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# **SIP Trunking Configuration Guide**

## **for**

# **Cisco Unified Communications Manager**

## **v7.1.3**

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## 1 Audience

This document is intended for the SIP Trunk customer’s technical staff and Value Added Retailer (VAR) having installation and operational responsibilities.

## 2 Introduction

This Configuration Guide describes the configuration steps for Cox SIP Trunking with the Cisco Unified Communications Manager (CUCM) 7.1.3(b) and the Cisco Unified Border Element (CUBE) for connectivity to Cox’s SIP Trunking service. Cox’s SIP Trunking provides both inbound and outbound call services replacing traditional ISDN PRI services.

Cox SIP Trunking is a scalable and efficient IP trunking telecommunication solution for your business that provides all the traditional services such as Direct Inward Dialing, Hunting, Calling Name, Calling Number, Local/Long Distance and Business Continuity options, including:

- Burstable Trunk Capacity – Dynamically increases call capacity during peak busy periods so your customers never receive a busy signal.
- Call Forward Always – On the trunk group pilot number for all calls in case of an outage (flood, fire, power outage, etc.).
- Call Forward Not Reachable – On the trunk group pilot number that operates on a per-call contingency basis to forward the call to any PSTN number (i.e., call center or alternate office location) during temporary call completion impairments.
- Route Exhaustion – Automatic reroute of trunk group calls to any PSTN phone number (i.e., a call center) if calls can’t be completed to the PBX.
- Support for geo-redundant PBX deployments and automatic reroute of SIP Trunks to the backup customer data center.

All calls are routed over Cox’s national fiber network with guaranteed Quality of Service (QoS); calls never traverse the Internet.

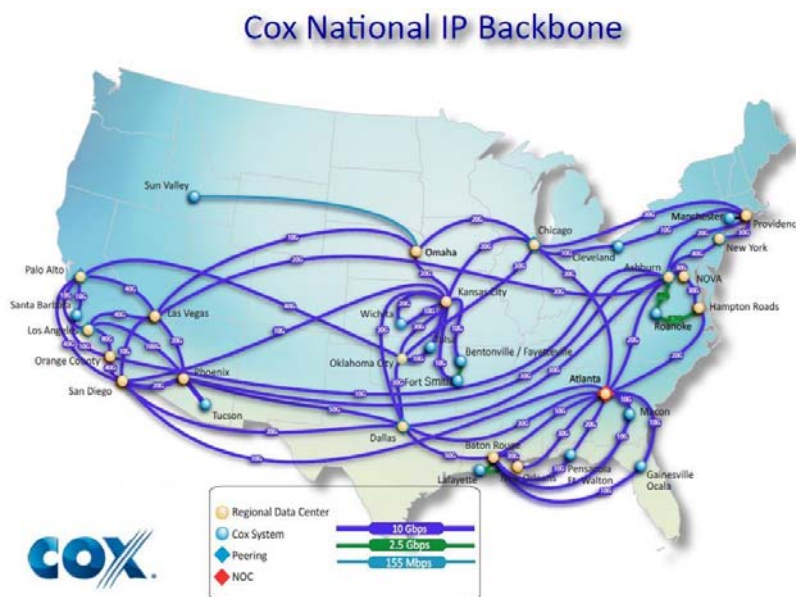
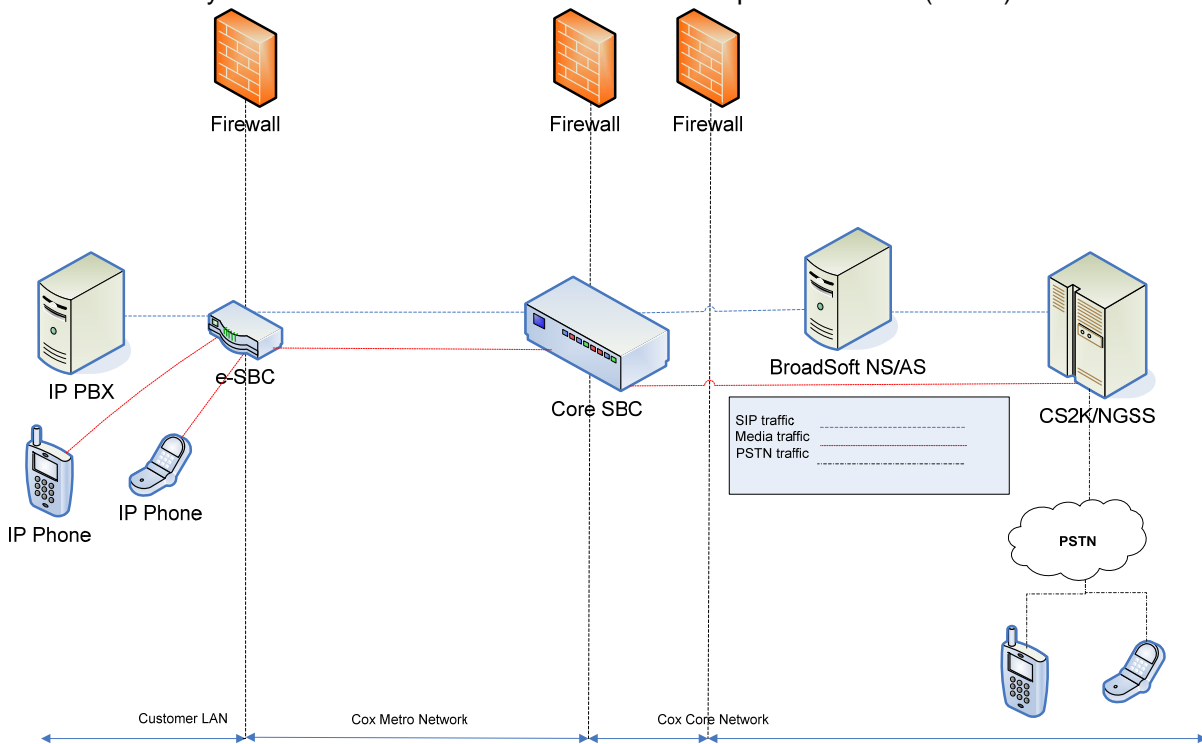


Figure 1 – Cox Fiber Network

### 3 Network Topology

The high level Cox SIP Trunk network architecture is depicted below. The key network elements are:

- IP PBX – Customer PBX for terminating SIP Trunks.
- Cox Enterprise Session Border Controller (E-SBC) – The E-SBC is a smart service demarcation device and SIP Application Layer Gateway (ALG) installed and managed by Cox.
- Core Session Border Controllers and Broadsoft SIP Call Server for maximum survivability and reliability.
- PSTN Gateway for connections to the Public Switched Telephone Network (PSTN).



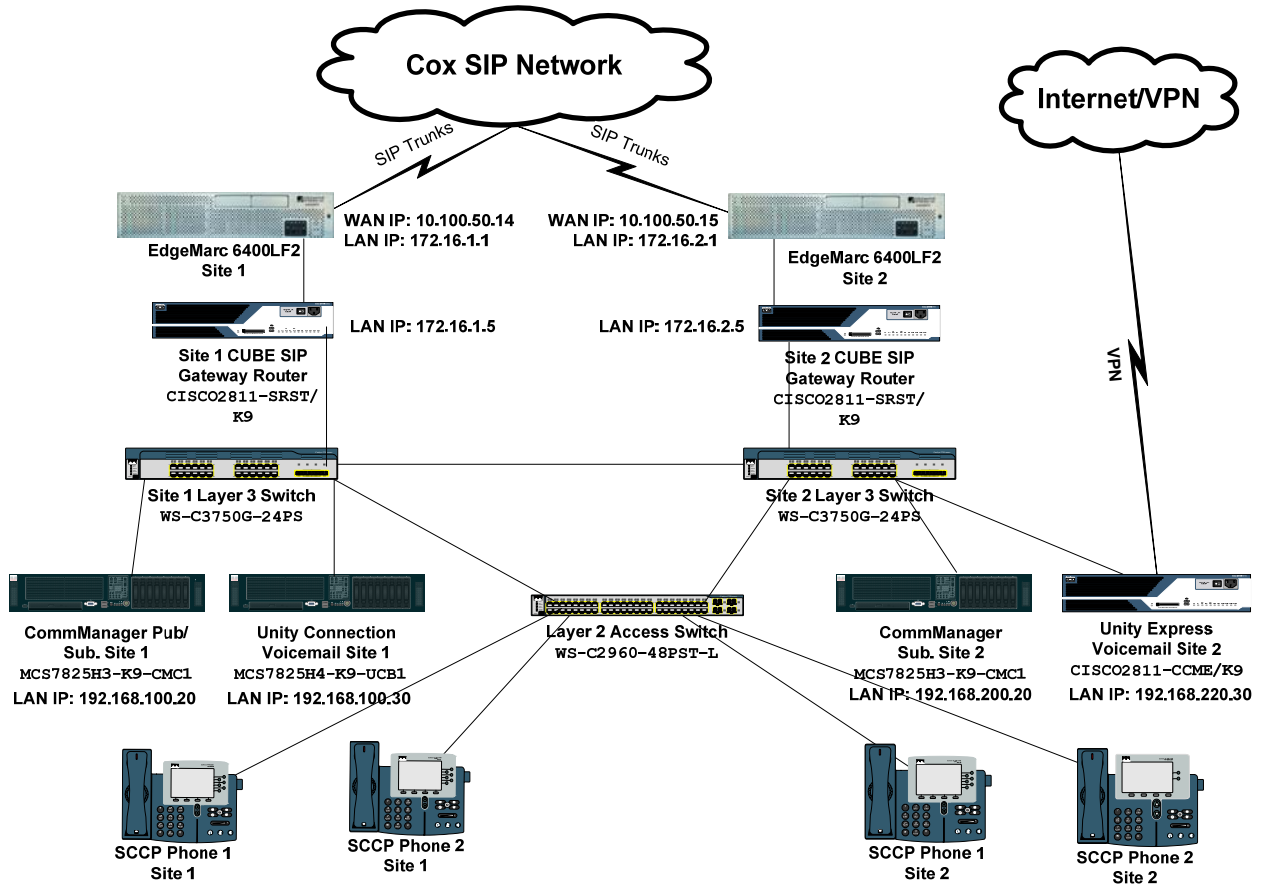
**Figure 2 – Reference Network Architecture**

This SIP Trunk network architecture is replicated across the Cox operating regions for scalability and operational autonomy.

Cox will deploy one or more Enterprise Session Border Controllers (E-SBCs) to meet call capacity, customer data center geo-redundancy and trunk group requirements. The E-SBC is owned and managed by Cox and is the service demarcation point. The E-SBC performs SIP ALG, SIP normalization, NAT, security, traffic shaping/prioritization, performance reporting and remote diagnostic functions.

## 4 System Components

The lab network for the SIP Trunk reference configuration is illustrated in **Figure 3** below and is representative of a CUCM network.



**Figure 3 – SIP Trunk Lab Reference Network**

### 4.1 Hardware Components

- Cisco IOS gateway running CUBE 1.2 (IOS image version 12.4)
- Cisco Unified Communications Manager cluster with two Cisco MCS 7800 Series servers
- Cisco 2811 router
- Cisco IP Phones. The topology diagram in Figure 3 depicts the 7960 and 7940, but any Cisco IP phone model may be used.
- Cisco VG202 Analog Voice Gateway
- EdgeMarc 6400 E-SBC

## 4.2 Software Requirements

- Cisco Unified Communications Manager 7.1.3(b)
- Cisco Unified Border Element (CUBE) version 1.2 IOS version 12.4
- Cisco GW IOS Release 12.4
- Cisco VG202 IOS Release version 12.4
- EdgeMarc 6400LF2 Release 9.12.0

## 5 Features

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### 5.1 Supported Features

- Basic Calls with G.711ulaw CODEC
- Calling Party Number Presentation and Restriction
- Call Transfer
- Call Forwarding
- RFC2833 transcoding
- Calling party number presentation and privacy (P-Asserted-Identity)
- SIP UPDATE for call transfer support

### 5.2 Unsupported Features

- Codec negotiation of G.729, G.726 and others
- T.38 Fax relay

## 6 Caveats and Limitations

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- A SIP header manipulation rule is required in the Cisco CUBE in for SIP Calls to proceed properly. A SIP profile was used to inject “user=phone” into the SIP INVITE and SIP RE-INVITE message headers that included: SIP Request-URI, Contact, To, and From header. Please refer to Section 7.3 for the SIP header rule definition.
- Cisco Analog Gateway(s) must be configured to support modem pass through for analog modem tones to work properly.



## 7 Configuration

The geo-redundant CUCM SIP Trunking lab network is illustrated in the figure below. The CUCM PBX at each site is assumed to be identically configured to carry the full call load in the event of a network failure at either location.

