode auto-provision	Enables SRST mode for a Cisco Unified CME router.

srst dn template

To specify an ephone-dn template to be used in Survivable Remote Site Telephony (SRST) mode on a Cisco Unified CallManager Express (Cisco Unified CME) router, use the **srst dn template** command in telephony-service configuration mode. To return to the default, use the **no** form of this command.

srst dn template *template-tag*
no srst dn template

Syntax Description	<i>template-tag</i> Identifying number of an existing ephone-dn template. Range is from 1 to 15.
---------------------------	--

Command Default No ephone-dn template is specified.

Command Modes Telephony-service configuration (config-telephony)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
	12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines This command applies the specified ephone-dn template to all SRST fallback ephone-dns. Ephone-dn templates are created with the **ephone-dn-template** command.

Use the **show telephony-service ephone-dn-template** to display the contents of ephone-dn templates.

Examples

The following example applies ephone-dn template 2 to all SRST fallback ephone-dns.

```
telephony-service
 srst dn template 2
```

Related Commands	Command	Description
	ephone-dn-template	Enters ephone-dn-template configuration mode to create an ephone-dn template.
	show telephony-service ephone-dn-template	Displays the contents of ephone-dn templates.

srst ephone description

To specify a description to be associated with an ephone in Survivable Remote Site Telephony (SRST) mode on a Cisco Unified CallManager Express (Cisco Unified CME) router, use the **srst ephone description** command in telephony-service configuration mode. To return to the default, use the **no** form of this command.

srst ephone description *string*
no srst ephone description

Syntax Description	<i>string</i> Description to be associated with an ephone. Maximum string length is 100 characters.
---------------------------	---

Command Default	No description is specified.
------------------------	------------------------------

Command Modes	Telephony-service configuration (config-telephony)
----------------------	--

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
	12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines	Use the show telephony-service ephone to display the ephone description to be associated with SRST fallback phones.
-------------------------	--

Examples

The following example applies a description to all SRST fallback ephones.

```
telephony-service
  srst ephone description srst fallback auto-provision phone
```

The following excerpt displays a time-stamped SRST description for ephone 1:

```
Router# show running-config
ephone 1
  description srst fallback auto-provision phone : Jul 07 2005 17:45:08
  ephone-template 5
  mac-address 100A.7052.2AAE
  button 1:1 2:2
```

Related Commands	Command	Description
	show telephony-service ephone	Displays ephone settings.

srst ephone template

To specify an ephone template to be used in Survivable Remote Site Telephony (SRST) mode on a Cisco Unified CallManager Express (Cisco Unified CME) router, use the **srst ephone template** command in telephony-service configuration mode. To return to the default, use the **no** form of this command.

srst ephone template *template-tag*
no srst ephone template

Syntax Description

<i>template-tag</i>	Identifying number of an existing ephone template. Range is from 1 to 20.
---------------------	---

Command Default

No ephone template is specified.

Command Modes

Telephony-service configuration (config-telephony)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines

Ephone templates are created with the **ephone-template** command. This command applies the specified ephone template to all SRST fallback ephones.

Use the **show telephony-service ephone-template** to display the contents of ephone templates.

Examples

The following example applies ephone template 3 to all SRST fallback ephones.

```
telephony-service
 srst ephone template 3
```

Related Commands

Command	Description
ephone-template	Enters ephone-template configuration mode to create an ephone template.
show telephony-service ephone-template	Displays the contents of ephone templates.

srst mode auto-provision

To enable Survivable Remote Site Telephony (SRST) mode for a Cisco Unified CallManager Express (Cisco Unified CME) router, use the **srst mode auto-provision** command in telephony-service configuration mode. To return to the default, use the **no** form of this command.

srst mode auto-provision {all | dn | none}
no srst mode auto-provision

Syntax Description

all	Includes information for learned ephones and ephone-dns in the running configuration.
dn	Includes information for learned ephone-dns in the running configuration.
none	Does not include information for learned ephones or learned ephone-dns in the running configuration. Use this keyword when you want Cisco Unified CME to provide SRST fallback services for Cisco Unified CallManager.

Command Default

SRST mode is disabled.

Command Modes

Telephony-service configuration (config-telephony)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(4)XC	Cisco Unified CME 4.0	This command was introduced.
12.4(9)T	Cisco Unified CME 4.0	This command was integrated into Cisco IOS Release 12.4(9)T.

Usage Guidelines

This command puts a Cisco Unified CME router into SRST mode to provide fallback call-processing services for IP phones that have lost connection to their Cisco Unified CallManager. The phones can be preconfigured manually or the Cisco Unified CME-SRST router can dynamically learn their configuration. The keywords in this command allow you to specify how much of the learned phone configurations you want to include in the running configuration of the Cisco Unified CME-SRST router.