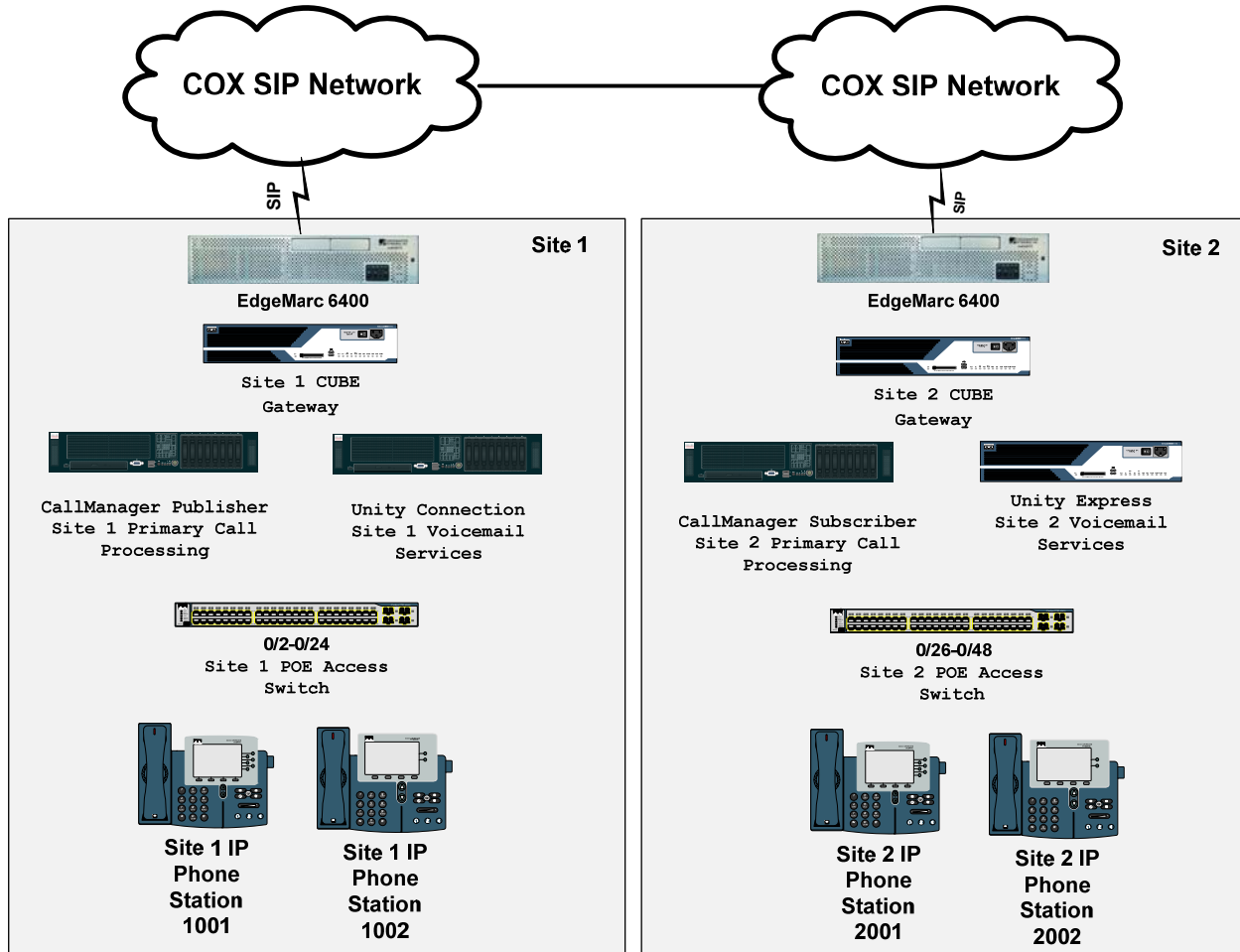


Figure 4 – Geo-Redundant CUCM Network

### 7.1 CUCM SIP Trunk Call Flows

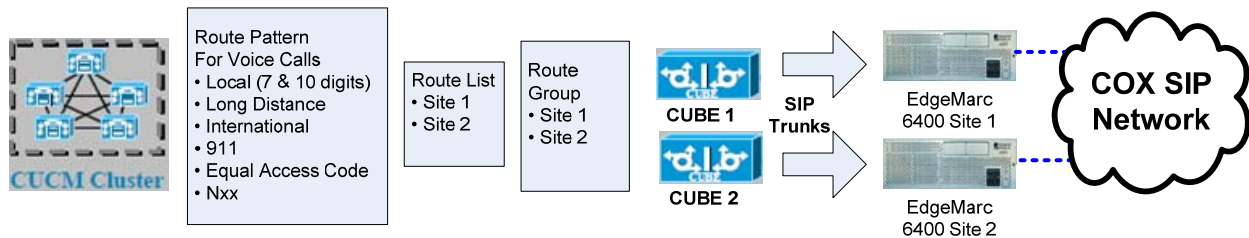
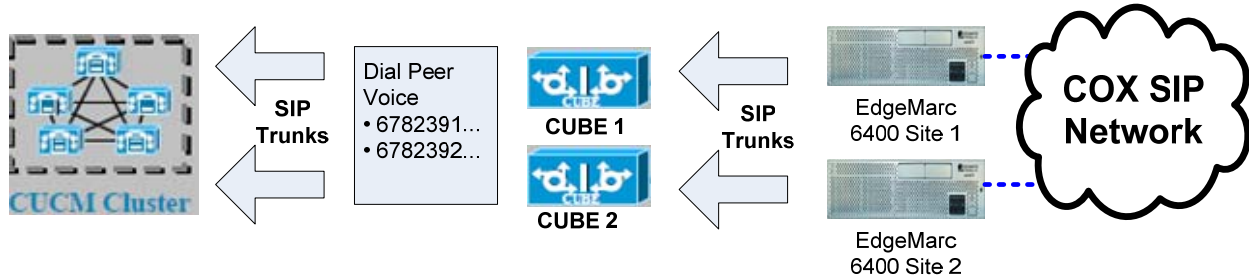


Figure 5 – Originating Call Flow Overview

The conceptual outgoing call flow is:

CUCM → CUBE → Cox E-SBC → Cox's SIP Network → PSTN

The same SIP Trunks are utilized for all voice types calls between CUCM and CUBE as shown above. All outgoing calls are routed from the CUCM to CUBE through the E-SBC to Cox's SIP Network and directed to the PSTN.



**Figure 6 – Terminating Call Flow Overview**

The Incoming call flow is:

PSTN → Cox's SIP Network → Cox E-SBC → CUBE → CUCM

In the lab example, a test account DID ranges were created for Cisco Unified Communications Manager interoperability certification:

- Site 1: 678.239.1xxx
- Site 2: 678.239.2xxx

All incoming calls are routed to CUCM Site 1 if the Called party number begins with 678.239.1xxx. Calls 678.239.2xxx are routed to CUCM Site 2.

## 7.2 SIP Trunk IP Address Assignments

To help organize your work, the IP addresses listed in **Table 1** should be recorded for your deployment and referenced in the configuration steps described in this document.

**Table 1 – IP Addresses**

Component	Cox Lab	Your Value
<b>Cisco CUBE</b>		
• Site 1 CUBE Gateway IP Address	172.16.1.5	
• Site 1 CUBE Gateway IP Address	172.16.2.5	
<b>Cox E-SBC EdgeMarc 6400's</b>		
• LAN IP Address Site 1	172.16.1.1	
• LAN Subnet Mask Site 1	255.255.255.0	
• LAN IP Address Site 2	172.16.2.1	
• LAN Subnet Mask Site 2	255.255.255.0	

### 7.3 Cisco Unified Border Element (CUBE) Configuration

Cisco Unified Border Element (CUBE) routers are utilized to hand off SIP calls to the Cox E-SBC. The CUBE feature set allowed for modification of key sip headers using manipulation rules to format both SIP INVITE and SIP RE-INVITE SIP messages to proceed properly.

The following sip profile was used to inject "user=phone" into the INVITE and REINVITE headers.

```
voice class sip-profiles 1
request INVITE sip-header SIP-Req-URI modify " SIP/2.0" ";user=phone SIP/2.0"
request REINVITE sip-header SIP-Req-URI modify " SIP/2.0" ";user=phone SIP/2.0"
request INVITE sip-header Contact modify ">" ";user=phone>"
request REINVITE sip-header Contact modify ">" ";user=phone>"
request INVITE sip-header To modify ">" ";user=phone>"
request REINVITE sip-header To modify ">" ";user=phone>"
request INVITE sip-header From modify ">" ";user=phone>"
request REINVITE sip-header From modify ">" ";user=phone>"
```

The SIP-SIP calling, interface binding, in-call signaling and sip profile activation was enabled using the following commands.

```
voice service voip
allow-connections sip to sip
fax protocol pass-through g711ulaw
sip
bind control source-interface Loopback0
bind media source-interface Loopback0
min-se 2000
header-passing
asserted-id pai
privacy pstn
midcall-signaling passthru
sip-profiles 1
```

Detail description:

1. **fax protocol pass-through g711ulaw** - Fax pass-through takes place when incoming T.30 fax data is not demodulated or compressed for its transit through the packet network. The two endpoints (fax machines) communicate directly to each other over a transparent IP connection. The gateway does not distinguish fax calls from voice calls.
2. **asserted-id pai** - To enable the translation to PAID headers in the outgoing header at a global level.
3. **privacy pstn** - To support of User privacy policy on the UCM, this flag is set on CUBE to preserve the P-Asserted-Identity and Privacy header on the outgoing SIP INVITE.

Dial-Peers are used to provide both inbound and outbound call legs. Each call utilizes two peers. The following shows the Site 1 dial peers. In the event that the primary path is not available, preference 1 dial peer is used. Preference 0 is the default and therefore does not show in Cisco IOS.

```
dial-peer voice 1 voip
destination-pattern 6782392...
session protocol sipv2
session target ipv4:192.168.200.20
dtmf-relay rtp-nte
codec g711ulaw
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
```

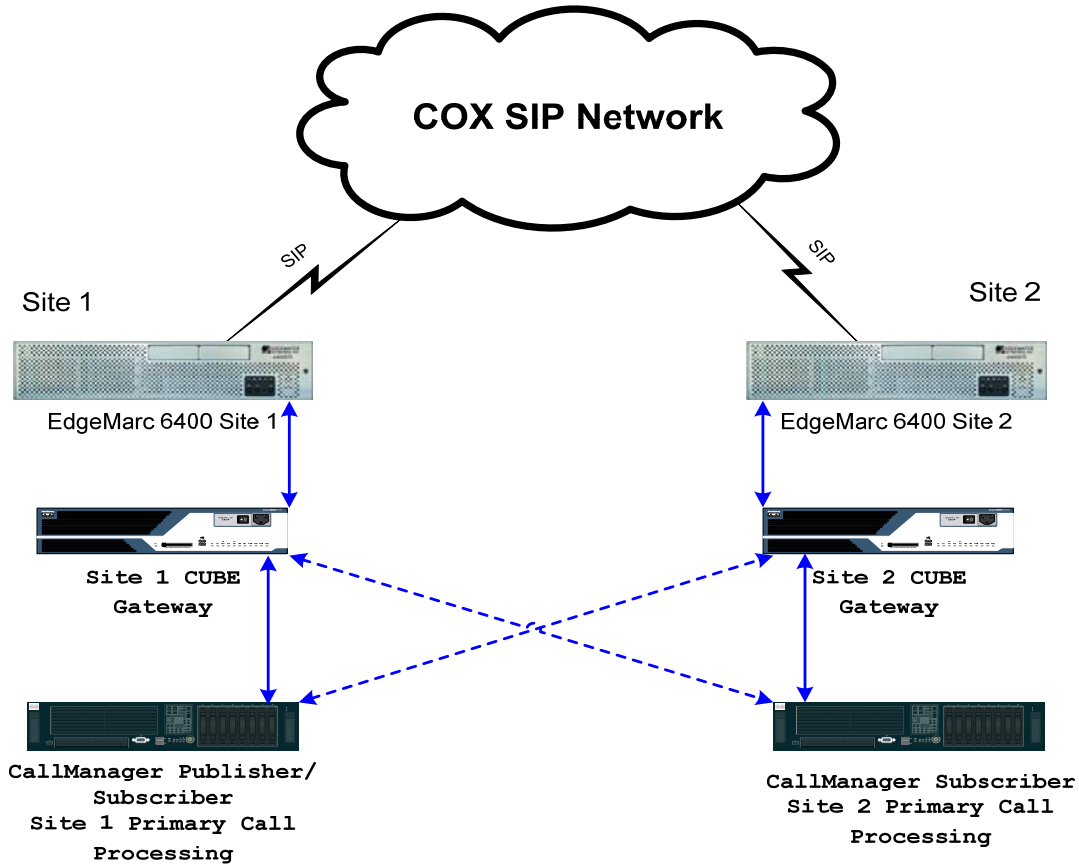
```
!  
dial-peer voice 2 voip  
  preference 1  
  destination-pattern 6782392...  
  session protocol sipv2  
  session target ipv4:192.168.100.20  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 10 voip  
  translation-profile outgoing calling-mask  
  destination-pattern 1[2-9]..[2-9].....  
  session protocol sipv2  
  session target ipv4:172.16.2.1  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 11 voip  
  translation-profile outgoing calling-mask  
  preference 1  
  destination-pattern [2-9]..[2-9].....  
  session protocol sipv2  
  session target ipv4:172.16.2.1  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 12 voip  
  translation-profile outgoing calling-mask  
  destination-pattern 011T  
  session protocol sipv2  
  session target ipv4:172.16.2.1  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 13 voip  
  translation-profile outgoing calling-mask  
  destination-pattern 911  
  session protocol sipv2  
  session target ipv4:172.16.2.1  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 3 voip  
  destination-pattern 6782391...  
  session protocol sipv2  
  session target ipv4:192.168.200.20  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad
```

```
!  
dial-peer voice 4 voip  
  preference 1  
  destination-pattern 6782391...  
  session protocol sipv2  
  session target ipv4:192.168.100.20  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad
```

Redundant call paths for inbound calls require the following statement. The IOS default is too large and allows for a timeout before searching for the second peer (preference 1).

```
sip-ua  
  retry invite 3  
  timers trying 100
```

Redundant call paths for outbound calls are handled by the Communication Manager. Communications Manager will route outbound calls based on the calling phones Calling Search Space (CSS). Each device assigned CSS provides for a primary and secondary path for outbound calls. The times that identify the primary path as unavailable were modified on the Communications Manager. The following values were modified in the Communications Manager Service Parameters.



**Figure 7 – Geo-Redundant Signaling Paths**

**Table 2 – SIP Trunk Failover Timers**

Parameter	Default	Set
Retry Count for SIP Invite	6	1
SIP Trying Timer	500	100

See the following Cisco documentation for more information:

**Failover Timer on SIP Trunks with CallManager Configuration Example:**

[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_configuration\\_example09186a008082d76a.shtml](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_configuration_example09186a008082d76a.shtml)

## **7.4 Configuring the Cisco Unified Communications Manager (UCM) Overview**

### **7.4.1 Voice Services**

Site Call Processing, Voicemail Services as well as InterLATA and IntraLATA SCCP and SIP voice calls are provided as defined here.

### **7.4.2 Call Processing**

Cisco Unified Communications Manager 7.1.3(b) was deployed using the distributed model. Communications Manager Server, which provides primary call processing and telephony services, can be deployed at one or two sites that maintain their own databases that are synchronized with each other. In the event that the local Communications Manager server becomes unavailable, IP Phones will attempt to register with the remote sites Communications Manager. Both Communications Manager servers share the same database and are fully aware of devices and phones registered to each other.

### **7.4.3 Voicemail Services**

Site 1 utilizes a Cisco Unity Connection server for voicemail services. Unity Connection is integrated with Communications Manager and provides voicemail and auto attendant services for Site 1.

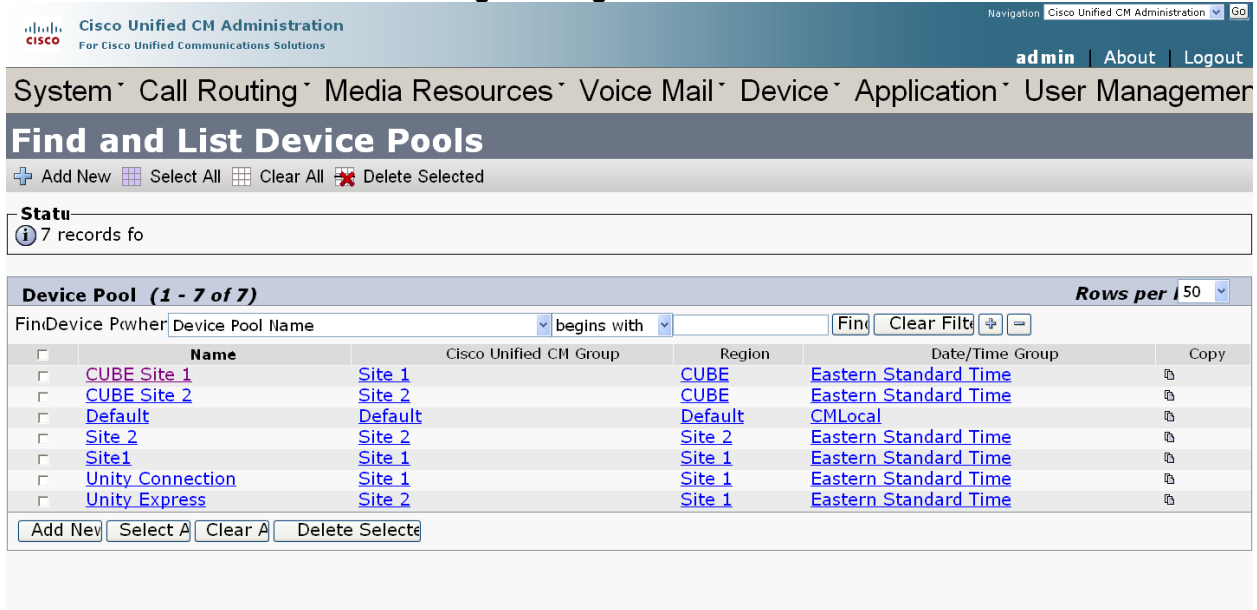
Site 2 has access to the Unity Connection server, but instead uses a local Cisco Unity Express Network Module (CUE) for voicemail and auto attendant services. The CUE module is located within the Cisco 2811 router.

Voicemail services are independent of each other and are not “networked” together. This means that they are unable to forward messages to each others mail store and are unaware of users configured outside their system.

### **7.4.4 Quality of Service**

Quality of Service (QOS) is provided at both, layer 2 and layer 3 boundaries using the Cisco Auto QOS feature. Both, RTP and signaling packets are tagged and passed on to the Cox’s IP Core Network for proper differential treatment.

### 7.4.5 Detail Communications Manager Configurations

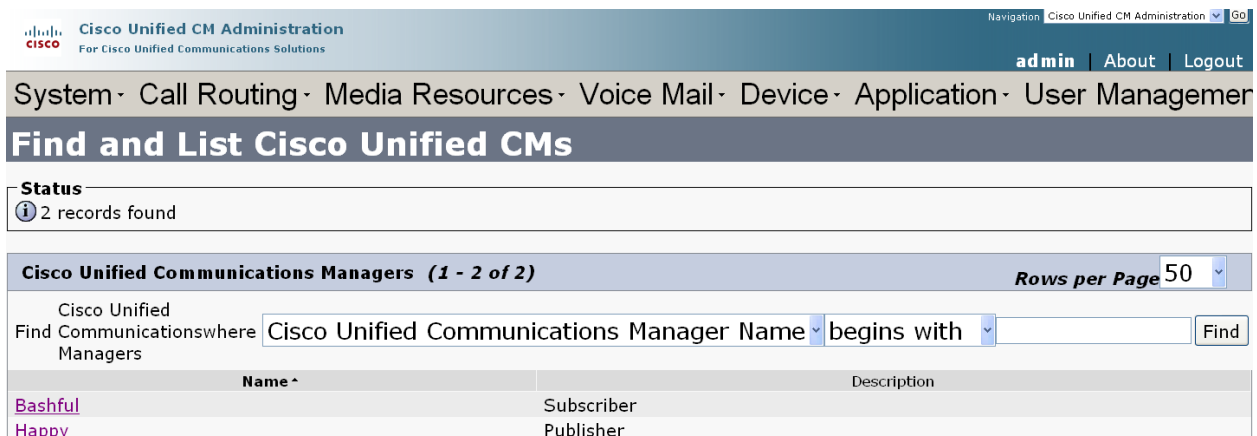


The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with 'Cisco Unified CM Administration' and 'For Cisco Unified Communications Solutions'. Below this is a breadcrumb trail: 'System > Call Routing > Media Resources > Voice Mail > Device > Application > User Management'. The main heading is 'Find and List Device Pools'. Below the heading are buttons for '+ Add New', 'Select All', 'Clear All', and 'Delete Selected'. A status box indicates '7 records found'. The main table is titled 'Device Pool (1 - 7 of 7)' and has a 'Rows per' dropdown set to 50. The table has columns for Name, Cisco Unified CM Group, Region, Date/Time Group, and Copy. Below the table are buttons for '+ Add New', 'Select All', 'Clear All', and 'Delete Selected'.

Name	Cisco Unified CM Group	Region	Date/Time Group	Copy
<a href="#">CUBE Site 1</a>	<a href="#">Site 1</a>	CUBE	<a href="#">Eastern Standard Time</a>	
<a href="#">CUBE Site 2</a>	<a href="#">Site 2</a>	CUBE	<a href="#">Eastern Standard Time</a>	
<a href="#">Default</a>	<a href="#">Default</a>	<a href="#">Default</a>	<a href="#">CMLocal</a>	
<a href="#">Site 2</a>	<a href="#">Site 2</a>	<a href="#">Site 2</a>	<a href="#">Eastern Standard Time</a>	
<a href="#">Site1</a>	<a href="#">Site 1</a>	<a href="#">Site 1</a>	<a href="#">Eastern Standard Time</a>	
<a href="#">Unity Connection</a>	<a href="#">Site 1</a>	<a href="#">Site 1</a>	<a href="#">Eastern Standard Time</a>	
<a href="#">Unity Express</a>	<a href="#">Site 2</a>	<a href="#">Site 1</a>	<a href="#">Eastern Standard Time</a>	

**Figure 8 – Device Pools**

Device pools are used to define sets of common characteristics for devices. The above screen shows a list of device pools



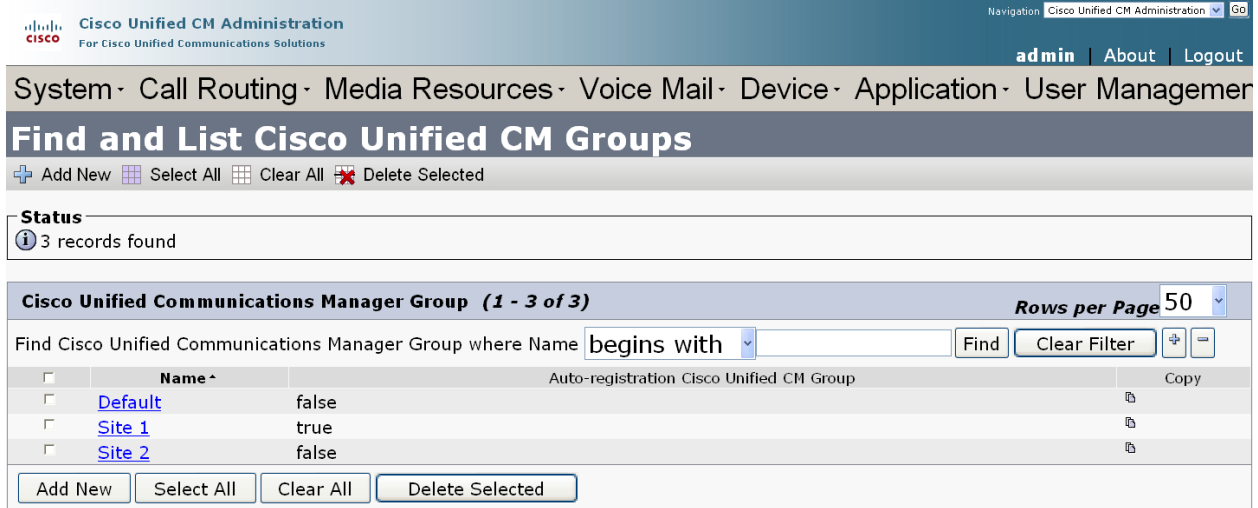
The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with 'Cisco Unified CM Administration' and 'For Cisco Unified Communications Solutions'. Below this is a breadcrumb trail: 'System > Call Routing > Media Resources > Voice Mail > Device > Application > User Management'. The main heading is 'Find and List Cisco Unified CMs'. Below the heading are buttons for '+ Add New', 'Select All', 'Clear All', and 'Delete Selected'. A status box indicates '2 records found'. The main table is titled 'Cisco Unified Communications Managers (1 - 2 of 2)' and has a 'Rows per Page' dropdown set to 50. The table has columns for Name and Description. Below the table are buttons for '+ Add New', 'Select All', 'Clear All', and 'Delete Selected'.