Use the **none** keyword to enable the Cisco Unified CME router to provide SRST fallback services for Cisco Unified CallManager. Use the **dn** or **all** keyword to enable the Cisco Unified CME router to learn the ephone-dn or ephone and ephone-dn configuration from Cisco Unified CallManager and include the information in its running configuration.



Note

We do not recommend that you use the **dn** or **all** keyword if you want Cisco Unified CME to provide SRST fallback services. After the Cisco Unified CME-SRST router learns the phone configuration from Cisco Unified CallManager and you save the configuration, the fallback phones are treated as locally configured phones on the Cisco Unified CME-SRST router which can adversely impact the fallback behavior of those phones.

Examples

The following example shows how to enable the Cisco Unified CME router to provide SRST fallback services for phones connected to Cisco Unified CallManager. Information for learned ephone-dns and ephones is not included in the running configuration.

```
telephony-service
  srst mode auto-provision none
```

Related Commands

Command	Description
show telephony-service all	Displays detailed configuration for phones, voice ports, and dial peers in a Cisco Unified CME system.
srst dn line-mode	Specifies line mode for the ephone-dns that are automatically created in SRST mode on a Cisco Unified CME router.

standby username password

To specify that the standby (secondary backup) router XML interface is enabled, use the **standby username password** command in telephony-service configuration mode on the primary router. To disable the XML interface on the secondary backup router, use the **no** form of this command.

standby username *username* **password** [0|6] *password*
no standby username *username* **password** [0|6] *password*

Syntax Description	<i>username</i>	Specifies the username who is authorized to enable the XML interface.
	<i>password</i>	Specifies the password to use for access.

Command Default An authorized user is not named.

Command Modes Telephony-service configuration (config-telephony)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.4(15)XY	Cisco Unified CME 4.2(1)	This command was introduced.
	12.4(15)XZ	Cisco Unified CME 4.3	This command was introduced.
	12.4(20)T	Cisco Unified CME 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.
	Cisco IOS XE Gibraltar 16.11.1a Release	Unified CME 12.6	The command was enhanced for password encryption, based on Unified CME password policy.

Usage Guidelines Use this command to enable the XML interface on the secondary backup router. The username and password must be the same as that used for access to the primary router.

From Unified CME 12.6 onwards, you must configure password encryption using the parameters [0|6]. This is in accordance with Unified CME Password Policy. The 0 in the parameter [0|6] mentioned in the CLI command represents plain, unencrypted text and 6 represents level 6 password encryption.

Examples

The following example enables the XML interface on the secondary backup router:

```
Router(config)# telephony-service
Router(config-telephony)# standby username admin password 1234
```

Related Commands	Command	Description
	username password	To assign a login account username and password to a phone user so that the user can log in to the Cisco Unified CME router.

statistics collect

To enable the collection of call statistics for an ephone hunt group, use the **statistics collect** command in ephone-hunt configuration mode. To stop statistics collection and to delete statistics that have been collected, use the **no** form of this command.

statistics collect
no statistics collect

Syntax Description	This command has no arguments or keywords.
Command Default	The default is no call statistics data is collected.
Command Modes	Ephone-hunt configuration (config-ephone-hunt)

Command History	Cisco IOS Release	Cisco Product	Modification
	12.3(11)XL	Cisco CME 3.2.1	This command was introduced.
	12.3(14)T	Cisco CME 3.3	This command was integrated into Cisco IOS Release 12.3(14)T.

Usage Guidelines

This command is used for the collection of call statistics, such as direct calls to hunt group pilot numbers, or calls to the Basic Automatic Call Distribution (B-ACD) and Auto Attendant service. For detailed information, see [Cisco Unified CME B-ACD and Tcl Call-Handling Applications](#) .

The **statistics collect** can be used to activate statistics collection for any number of ephone hunt groups.

Statistics collection begins at the time that the **statistics collect** is entered. A maximum of one week (168 hours) of statistics can be stored at a time. You can display the statistics with the **show hunt-group** or transfer statistics automatically to files using TFTP. The **no statistics collect** deletes all statistics that have been collected.

All or some of the statistics can be output with the **show hunt-group** or sent to files automatically using TFTP by using the **hunt-group report url hunt-group report every hours** commands.

Examples

The following example enables the collection of call statistics for ephone hunt group 1 and ephone hunt group 2:

```
Router(config)# ephone-hunt 1
Router(config-ephone-hunt)# statistics collect
Router(config)# ephone-hunt 2
Router(config-ephone-hunt)# statistics collect
```

Related Commands	Command	Description
	hunt-group report delay hours	Delays the automatic transfer of Cisco CME B-ACD call statistics to a file.