Name	Description
<a href="#">Bashful</a>	Subscriber
<a href="#">Happy</a>	Publisher

**Figure 9 - Cisco Unified CM's**

Two Communications Managers – *Happy* and *Bashful*. *Happy* serves as both Publisher and Subscriber for Site 1, while *Bashful* acts as a Subscriber only for Site 2





**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

admin | About | Logout

System · Call Routing · Media Resources · Voice Mail · Device · Application · User Management

## Find and List Cisco Unified CM Groups

**Status**  
3 records found

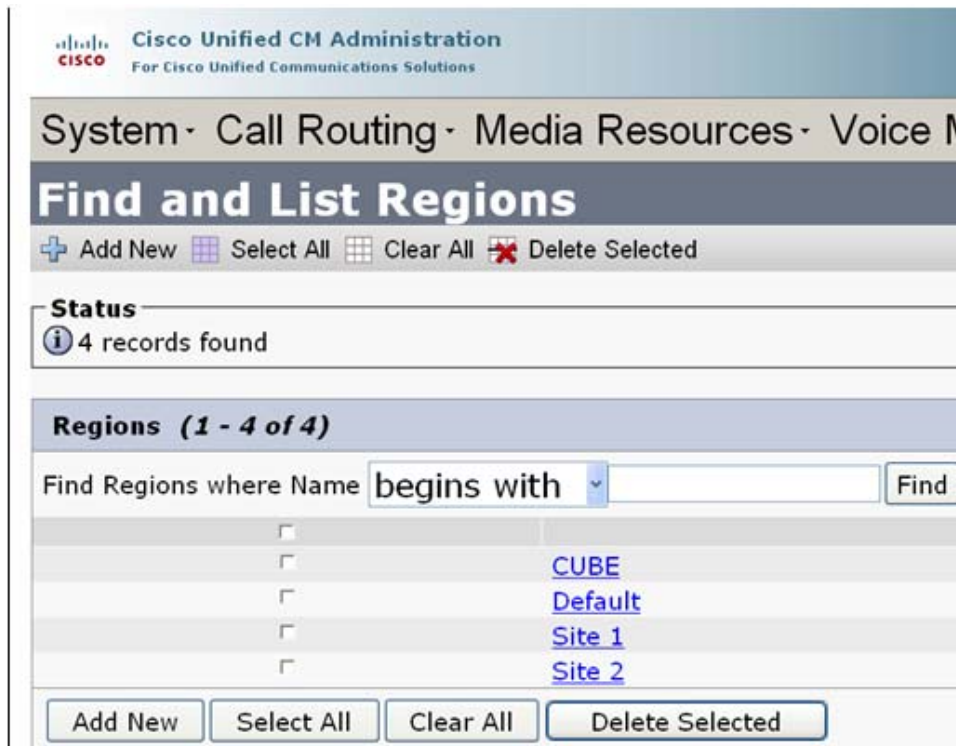
**Cisco Unified Communications Manager Group (1 - 3 of 3)** Rows per Page: 50

Find Cisco Unified Communications Manager Group where Name

<input type="checkbox"/>	Name	Auto-registration	Copy
<input type="checkbox"/>	<a href="#">Default</a>	false	<input type="button" value="⌂"/>
<input type="checkbox"/>	<a href="#">Site 1</a>	true	<input type="button" value="⌂"/>
<input type="checkbox"/>	<a href="#">Site 2</a>	false	<input type="button" value="⌂"/>

**Figure 10 - Cisco Unified CM Groups**

There are two CM Groups in this configuration and there are: Site 1 and Site 2 as shown above



**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System · Call Routing · Media Resources · Voice M

## Find and List Regions

**Status**  
4 records found


**Regions (1 - 4 of 4)**

Find Regions where Name

<input type="checkbox"/>	
<input type="checkbox"/>	<a href="#">CUBE</a>
<input type="checkbox"/>	<a href="#">Default</a>
<input type="checkbox"/>	<a href="#">Site 1</a>
<input type="checkbox"/>	<a href="#">Site 2</a>

**Figure 11 – Regions**

There are four Regions defined: Default, CUBE, Site 1, and Site 2


Cisco Unified CM Administration  
 For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾

## Find and List Physical Locations

+ Add New ☐ Select All ☐ Clear All ☐✖ Delete Selected

**Status**

i 2 records found

**Physical Location** (1 - 2 of 2)

Find Physical Location where Name ▾ begins with ▾ Find

	Name ^	
<input type="checkbox"/>	<a href="#">Site 1</a>	Lake Hearn Lab
<input type="checkbox"/>	<a href="#">Site 2</a>	

Add New
Select All
Clear All
Delete Selected

**Figure 12 - Physical Locations**

Two Locations – Site 1 and Site 2

**Cisco Unified CM Administration** Navigation Cisco Unified C  
 For Cisco Unified Communications Solutions admin

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### Enterprise Parameters Configuration

Save Set to Default Reset Apply Config

**Status**  
 Status: Ready

---

**Enterprise Parameters Configuration**

Parameter Name	Parameter Value	Suggested Value
<a href="#">Synchronization Between Auto Device Profile and Phone Configuration *</a>	True	True
<a href="#">Max Number of Device Level Trace *</a>	12	12
<a href="#">Trace Compression *</a>	Disabled	Disabled
<a href="#">DSCP for Phone-based Services *</a>	default DSCP (000000)	default DSCP (000000)
<a href="#">DSCP for Phone Configuration *</a>	CS3(precedence 3) DSCP (011000)	CS3(precedence 3) DSCP (011000)
<a href="#">DSCP for Cisco CallManager to Device Interface *</a>	CS3(precedence 3) DSCP (011000)	CS3(precedence 3) DSCP (011000)
<a href="#">Connection Monitor Duration *</a>	120	120
<a href="#">Auto Registration Phone Protocol *</a>	SCCP	SCCP
<a href="#">BLF For Call Lists *</a>	Enabled	Disabled
<a href="#">Advertise G.722 Codec *</a>	Enabled	Enabled
<a href="#">Phone Personalization *</a>	Enabled	Disabled
<a href="#">Services Provisioning *</a>	Internal	Internal

**Figure 13 - Enterprise Parameters Configuration**

Enterprise Parameters Configuration – relates to IP Phone Service

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System - Call Routing - Media Resources - Voice Mail - Device - Application - User Management - Bulk Administration

### Enterprise Parameters Configuration

Save Set to Default Reset Apply Config

Feature Control Policy < None >

---

**CCMAdmin Parameters**

Max List Box Items *	250	250
Max Lookup Items *	1000	1000
Enable Dependency Records *	False	False
Auto select DN on any Partition *	False	False

---

**CCMUser Parameters**

Show Ring Settings *	False	False
Show Call Forwarding *	Show All Settings	Show All Settings
Show Speed Dial Settings *	True	True
Show Cisco IP Phone Services Settings *	True	True
Show Personal Address Book Settings *	True	True
Show Message Waiting Lamp Policy Settings *	True	True
Show Line Text Label Settings *	False	False
Show Locale for Phone Settings *	True	True
Show Locale for Web Pages Settings *	True	True

**Figure 14 - Enterprise Parameter Configuration – Continued**

Enterprise Parameters Configuration – relates to IP Phone Services

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration

### Enterprise Parameters Configuration

Save Set to Default Reset Apply Config

Show Change Password Option *	True	True
Show Change PIN Option *	True	True
Show Download Plugin Option *	True	True
Show Online Guide Option *	True	True
Show Directory *	True	True
Show Mobility Features Option *	True	True
Show Manager Name in Directory *	True	True
Show User Id in Directory *	True	True
Show Extension in Directory *	True	True
Show LDAP Extension in Directory *	True	True

---

**CDR Parameters**

CDR File Time Interval *	1	1
Cluster ID *	StandAloneCluster	StandAloneCluster


---

**Localization Parameters**





Default Network Locale *	United States	United States
Default User Locale *	English United States	English United States

**Figure 15 - Enterprise Parameters Configuration – Continued**

Enterprise Parameters Configuration – relates to IP Phone Services

**Cisco Unified CM Administration** Navigation   
 For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ **Enterprise Parameters Configuration**

 Save 
  Set to Default 
  Reset 
  Apply Config

MLPP Parameters		
<a href="#">MLPP Domain Identifier</a> *	<input type="text" value="000000"/>	000000
<a href="#">MLPP Indication Status</a> *	<input type="text" value="MLPP Indication turned off"/>	MLPP Indication turned off
<a href="#">MLPP Preemption Setting</a> *	<input type="text" value="No preemption allowed"/>	No preemption allowed
<a href="#">Precedence Alternate Party Timeout</a> *	<input type="text" value="30"/>	30
<a href="#">Use Standard VM Handling For Precedence Calls</a> *	<input type="text" value="False"/>	False

Security Parameters		
<a href="#">Cluster Security Mode</a> *	<input type="text" value="0"/>	0
<a href="#">CAPF Phone Port</a> *	<input type="text" value="3804"/>	3804
<a href="#">CAPF Operation Expires in (days)</a> *	<input type="text" value="10"/>	10
<a href="#">Enable Caching</a> *	<input type="text" value="False"/>	False

Phone URL Parameters		
<a href="#">URL Authentication</a>	<input type="text" value="http://happy:8080/ccm/cip/authenticate.jsp"/>	
<a href="#">URL Directories</a>	<input type="text" value="http://happy:8080/ccm/cip/xmldirectory.jsp"/>	
<a href="#">URL Idle</a>	<input type="text" value=""/>	
<a href="#">URL Idle Time</a>	<input type="text" value="0"/>	0
<a href="#">URL Information</a>	<input type="text" value="http://happy:8080/ccm/cip/GetTelecasterHelpText.jsp"/>	

**Figure 16 - Enterprise Parameters Configuration – Continued**

Enterprise Parameters Configuration – relates to IP Phone Services

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk A

### Enterprise Parameters Configuration

<a href="#">URL Messages</a>	<input type="text"/>
<a href="#">IP Phone Proxy Address</a>	<input type="text"/>
<a href="#">URL Services</a>	<input type="text" value="http://happy:8080/ccm/cip/getservicesmenu.jsp"/>

---

**User Search Parameters**

<a href="#">Enable All User Search *</a>	<input type="text" value="True"/>	True
<a href="#">User Search Limit *</a>	<input type="text" value="64"/>	64

---

**CCM Web Services Parameters**

<a href="#">Allowed Performance Queries Per Minute *</a>	<input type="text" value="50"/>	50
<a href="#">Allowed Device Queries Per Minute *</a>	<input type="text" value="15"/>	15
<a href="#">Performance Queue Limit *</a>	<input type="text" value="100"/>	100
<a href="#">Allowed CDRonDemand get_file Queries Per Minute *</a>	<input type="text" value="10"/>	10
<a href="#">Allowed CDRonDemand get_file_list Queries Per Minute *</a>	<input type="text" value="20"/>	20

---

**Trace Parameters**

<a href="#">File Close Thread Flag *</a>	<input type="text" value="True"/>	True
<a href="#">FileCloseThreadQueueWatermark *</a>	<input type="text" value="100"/>	100

**Figure 17 - Enterprise Parameters Configuration – Continued**

Enterprise Parameters Configuration – relates to IP Phone Services

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System - Call Routing - Media Resources - Voice Mail - Device - Application - User Management - Bulk Admin

### Enterprise Parameters Configuration

Save Set to Default Reset Apply Config

**User Management Parameters**

[Effective Access Privileges For Overlapping User Groups and roles \\*](#) Maximum

---

**Service Manager TCP ports parameters**

<a href="#">Service Manager TCP Server communication port number *</a>	8888	8888
<a href="#">Service Manager TCP Client communication port number *</a>	8889	8889

---

**CRS Application Parameters**

<a href="#">Auto Attendant Installed *</a>	false
<a href="#">IPCC Express Installed *</a>	false

---

**Clusterwide Domain Configuration**

[Organization Top Level Domain](#)

[Cluster Fully Qualified Domain Name](#)

---

**Denial-of-Service Protection**

[Denial-of-Service Protection \\*](#) True

---

**TLS Handshake Timer**

[TLS Handshake Timer \\*](#)  60

**Figure 18 - Enterprise Parameters Configuration – Continued**


Enterprise Parameters Configuration – relates to IP Phone Services




**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System - Call Routing - Media Resources - Voice Mail - Device - Appli

### Enterprise Phone Configuration

 Save

**Status**  
 Status: Ready

**Product Specific Configuration Layout**

	Param	Over
Back USB Port*	Enabled	<input type="checkbox"/>
Side USB Port*	Enabled	<input type="checkbox"/>
Cisco Camera*	Disabled	<input type="checkbox"/>
Enable/Disable USB Classes	<div style="background-color: #005596; color: white; padding: 2px;">                     Mass Storage                      Human Interface Device                      Audio Class                 </div>	<input type="checkbox"/>
SDIO *	Disabled	<input type="checkbox"/>
Bluetooth *	Enabled	<input type="checkbox"/>
Wifi *	Enabled	<input type="checkbox"/>
Bluetooth Profiles*	<div style="background-color: #005596; color: white; padding: 2px;">                     Headset                      Human Interface Device                 </div>	<input type="checkbox"/>
Join And Direct Transfer Policy*	Same line, across line enable	<input type="checkbox"/>

Figure 19 - Enterprise Phone Configuration

Enterprise Phone Configuration

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk A

### Find and List SIP Trunk Security Profiles

+ Add New    Select All    Clear All    Delete Selected

**Status**  
2 records found

**SIP Trunk Security Profile (1 - 2 of 2)**

Find SIP Trunk Security Profile where **Name** ▾ begins with ▾  Find Clear Filter

<input type="checkbox"/>	Name ^	Description
<input type="checkbox"/>	<a href="#">COX Business Security SIP Trunk Profile</a>	COX Business SIP Trunk Profile
<input type="checkbox"/>	<a href="#">Non Secure SIP Trunk Profile</a>	Non Secure SIP Trunk Profile authenticated by null String

Add New   Select All   Clear All   Delete Selected

**Figure 20 - SIP Trunk Security Profiles**

We Defined a Cox Business Security Profile for SIP Trunking

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Manage

### Find and List Route Groups

+ Add New    Select All    Clear All    Delete Selected

**Status**  
3 records found

**Route Group (1 - 3 of 3)**

Find Route Group where Route Group Name **begins with** ▾  Find Clear Filter

<input type="checkbox"/>	Name ^
<input type="checkbox"/>	<a href="#">Site_1</a>
<input type="checkbox"/>	<a href="#">Site_1 Private</a>
<input type="checkbox"/>	<a href="#">Site_2</a>

Add New   Select All   Clear All   Delete Selected

**Figure 21 - Two Route Groups**

Defined are two route groups

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation Cisco Unified admin

System > Call Routing > Media Resources > Voice Mail > Device > Application > User Management > Bulk Administration > Help >

### Find and List Route Lists

Status **3 records found**

**Route List (1 - 3 of 3)** Rows

Find Route List where **Name** begins with

<input type="checkbox"/>	Name ^	Description	Enabled	Status
<input type="checkbox"/>	<a href="#">Site_1</a>	Calls from Site 1	true	Registered with 192.168.100.20
<input type="checkbox"/>	<a href="#">Site_1_Private</a>	Outbound calls from site 1 to be marked private	true	Registered with 192.168.100.20
<input type="checkbox"/>	<a href="#">Site_2</a>	Calls from Site 2	true	Registered with 192.168.100.20

**Figure 22 - Route Lists**

Two site list are defined. One from Site 1 to Site 2 and the other from Site 2 to Site 1

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Admin admin About

System > Call Routing > Media Resources > Voice Mail > Device > Application > User Management > Bulk Administration > Help >

### Find and List Route Patterns

Status **27 records found**

**Route Patterns (1 - 27 of 27)** Rows per Page

Find Route Patterns where **Pattern** begins with

<input type="checkbox"/>	Pattern ^	Description	Partition	Route Filter	Associated Device
<input type="checkbox"/>	<a href="#">*67.011!</a>	Blocked International Calls from Site 1	<a href="#">International Site 1</a>		<a href="#">Site_1</a>
<input type="checkbox"/>	<a href="#">*67.1[2-9]XX[2-9]XXXXXX</a>	Long Distance Calls from Site 1	<a href="#">Long Distance Site 1</a>		<a href="#">Site_1_Private</a>
<input type="checkbox"/>	<a href="#">*67.404[2-9]XXXXXX</a>	Local 10 digit calls from Site 1	<a href="#">Local Site 1</a>		<a href="#">Site_1_Private</a>
<input type="checkbox"/>	<a href="#">*67.678239!</a>	Blocked bl International Calls from Site 1	<a href="#">Local Site 1</a>		<a href="#">Site_1</a>
<input type="checkbox"/>	<a href="#">*67.678[2-9]XXXXXX</a>	Local on-net 10 digit calls from Site 1	<a href="#">Local Site 1</a>		<a href="#">Site_1_Private</a>
<input type="checkbox"/>	<a href="#">9.011!</a>	International Calls from Site 2	<a href="#">International Site 2</a>		<a href="#">Site_2</a>
<input type="checkbox"/>	<a href="#">9.011!</a>	International Calls from Site 1	<a href="#">International Site 1</a>		<a href="#">Site_1</a>
<input type="checkbox"/>	<a href="#">9.011!</a>	International Calls from Site 2	<a href="#">International Site 2</a>		<a href="#">Site_2</a>
<input type="checkbox"/>	<a href="#">9.011!</a>	International Calls from Site 1	<a href="#">International Site 1</a>		<a href="#">Site_1</a>
<input type="checkbox"/>	<a href="#">9.101XXXX1[2-9]XX[2-9]XXXXXX</a>	Site 2 LD Access Codes	<a href="#">Local Site 2</a>		<a href="#">Site_2</a>
<input type="checkbox"/>	<a href="#">9.101XXXX1[2-9]XX[2-9]XXXXXX</a>	Site 1 LD Access Codes	<a href="#">Local Site 1</a>		<a href="#">Site_1</a>
<input type="checkbox"/>	<a href="#">9.1[2-9]XX[2-9]XXXXXX</a>	Long Distance Calls from Site 2	<a href="#">Long Distance Site 2</a>		<a href="#">Site_2</a>
<input type="checkbox"/>	<a href="#">9.1[2-9]XX[2-9]XXXXXX</a>	Long Distance Calls from Site 1	<a href="#">Long Distance Site 1</a>		<a href="#">Site_1</a>
<input type="checkbox"/>	<a href="#">9.404[2-9]XXXXXX</a>	Local 10 digit calls from Site 2	<a href="#">Local Site 2</a>		<a href="#">Site_2</a>

**Figure 23 - Route Patterns**

Defined Route patterns examples include: Local, Long Distance, International, etc.

<input type="checkbox"/>	<a href="#">9.678[2-9]XXXXXX</a>	Local 10 digit calls from Site 2	<a href="#">Local Site 2</a>	<a href="#">Site 2</a>
<input type="checkbox"/>	<a href="#">9.678[2-9]XXXXXX</a>	Local 10 digit calls from Site 1	<a href="#">Local Site 1</a>	<a href="#">Site 1</a>
<input type="checkbox"/>	<a href="#">9.703[2-9]XXXXXX</a>	LD 10 digit calls from Site 2	<a href="#">Local Site 2</a>	<a href="#">Site 2</a>
<input type="checkbox"/>	<a href="#">9.703[2-9]XXXXXX</a>	LD 10 digit calls from Site 1	<a href="#">Local Site 1</a>	<a href="#">Site 1</a>
<input type="checkbox"/>	<a href="#">9.770[2-9]XXXXXX</a>	Local 10 digit calls from Site 2	<a href="#">Local Site 2</a>	<a href="#">Site 2</a>
<input type="checkbox"/>	<a href="#">9.770[2-9]XXXXXX</a>	Local 10 digit calls from Site 1	<a href="#">Local Site 1</a>	<a href="#">Site 1</a>
<input type="checkbox"/>	<a href="#">9.911</a>	911 Access for Site 1	<a href="#">911Site1</a>	<a href="#">Site 1</a>
<input type="checkbox"/>	<a href="#">9.911</a>	911 Access for Site 2	<a href="#">911Site2</a>	<a href="#">Site 2</a>
<input type="checkbox"/>	<a href="#">9.[2-8]111</a>	N11 Access for Site 2	<a href="#">N11 Site 2</a>	<a href="#">Site 2</a>
<input type="checkbox"/>	<a href="#">9.[2-8]111</a>	N11 Access for Site 1	<a href="#">N11 Site 1</a>	<a href="#">Site 1</a>
<input type="checkbox"/>	<a href="#">9.[2-9]XXXXXX</a>	Local 7 digit calls from Site 1	<a href="#">Local Site 1</a>	<a href="#">Site 1</a>
<input type="checkbox"/>	<a href="#">9.[2-9]XXXXXX</a>	Local 7 digit calls from Site 2	<a href="#">Local Site 2</a>	<a href="#">Site 2</a>

**Figure 24 - Route Patterns**

Defined Route Patterns include: Local, Long Distance, International, etc. – Continued



**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾

### Find and List Line Groups

**Status**

**i** 6 records found

**Line Groups (1 - 6 of 6)**

Find Line Groups where Line Group Name

<input type="checkbox"/>	Line Group Name ^
<input type="checkbox"/>	<a href="#">CiscoUM1</a>
<input type="checkbox"/>	<a href="#">HuntTest</a>
<input type="checkbox"/>	<a href="#">Site 1 Broadcast</a>
<input type="checkbox"/>	<a href="#">Site 1 Hunt</a>
<input type="checkbox"/>	<a href="#">Site 2 Broadcast</a>
<input type="checkbox"/>	<a href="#">Site 2 Hunt</a>

**Figure 25 - Line Groups**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾

### Find and List Hunt Lists

**Status**  
6 records found

**Hunt List (1 - 6 of 6)**

Find Hunt List where **Name** begins with

<input type="checkbox"/>	Name ^	Description	Enabled	Status
<input type="checkbox"/>	<a href="#">Hunt Test List</a>	Hunt Test List	true	Registered with 192.168.100.20
<input type="checkbox"/>	<a href="#">Site 1 Broadcast</a>	Site 1 Broadcast Hunt	true	Registered with 192.168.100.20
<input type="checkbox"/>	<a href="#">Site 1 Hunt</a>	Site 1 Hunt Top Down	true	Registered with 192.168.100.20
<input type="checkbox"/>	<a href="#">Site 2 Broadcast</a>	Site 2 Broadcast Hunt	true	Registered with 192.168.100.20
<input type="checkbox"/>	<a href="#">Site 2 Hunt</a>	Site 2 Top Down Hunt	true	Registered with 192.168.100.20
<input type="checkbox"/>	<a href="#">Unity</a>	Unity Ports	true	Registered with 192.168.100.20

Figure 26 - Hunt Lists

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾

### Find and List Hunt Pilots

**Status**  
5 records found

**Hunt Pilots (1 - 5 of 5)**

Find Hunt Pilots where **Pattern** begins with

<input type="checkbox"/>	Pattern ^	Description	Partition	Route Filter	Hunt List
<input type="checkbox"/>	<a href="#">1005</a>	Site 1 Top Down Hunt Pilot	<a href="#">Internal</a>		<a href="#">Site 1 Hunt</a>
<input type="checkbox"/>	<a href="#">1006</a>	Site 1 Broadcast Hunt Pilot	<a href="#">Internal</a>		<a href="#">Site 1 Broadcast</a>
<input type="checkbox"/>	<a href="#">2005</a>	Site 2 Top Down Hunt Pilot	<a href="#">Internal</a>		<a href="#">Site 2 Hunt</a>
<input type="checkbox"/>	<a href="#">2006</a>	Site 2 Broadcast Hunt Pilot	<a href="#">Internal</a>		<a href="#">Site 2 Broadcast</a>
<input type="checkbox"/>	<a href="#">3000</a>	Unity Connection	<a href="#">Internal</a>		<a href="#">Unity</a>

Figure 27 - Hunt Pilots Numbers

The screenshot displays the Cisco Unified CM Administration interface. At the top, the Cisco logo and text "Cisco Unified CM Administration For Cisco Unified Communications Solutions" are visible. Below this is a navigation menu with "System", "Call Routing", "Media Resources", and "Voice". The "Find and List Time Periods" section is active, showing a toolbar with "Add New", "Select All", "Clear All", and "Delete Selected" buttons. A "Status" box indicates "1 records found". The main area shows a search filter for "Name" set to "begins with" and a table with one entry: "All the time". At the bottom, there are buttons for "Add New", "Select All", "Clear All", and "Delete Selected".

**Figure 28 - Time Period**

Defined Time Period for services, for testing we selected All the time.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management

### Find and List Partitions

**Status**  
*i* 14 records found

**Partition (1 - 14 of 14)**

Find Partition where

<input type="checkbox"/>	Partition Name ^	
<input type="checkbox"/>	<a href="#">911Site1</a>	911 Calls from Site 1
<input type="checkbox"/>	<a href="#">911Site2</a>	911 Calls from Site 2
<input type="checkbox"/>	<a href="#">Feature</a>	Calling Features
<input type="checkbox"/>	<a href="#">Internal</a>	IP Phones and internal devices
<input type="checkbox"/>	<a href="#">International Site 1</a>	International Calls from Site 1
<input type="checkbox"/>	<a href="#">International Site 2</a>	International Calls from Site 2
<input type="checkbox"/>	<a href="#">Local Site 1</a>	Local Calls from Site 1
<input type="checkbox"/>	<a href="#">Local Site 2</a>	Local Calls from Site 2
<input type="checkbox"/>	<a href="#">Long Distance Site 1</a>	Long distance Calls
<input type="checkbox"/>	<a href="#">Long Distance Site 2</a>	Long distance Calls from Site 2
<input type="checkbox"/>	<a href="#">N11 Site 1</a>	N11
<input type="checkbox"/>	<a href="#">N11 Site 2</a>	N11 Site 2
<input type="checkbox"/>	<a href="#">UnityPorts</a>	Unity Device Ports
<input type="checkbox"/>	<a href="#">Unreachable</a>	Partition that is not in any CSS