Command	Description
hunt-group report every hours	Sets the hourly interval at which Cisco CME B-ACD call data is automatically transferred to a file.
hunt-group report url	Sets filename parameters and the URL path where Cisco CME B-ACD call statistics are to be sent using TFTP.
show ephone-hunt statistics	Displays ephone-hunt configuration information and current status and statistics information.

statistics collect (voice hunt-group)

To enable the collection of call statistics for a voice hunt group, use the **statistics collect** command in voice hunt-group configuration mode. To return to the default, use the **no** form of this command.

statistics collect
no statistics collect

Syntax Description This command has no arguments or keywords.

Command Default No configuration statistics can be collected for voice hunt groups.

Command Modes Voice hunt-group configuration (config-voice-hunt-group)

Command History	Release	Modification
	15.2(2)T	This command was introduced.

Examples The following example shows how to enable the collection of call statistics for voice hunt group 60:

```
Router(config)# voice hunt-group 60
Router(config-voice-hunt-group)# statistics collect
```

Related Commands	Command	Description
	statistics collect	Enables the collection of call statistics for an ephone hunt group.

subnet

To define which IP phones are part of an emergency response location (ERL) for the enhanced 911 service, use the **subnet** command in voice emergency response location configuration mode. To remove the subnet definition, use the **no** form of this command.

subnet [{1 | 2}] *IPaddress mask*
no subnet [{1 | 2}]

Syntax Description

<i>IPaddress</i>	IP address that identifies which IP phones are part of the ERL.
<i>mask</i>	IP subnet mask for the network segment that is part of the ERL.

Command Default

No subnets are defined.

Command Modes

Voice emergency response location configuration (cfg-emrgncy-resp-location)

Command History

Cisco IOS Release	Cisco Product	Modification
12.4(15)T	Cisco Unified CME 4.1 Cisco Unified SRST 4.1 Cisco Unified SIP SRST 4.1	This command was introduced. For Cisco Unified CME, this command is supported in SRST fallback mode only.
12.4(15)XY	Cisco Unified CME 4.2(1) Cisco Unified SRST 4.2(1) Cisco Unified SIP SRST 4.2(1)	This command was added to Cisco Unified CME.
12.4(20)T	Cisco Unified CME 7.0 Cisco Unified SRST 7.0 Cisco Unified SIP SRST 7.0	This command was integrated into Cisco IOS Release 12.4(20)T.

Usage Guidelines

Use this command to define the groups of IP phones that are part of an ERL. You can create up to 2 different subnets. To include all phones on a single ERL, you can set the subnet mask to 0.0.0.0 to indicate a “catch-all” subnet.

Examples

In the following example, all IP phones with the IP address of 10.X.X.X or 192.168.X.X are automatically associated with this ERL. If one of the phones dials 911, its extension is replaced with 408 555-0100 before it goes to the PSAP. The PSAP will see that the caller’s number is 408 555-0100.

```
voice emergency response location 1
  elin 1 4085550100
  subnet 10.0.0.0 255.0.0.0
  subnet 2 192.168.0.0 255.255.0.0
```

Related Commands

Command	Description
elin	Specifies a PSTN number that will replace the caller’s extension.

system message

To set a text message for display on idle Cisco IP Phones with display, such as Cisco IP Phone 7940 and Cisco IP Phone 7960, in a Cisco Unified Communications Manager Express (Cisco Unified CME) system, use the **system message** command in telephony-service configuration mode. To return to the default, use the **no** form of this command.

system message *text-message*

no system message

Syntax Description

<i>text-message</i>	Alphanumeric string of approximately 30 characters maximum to display when the phone is idle.
---------------------	---

Command Default

The message “Cisco Unified Communications Manager Express” is displayed.

Command Modes

Telephony-service configuration (config-telephony)

Command History

Cisco IOS Release	Cisco Product	Modification
12.2(15)ZJ	Cisco Unified CME 3.0	This command was introduced.
12.3(4)T	Cisco Unified CME 3.0	This command was integrated into Cisco IOS Release 12.3(4)T.

Usage Guidelines

The number of characters that can be displayed is not fixed because IP phones typically use a proportional (as opposed to a fixed-width) font. There is room for approximately 30 alphanumeric characters.

The display message is refreshed with a new message after any of the following events occurs:

- A busy phone goes back on-hook.
- An idle phone receives a keepalive message.
- A phone is restarted.

Examples

The following example sets the message “ABC Company” to display instead of “Cisco Unified Communications Manager Express” on idle Cisco IP Phones 7940 and 7940G and the Cisco IP Phones 7960 and 7960G:

```
Router(config)# telephony-service
Router(config-telephony)# system message ABC Company
```

Related Commands

Command	Description
telephony-service	Enters telephony-service configuration mode.