**Figure 29 - Partitions**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Ma

### Find and List Calling Search Spaces

**Status**  
 13 records found

**Calling Search Space (1 - 13 of 13)**

Find Calling Search Space where **CSS Name** ▾ begins with ▾

<input type="checkbox"/>	CSS Name ^	Descripti
<input type="checkbox"/>	<a href="#">COS1-Site1</a>	Internal Only for Site 1
<input type="checkbox"/>	<a href="#">COS1-Site2</a>	Internal Only for Site 1
<input type="checkbox"/>	<a href="#">COS2-Site1</a>	Internal 911 and Local for Site 1
<input type="checkbox"/>	<a href="#">COS2-Site2</a>	Internal 911 and Local for Site 2
<input type="checkbox"/>	<a href="#">COS3-Site1</a>	Internal 911 Local and LD for Site 1
<input type="checkbox"/>	<a href="#">COS3-Site2</a>	Internal 911 Local and LD for Site 2
<input type="checkbox"/>	<a href="#">COS4-Site1</a>	Internal 911 Local and LD for Site 1
<input type="checkbox"/>	<a href="#">COS4-Site2</a>	Internal 911 Local and LD for Site 2
<input type="checkbox"/>	<a href="#">Gateway Site 1</a>	Inbound Calls from the Voice Gateway for Site 1
<input type="checkbox"/>	<a href="#">Gateway Site 2</a>	Inbound Calls from the Voice Gateway for Site 2
<input type="checkbox"/>	<a href="#">Intercept-Site1</a>	911 only access for Site 1
<input type="checkbox"/>	<a href="#">Intercept-Site2</a>	911 only access for Site 2
<input type="checkbox"/>	<a href="#">UnityPorts</a>	CSS for use with Unity CTI Ports

**Figure 30 - Calling Search Spaces**



**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾

### Find and List Client Matter Codes

**Status**  
*i* 2 records found

**Client Matter Code (1 - 2 of 2)**

Find Client Matter Code where **Client Matter Code** ▾ begins with ▾

<input type="checkbox"/>	Client Matter Code ^	
<input type="checkbox"/>	<a href="#">1234</a>	Account Code
<input type="checkbox"/>	<a href="#">5555</a>	CMC

**Figure 31 - Client Matter Codes**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾

### Find and List Forced Authorization Code

**Status**  
*i* 1 records found

**Forced Authorization Code (1 - 1 of 1)**

Find Forced Authorization Code where **Authorization Code Name** ▾ begins with ▾

<input type="checkbox"/>	Authorization Code Name ^	Authorization Code	
<input type="checkbox"/>	<a href="#">Authcode</a>	5678	0

**Figure 32 - Forced Authorization Code**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾

### Find and List Translation Patterns

**Status**  
 2 records found

**Translation patterns (1 - 2 of 2)**

Find Translation patterns where **Pattern** ▾ begins with ▾

<input type="checkbox"/>	<b>Translation Pattern</b> ↑	Partition	Description
<input type="checkbox"/>	 0	<a href="#">Internal</a>	Operator
<input type="checkbox"/>	 10XX	<a href="#">Internal</a>	Route all to Voicemail

Figure 33 - Translation Patterns

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk ▾

### Find and List Call Park Numbers

**Status**  
 2 records found

**Call Park Numbers (1 - 2 of 2)**

Find Call Park Numbers where **Number** ▾ begins with ▾

<input type="checkbox"/>	<b>Call Park Number</b> ↑	Partition	Description
<input type="checkbox"/>	<a href="#">1008</a>	<a href="#">Internal</a>	<a href="#">Happy</a>
<input type="checkbox"/>	<a href="#">2008</a>	<a href="#">Internal</a>	<a href="#">Bashful</a>

Figure 34 - Call Park Numbers

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration **Go**

admin | About | Logout

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Find and List Call Pickup Groups**

+ Add New     Select All     Clear All     Delete Selected

**Status**  
2 records found

**Call Pickup Group (1 - 2 of 2)** Rows per Page 50

Find Call Pickup Group where: **Call Pickup Group Name** ▾ begins with ▾  Find Clear Filter

<input type="checkbox"/>	Call Pickup Group Name *	Call Pickup Group Number	Partition	Description	Copy
<input type="checkbox"/>	PickupGroup	1015	Local Site 1		<input type="button" value="Copy"/>
<input type="checkbox"/>	PickupGroup1	1016	Local Site 2		<input type="button" value="Copy"/>

+ Add New     Select All     Clear All     Delete Selected

**Figure 35 - Call Pickup Group**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration **Go**

admin | About | Logout

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Find and List Directory Numbers**

+ Add New     Select All     Clear All     Delete Selected

**Status**  
66 records found

**Directory Number (1 - 50 of 66)** Rows per Page 50

Find Directory Number where: **Directory Number** ▾ begins with ▾  Find Clear Filter

<input type="checkbox"/>	Pattern/Directory Number *	Partition	Description	Copy
<input type="checkbox"/>	1001	Unreachable	James Dean	<input type="button" value="Copy"/>
<input type="checkbox"/>	1001	Feature	James Dean	<input type="button" value="Copy"/>
<input type="checkbox"/>	1001	Internal	James Dean	<input type="button" value="Copy"/>
<input type="checkbox"/>	1002	Internal	Elvis Presley	<input type="button" value="Copy"/>
<input type="checkbox"/>	1002	Internal	Elvis Presley	<input type="button" value="Copy"/>
<input type="checkbox"/>	1002	Unreachable	Elvis Presley	<input type="button" value="Copy"/>
<input type="checkbox"/>	1003	Internal		<input type="button" value="Copy"/>
<input type="checkbox"/>	1004	Local Site 1		<input type="button" value="Copy"/>
<input type="checkbox"/>	1004	Internal	ATA001DA2EA6613	<input type="button" value="Copy"/>
<input type="checkbox"/>	1009	Internal		<input type="button" value="Copy"/>
<input type="checkbox"/>	1010	Internal	Site 1 Auto Attendant	<input type="button" value="Copy"/>
<input type="checkbox"/>	1011	Internal		<input type="button" value="Copy"/>
<input type="checkbox"/>	1050			<input type="button" value="Copy"/>
<input type="checkbox"/>	1051			<input type="button" value="Copy"/>
<input type="checkbox"/>	2000	UnityPorts		<input type="button" value="Copy"/>

**Figure 36 - Directory Numbers**

**Cisco Unified CM Administration** Navigation Cisco U  
 For Cisco Unified Communications Solutions adr

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management

**Route Plan Report** **Related Links:** [View](#)

Status 132 records found

Route Plan Report (1 - 50 of 132) Rows

Find  Route Plan Report where  begins with

Pattern/Directory Number	Partition	Type	Route Detail
<a href="#">*67.011!</a>	<a href="#">International Site_1</a>	Route Pattern	<ul style="list-style-type: none"> <li>Site_1</li> <li>Site_1</li> <li>Grumpy (All ports)</li> <li>Site_2</li> <li>Dopey (All ports)</li> </ul>
<a href="#">*67.1[2-9]xx[2-9]XXXXXX</a>	<a href="#">Long Distance Site_1</a>	Route Pattern	<ul style="list-style-type: none"> <li>Site_1_Private</li> <li>Site_1_Private</li> <li>Gurmpy_Private (All ports)</li> </ul>
<a href="#">*67.404[2-9]XXXXXX</a>	<a href="#">Local Site_1</a>	Route Pattern	<ul style="list-style-type: none"> <li>Site_1_Private</li> <li>Site_1_Private</li> </ul>

Figure 37 - Route Plan Report

**Cisco Unified CM Administration** Navigation Cisco U  
 For Cisco Unified Communications Solutions adr

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management

**Route Plan Report** **Related Links:** [View](#)

<a href="#">*67.678239!</a>	<a href="#">Local Site_1</a>	Route Pattern	<ul style="list-style-type: none"> <li>Site_1</li> <li>Site_1</li> <li>Grumpy (All ports)</li> <li>Site_2</li> <li>Dopey (All ports)</li> </ul>
<a href="#">*67.678[2-9]XXXXXX</a>	<a href="#">Local Site_1</a>	Route Pattern	<ul style="list-style-type: none"> <li>Site_1_Private</li> <li>Site_1_Private</li> <li>Gurmpy_Private (All ports)</li> </ul>
<a href="#">Q</a>	<a href="#">Internal</a>	Translation Pattern	
<a href="#">1001</a>	<a href="#">Internal</a>	Directory Number	<ul style="list-style-type: none"> <li>SEP0023EBC88963</li> <li>HuntTest</li> <li>Site_1_Hunt</li> <li>Site_1_Broadcast</li> </ul>
<a href="#">1001</a>	<a href="#">Unreachable</a>	Directory Number	
<a href="#">1001</a>	<a href="#">Feature</a>	Directory Number	
<a href="#">1002</a>	<a href="#">Internal</a>	Directory Number	<ul style="list-style-type: none"> <li>SEP0023EBC78105</li> <li>HuntTest</li> <li>Site_1_Hunt</li> <li>Site_1_Broadcast</li> </ul>
<a href="#">1002</a>	<a href="#">Unreachable</a>	Directory Number	
<a href="#">1002</a>		Directory Number	

Figure 38 - Route Plan Report - Continued




























Cisco Unified CM Administration					
For Cisco Unified Communications Solutions					
System	Call Routing	Media Resources	Voice Mail	Device	Application
Route Plan Report					Related Links
	<a href="#">1003</a>	<a href="#">Internal</a>	Directory Number		 SEP0023EBC78105  HuntTest  Site_1_Hunt
	<a href="#">1004</a>	<a href="#">Local Site 1</a>	Directory Number		
	<a href="#">1004</a>	<a href="#">Internal</a>	Directory Number		 AN1DA2EA6613000
	<a href="#">1004</a>	<a href="#">Internal</a>	Directory Number		 RossParkerIPC
	<a href="#">1005</a>	<a href="#">Internal</a>	Hunt Pilot		 Site_1_Hunt  Site_1_Hunt  1001, Internal  1002, Internal  1003, Internal
	<a href="#">1006</a>	<a href="#">Internal</a>	Hunt Pilot		 Site_1_Broadcast  Site_1_Broadcast  1001, Internal  1002, Internal  2001, Internal
	<a href="#">1008</a>	<a href="#">Internal</a>	Call Park		
	<a href="#">1009</a>	<a href="#">Internal</a>	Directory Number		
	<a href="#">1010</a>	<a href="#">Internal</a>	Directory Number		 Unity_AA_Pilot
	<a href="#">1011</a>	<a href="#">Internal</a>	Directory Number		
	<a href="#">1015</a>	<a href="#">Local Site 1</a>	Call Pickup Group		

Figure 39 - Route Plan Report - Continued

























Cisco Unified CM Administration					
For Cisco Unified Communications Solutions					
System	Call Routing	Media Resources	Voice Mail	Device	Application
Route Plan Report					Related Links
	<a href="#">1016</a>	<a href="#">Local Site 2</a>	Call Pickup Group		
	<a href="#">1050</a>		Directory Number		
	<a href="#">1051</a>		Directory Number		
	<a href="#">10XX</a>	<a href="#">Internal</a>	Translation Pattern		
	<a href="#">2000</a>	<a href="#">UnityPorts</a>	Directory Number		
	<a href="#">2001</a>	<a href="#">Internal</a>	Directory Number		 SEP0026CB3B281A  HuntTest  Site_2_Hunt  Site_1_Broadcast  Site_2_Broadcast
	<a href="#">2001</a>	<a href="#">Internal</a>	Directory Number		 SEP0023EBC78105  HuntTest  Site_2_Hunt  Site_1_Broadcast  Site_2_Broadcast
	<a href="#">2001</a>	<a href="#">Local Site 1</a>	Directory Number		
	<a href="#">2001</a>	<a href="#">Local Site 2</a>	Directory Number		
	<a href="#">2001</a>	<a href="#">UnityPorts</a>	Directory Number		
	<a href="#">2001</a>	<a href="#">911Site2</a>	Directory Number		
	<a href="#">2001</a>	<a href="#">Feature</a>	Directory Number		
	<a href="#">2002</a>	<a href="#">UnityPorts</a>	Directory Number		
	<a href="#">2002</a>	<a href="#">Unreachable</a>	Directory Number		

Figure 40 - Route Plan Report - Continued

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾

### Route Plan Report

Pattern/Directory Number	Partition	Type	Related Links
<a href="#">2003</a>	<a href="#">UnityPorts</a>	Directory Number	
<a href="#">2003</a>	<a href="#">Internal</a>	Directory Number	Site_2_Hunt
<a href="#">2003</a>	<a href="#">Internal</a>	Directory Number	Site_2_Broadcast
<a href="#">2003</a>	<a href="#">Feature</a>	Directory Number	
<a href="#">2003</a>	<a href="#">N11 Site 1</a>	Directory Number	
<a href="#">2004</a>	<a href="#">UnityPorts</a>	Directory Number	
<a href="#">2005</a>	<a href="#">UnityPorts</a>	Directory Number	
<a href="#">2005</a>	<a href="#">Internal</a>	Hunt Pilot	Site_2_Hunt Site_2_Hunt 7702 2001, Internal 7709 2002, Internal 7702 2003, Internal
<a href="#">2006</a>	<a href="#">UnityPorts</a>	Directory Number	
<a href="#">2006</a>	<a href="#">Internal</a>	Hunt Pilot	Site_2_Broadcast Site_2_Broadcast 7702 2001, Internal 7702 2002, Internal 7709 2003, Internal
<a href="#">2007</a>	<a href="#">UnityPorts</a>	Directory Number	

Figure 41 - Route Plan Report - Continued

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help

### Route Plan Report

Related Links: [View](#)

Status: 132 records found

Route Plan Report (51 - 100 of 132)

Find:  Route Plan Report where  begins with

Pattern/Directory Number	Partition	Type	Route Detail
<a href="#">2008</a>	<a href="#">Internal</a>	Call Park	
<a href="#">2010</a>	<a href="#">Internal</a>	Directory Number	UnityX_AA_Pilot
<a href="#">2011</a>	<a href="#">Internal</a>	Directory Number	SEP0026CB3B281A
<a href="#">2011</a>	<a href="#">Local Site 1</a>	Directory Number	
<a href="#">2011</a>	<a href="#">Internal</a>	Directory Number	
<a href="#">2022</a>	<a href="#">Internal</a>	Attendant Console	test
<a href="#">2392</a>	<a href="#">Internal</a>	Directory Number	SEP001BD4331E25
<a href="#">3000</a>	<a href="#">UnityPorts</a>	Directory Number	
<a href="#">3000</a>	<a href="#">Internal</a>	Hunt Pilot	Unity CiscoUM1 7702 6000, UnityPorts 7702 6001, UnityPorts 7709 6002, UnityPorts

Figure 42 - Route Plan Report - Continued

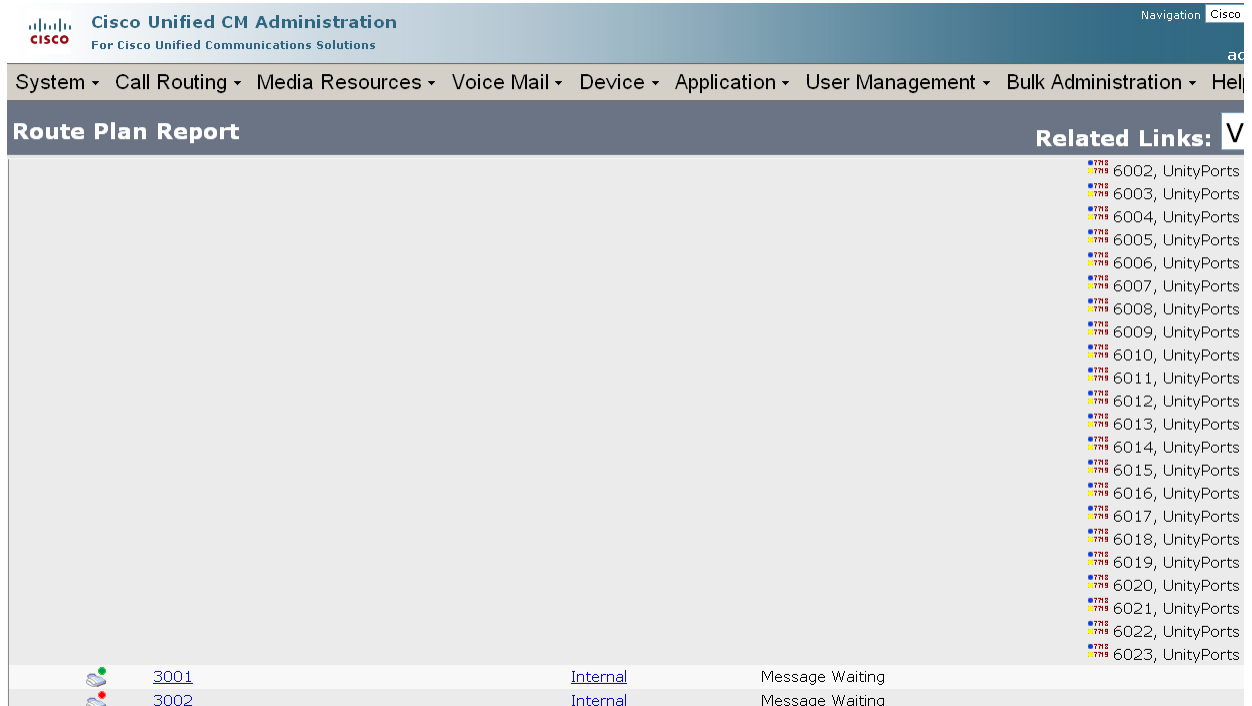


Figure 43 - Route Plan Report - Continued

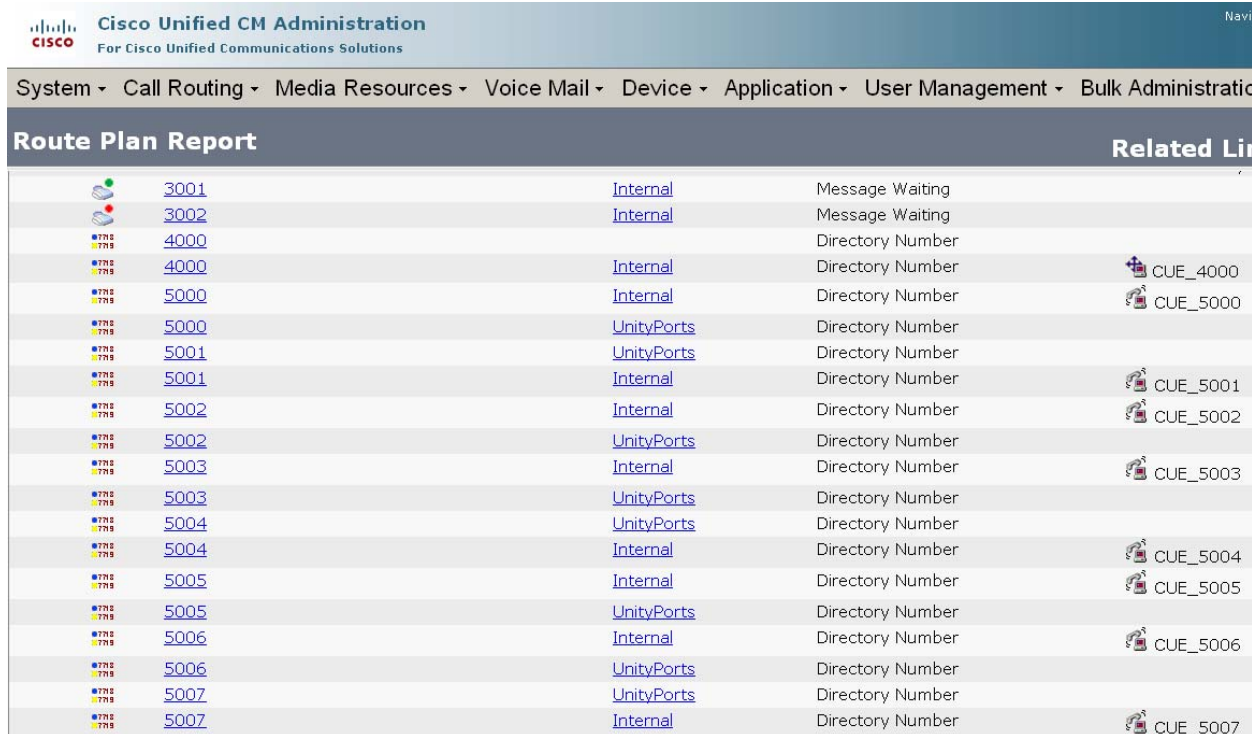


Figure 44 - Route Plan Report - Continued

Cisco Unified CM Administration For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾

### Route Plan Report

Route Plan Report			Related Links
6001	UnityPorts	Voice Mail Port	CiscoUM1-VI1
6002	UnityPorts	Voice Mail Port	CiscoUM1-VI2
6003	UnityPorts	Voice Mail Port	CiscoUM1-VI3
6004	UnityPorts	Voice Mail Port	CiscoUM1-VI4
6005	UnityPorts	Voice Mail Port	CiscoUM1-VI5
6006	UnityPorts	Voice Mail Port	CiscoUM1-VI6
6007	UnityPorts	Voice Mail Port	CiscoUM1-VI7
6008	UnityPorts	Voice Mail Port	CiscoUM1-VI8
6009	UnityPorts	Voice Mail Port	CiscoUM1-VI9
6010	UnityPorts	Voice Mail Port	CiscoUM1-VI10
6011	UnityPorts	Voice Mail Port	CiscoUM1-VI11
6012	UnityPorts	Voice Mail Port	CiscoUM1-VI12
6013	UnityPorts	Voice Mail Port	CiscoUM1-VI13
6014	UnityPorts	Voice Mail Port	CiscoUM1-VI14
6015	UnityPorts	Voice Mail Port	CiscoUM1-VI15
6016	UnityPorts	Voice Mail Port	CiscoUM1-VI16
6017	UnityPorts	Voice Mail Port	CiscoUM1-VI17
6018	UnityPorts	Voice Mail Port	CiscoUM1-VI18
6019	UnityPorts	Voice Mail Port	CiscoUM1-VI19
6020	UnityPorts	Voice Mail Port	CiscoUM1-VI20
6021	UnityPorts	Voice Mail Port	CiscoUM1-VI21

Figure 45 - Route Plan Report – Continued

Cisco Unified CM Administration For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### Route Plan Report

Status: 132 records found

Route Plan Report (101 - 132 of 132)

Find: All Patterns Route Plan Report where Pattern/Directory Number begins with

Pattern/Directory Number ^	Partition	Type	Route Detail
6021	UnityPorts	Voice Mail Port	CiscoUM1-VI22
6022	UnityPorts	Voice Mail Port	CiscoUM1-VI23
6023	UnityPorts	Voice Mail Port	CiscoUM1-VI24
6782391004	Internal	Directory Number	
6782391007	Local Site 1	Directory Number	
6782391008	Internal	Directory Number	
6782391009	Internal	Directory Number	
6782391011	Internal	Directory Number	
6782392001		Directory Number	
6782392001	Local Site 1	Directory Number	
90111	International Site 2	Route Pattern	Site_2 Site_2 Dopey (All ports)

Figure 46 - Route Plan Report - Continued
























Route Plan Report				Related Links: <a href="#">View</a>
	<a href="#">9.011!</a>	<a href="#">International Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.011!#</a>	<a href="#">International Site 2</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Site_1</li> <li> Grumpy (All ports)</li> <li> Site_2</li> <li> Dopey (All ports)</li> </ul>
	<a href="#">9.011!#</a>	<a href="#">International Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.101XXXX1[2-9]XX[2-9]XXXXX</a>	<a href="#">Local Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Site_1</li> <li> Grumpy (All ports)</li> <li> Site_2</li> <li> Dopey (All ports)</li> </ul>

Figure 47 - Route Plan Report – Continued
























Route Plan Report				Related Links: <a href="#">View</a>
	<a href="#">9.1[2-9]XX[2-9]XXXXX</a>	<a href="#">Long Distance Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.1[2-9]XX[2-9]XXXXX</a>	<a href="#">Long Distance Site 2</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Site_1</li> <li> Grumpy (All ports)</li> <li> Site_2</li> <li> Dopey (All ports)</li> </ul>
	<a href="#">9.404[2-9]XXXXX</a>	<a href="#">Local Site 2</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.404[2-9]XXXXX</a>	<a href="#">Local Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>

Figure 48 - Route Plan Report - Continued





























Route Plan Report				Related Links: <a href="#">View</a>
	<a href="#">9.678[2-9]XXXXXX</a>	<a href="#">Local Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Site_1</li> <li> Grumpy (All ports)</li> <li> Site_2</li> <li> Dopey (All ports)</li> </ul>
	<a href="#">9.678[2-9]XXXXXX</a>	<a href="#">Local Site 2</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.703[2-9]XXXXXX</a>	<a href="#">Local Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Site_1</li> <li> Grumpy (All ports)</li> <li> Site_2</li> <li> Dopey (All ports)</li> </ul>
	<a href="#">9.703[2-9]XXXXXX</a>	<a href="#">Local Site 2</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.770[2-9]XXXXXX</a>	<a href="#">Local Site 1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Site 1</li> </ul>

Figure 49 - Route Plan Report – Continued

Cisco Unified CM Administration For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration admin

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### Route Plan Report

Related Links: [View](#)





























	<a href="#">9.911</a>	<a href="#">911Site1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Grumpy (All ports)</li> <li> Site_1</li> <li> Site_1</li> <li> Grumpy (All ports)</li> <li> Site_2</li> <li> Dopey (All ports)</li> </ul>
	<a href="#">9.[2-8]11</a>	<a href="#">N11_Site_2</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.[2-8]11</a>	<a href="#">N11_Site_1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Site_1</li> <li> Grumpy (All ports)</li> <li> Site_2</li> <li> Dopey (All ports)</li> </ul>
	<a href="#">9.[2-9]XXXXXX</a>	<a href="#">Local_Site_2</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_2</li> <li> Site_2</li> <li> Dopey (All ports)</li> <li> Site_1</li> <li> Grumpy (All ports)</li> </ul>
	<a href="#">9.[2-9]XXXXXX</a>	<a href="#">Local_Site_1</a>	Route Pattern	<ul style="list-style-type: none"> <li> Site_1</li> <li> Site_1</li> </ul>

Figure 50 - Route Plan Report - Continued

Cisco Unified CM Administration For Cisco Unified Communications Solutions

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### Find and List Voice Mail Ports














<input type="checkbox"/>	<a href="#">CiscoUM1-VI17</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6016	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI18</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6017	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI19</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6018	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI2</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6001	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI20</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6019	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI21</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6020	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI22</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6021	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI23</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6022	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI24</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6023	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI3</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6002	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI4</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6003	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI5</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6004	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	
<input type="checkbox"/>	<a href="#">CiscoUM1-VI6</a>	Unity Connection	<a href="#">Unity Connection</a>	Non Secure Voice Mail Port	<a href="#">UnityPorts</a>	6005	<a href="#">UnityPorts</a>	Registered with 192.168.100.20	192.168.100.30	

Figure 51 - Cisco Unity Voice Mail Ports Setup

Cisco Unified CM Administration  
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### Find and List Message Waiting Numbers

+ Add New   + Select All   + Clear All   + Delete Selected

Status  
2 records found

Message Waiting Numbers (1 - 2 of 2) Rows per Page 50

Find Message Waiting Numbers where Directory Number begins with and where Message Waiting Indicator is Both Find Clear Filter + -

<input type="checkbox"/>	Directory Number ^	Description	Partition	Calling Search Space	Copy
<input type="checkbox"/>	3001	On	Internal	COS1-Site1	
<input type="checkbox"/>	3002	Off	Internal	COS1-Site1	

+ Add New   + Select All   + Clear All   + Delete Selected

Figure 52 - Message Waiting Numbers

Cisco Unified CM Administration  
For Cisco Unified Communications Solutions

System - Call Routing - Media Resources - Voice Mail - Device - Application - User Management - Bulk Adminis

### Find and List Voice Mail Pilots

+ Add New   + Select All   + Clear All   + Delete Selected

Status  
4 records found

Voice Mail Pilot (1 - 4 of 4)

Find Voice Mail Pilot where Voice Mail Pilot Number begins with Find Clear Filter + -

<input type="checkbox"/>	Pilot Number ^	Description	
<input type="checkbox"/>		Default	
<input type="checkbox"/>		No Voice Mail	
<input checked="" type="checkbox"/>	3000	Unity Pilot	UnityPorts
<input type="checkbox"/>	4000	Unity Express Pilot	UnityPorts

+ Add New   + Select All   + Clear All   + Delete Selected

Figure 53 - Voice Mail Pilot

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Find and List Voice Mail Profiles**

+ Add New     Select All     Clear All     Delete Selected

**Status**  
3 records found

**Voice Mail Profile (1 - 3 of 3)** Rows per Page 50

Find Voice Mail Profile where Voice Mail Profile Name **begins with**

<input type="checkbox"/>	Name ^	Description	Pilot	Calling Search Space	Copy
<input type="checkbox"/>	NoVoiceMail	No Voice Mail			
<input checked="" type="checkbox"/>	Unity_Connection	Default voice messaging profile	3000	UnityPorts	
<input type="checkbox"/>	Unity_Express	Cisco Unity Express	4000	UnityPorts	

**Figure 54 - Voice Mail Profile**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Find and List CTI Route Points**

+ Add New     Select All     Clear All     Delete Selected       

**Status**  
4 records found

**CTI Route Point (1 - 4 of 4)** Rows per Page 50

Find CTI Route Point where **Device Name** **begins with**

<input type="checkbox"/>	Device Name ^	Description	Device Pool	Calling Search Space	Partition	Extension	Status	IP Address	Copy
<input type="checkbox"/>	CUJE_4000	Unity Express Pilot Number	Unity_Express		Internal	4000	Unknown	Unknown	
<input type="checkbox"/>	UnityX_AA_Pilot	Unity Express AA Pilot	Unity_Express		Internal	2010	Unknown	Unknown	
<input type="checkbox"/>	Unity_AA_Pilot	Unity Connection AA Pilot	Unity_Connection		Internal	1010	Unknown	Unknown	
<input type="checkbox"/>	test		Unity_Express			2022	Unknown	Unknown	

**Figure 55 - CTI Route Points**

The CTI Route has three route points listed, they are Unity Express (Voice Mail), Unity Express Auto-Attendant, and Unity Connection Auto-Attendant.

**Cisco Unified CM Administration**  
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**Find and List Phones** Related Links: **Actively Logged In Device Report** **Go**

**Status**  
16 records found

**Phone (1 - 16 of 16)** Rows per Page 50

Find Phone where **Device Name** begins with

Select item or enter search text

<input type="checkbox"/>	Device Name(Line) ^	Description	Device Pool	Device Protocol	Status	IP Address	Copy	Super Copy
<input type="checkbox"/>	<a href="#">AN1DA2EA6613000</a>	AN1DA2EA6613000	<a href="#">Site1</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">AN1DA2EA6613001</a>	AN1DA2EA6613001	<a href="#">Site1</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5000</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5001</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5002</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5003</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5004</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5005</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5006</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">CUE_5007</a>	Unity Express Port	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">RossParkerPC</a>	Ross Test Phone	<a href="#">Site1</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">SEP001BD4331E25</a>	Test Phone Site 2 Cisco UCM	<a href="#">Site_2</a>	SCCP	Unknown	Unknown	<input type="checkbox"/>	<input type="checkbox"/>

Figure 56 - Detail Telephone Status Page

**Cisco Unified CM Administration**  
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**Find and List Trunks**

**Status**  
3 records found

**Trunks (1 - 3 of 3)** Rows per Page 50

Find Trunks where **Device Name** begins with

Select item or enter search text

<input type="checkbox"/>	Name ^	Description	Calling Search Space	Device Pool	Route Pattern	Partition	Route Group	Priority	Trunk Type	SIP Trunk Security Profile
<input type="checkbox"/>	<a href="#">Dopey</a>	Site 2 CUBE	<a href="#">Gateway_Site_2</a>	<a href="#">CUBE_Site_2</a>			<a href="#">Site_2</a>	1	SIP Trunk	<a href="#">Non Secure SIP Trunk Profile</a>
<input type="checkbox"/>	<a href="#">Grumpy</a>	Site 1 SIP	<a href="#">Gateway_Site_1</a>	<a href="#">CUBE_Site_1</a>			<a href="#">Site_1</a>	1	SIP Trunk	<a href="#">Non Secure SIP Trunk Profile</a>
<input type="checkbox"/>	<a href="#">Grumpy_Private</a>	Site 1 calls marked as private	<a href="#">Gateway_Site_1</a>	<a href="#">CUBE_Site_1</a>			<a href="#">Site_1_Private</a>	1	SIP Trunk	<a href="#">Non Secure SIP Trunk Profile</a>

Figure 57 - SIP Trunks

**Cisco Unified CM Administration**  
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### Find and List IP Phone Services

+ Add New     Select All     Clear All     Delete Selected

**Status**  
7 records found

**IP Phone Service (1 - 7 of 7)** Rows per Page 50

Find IP Phone Service where: **IP Phone Service** begins with  Find Clear Filter

<input type="checkbox"/>	IP Phone Service ^	Description	Enterprise Subscription
<input type="checkbox"/>	<a href="#">Corporate Directory</a>	Corporate Directory	true
<input type="checkbox"/>	<a href="#">Interroom Calls</a>	Interroom Calls	false
<input type="checkbox"/>	<a href="#">Missed Calls</a>	Missed Calls	true
<input type="checkbox"/>	<a href="#">Personal Directory</a>	Personal Directory	true
<input type="checkbox"/>	<a href="#">Placed Calls</a>	Placed Calls	true
<input type="checkbox"/>	<a href="#">Received Calls</a>	Received Calls	true
<input type="checkbox"/>	<a href="#">Voicemail</a>	Voicemail	true

+ Add New     Select All     Clear All     Delete Selected

**Figure 58 - IP Phone Services**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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### Find and List SIP Profiles

+ Add New     Select All     Clear All     Delete Selected

**Status**  
2 records found

**SIP Profile (1 - 2 of 2)** Rows per Page 50

Find SIP Profile where: **Name** begins with  Find Clear Filter

<input type="checkbox"/>	Name ^	Description	Copy
<input type="checkbox"/>	<a href="#">COX Business SIP Profile</a>	COX Business SIP Profile	
<input type="checkbox"/>	<a href="#">Standard SIP Profile</a>	Default SIP Profile	

+ Add New     Select All     Clear All     Delete Selected

**Figure 59 - SIP Profiles**  
COX Business SIP Profile

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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### Find and List Common Device Configurations

+ Add New     Select All     Clear All     Delete Selected

**Status**  
2 records found

**Common Device Configuration (1 - 2 of 2)** Rows per Page 50

Find Common Device Configuration where Name: begins with  Find Clear Filter

<input type="checkbox"/>	Name ^	Copy
<input type="checkbox"/>	<a href="#">Site 1</a>	
<input type="checkbox"/>	<a href="#">Site 2</a>	

+ Add New     Select All     Clear All     Delete Selected

**Figure 60 - Common Device Configuration**

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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### Find and List Attendant Console Users

Status

**1 records found**

---

**Attendant Console Users (1 - 1 of 1)** Rows per Page **50**

Find Attendant Console Users where User ID **begins with**

<input type="checkbox"/>	User ID *
<input type="checkbox"/>	6782391010

Figure 61 - Attendant Console User

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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### Phone Configuration

Status

**Status: Ready**

---

#### Association Information

- 1  [Line \[1\] - 2392 in Internal](#)
- 2  [Line \[2\] - Add a new DN](#)
- 3  [Add a new SD](#)
- 4  [Add a new SD](#)
- 5  [Add a new SD](#)
- 6  [Add a new SD](#)
- 7  [Add a new SD](#)
- 8  [Add a new SD](#)
- ..... Unassigned Associated Items .....
- 9  [Add a new SD](#)
- 10  [Add a new SURL](#)
- 11  [Add a new BLF SD](#)
- 12  [Add a new BLF Directed Call Park](#)
- 13 CallBack
- 14 Call Park
- 15 Call Pickup
- 16 Conference List

#### Phone Type

**Product Type: Cisco 7970**  
**Device Protocol: SCCP**

---

#### Device Information

Registration	Unknown
IPv4 Address	Unknown
<input checked="" type="checkbox"/> Device is Active	
<input checked="" type="checkbox"/> Device is trusted	
MAC Address*	<input type="text" value="001BD4331E25"/>
Description	<input type="text" value="Test Phone Site 2 Cisco UCM"/>
Device Pool*	<input type="text" value="Site 2"/> <a href="#">View Details</a>
Common Device Configuration	<input type="text" value="Site 1"/> <a href="#">View Details</a>
Phone Button Template*	<input type="text" value="Standard 7970 SCCP"/>
Softkey Template	<input type="text" value="&lt; None &gt;"/>
Common Phone Profile*	<input type="text" value="Standard Common Phone Profile"/>
Calling Search Space	<input type="text" value="&lt; None &gt;"/>
AAR Calling Search Space	<input type="text" value="&lt; None &gt;"/>
Media Resource Group List	<input type="text" value="&lt; None &gt;"/>
User Hold MOH Audio Source	<input type="text" value="&lt; None &gt;"/>
Network Hold MOH Audio Source	<input type="text" value="&lt; None &gt;"/>
Location*	<input type="text" value="Site 1"/>

Figure 62 - Detail Phone Configuration



**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Phone Configuration** Related Links: [Back To Fi](#)

Save  Delete  Copy  Reset  Apply Config  Add New

17	Conference	AAR Group	< None >
18	Do Not Disturb	User Locale	< None >
19	End Call	Network Locale	< None >
20	Forward All	Built In Bridge*	Default
21	Group Call Pickup	Privacy*	Default
22	Hold	Device Mobility Mode*	Default <a href="#">View Current Device Mobility Settings</a>
23	Hunt Group Logout	Owner User ID	< None >
24	<a href="#">Intercom [1] - Add a new Intercom</a>	Phone Suite*	Default
25	Malicious Call Identification	Services Provisioning*	Default
26	Meet Me Conference	Phone Load Name	
27	Mobility	Single Button Barge	Default
28	New Call	Join Across Lines	Default
29	Other Pickup	Use Trusted Relay Point*	Default
30	Quality Reporting Tool	BLF Audible Alert Setting (Phone Idle)*	Default
31	Redial	BLF Audible Alert Setting (Phone Busy)*	Default
32	Remove Last Participant	Always Use Prime Line*	Default
33	Transfer	Always Use Prime Line for Voice Message*	Default
34	Video Mode	Calling Party Transformation CSS	< None >
35	Privacy	Geolocation	< None >
36	None		

Use Device Pool Calling Party Transformation CSS  
 Retry Video Call as Audio  
 Ignore Presentation Indicators (internal calls only)  
 Allow Control of Device from CTI

**Figure 63 - Detail Phone Configuration - Continued**

Cisco Unified CM Administration  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Phone Configuration**

Save ✖ Delete 📄 Copy 🔄 Reset 🔧 Apply Config ➕ Add New

Logged Into Hunt Group  
 Remote Device  
 Protected Device \*\*\*\*

**Protocol Specific Information**

Packet Capture Mode*	None
Packet Capture Duration	0
Presence Group*	Standard Presence group
Device Security Profile*	Cisco 7970 - Standard SCCP Non-Secure Profile
SUBSCRIBE Calling Search Space	COS1-Site1

Unattended Port  
 Require DTMF Reception  
 RFC2833 Disabled

**Certification Authority Proxy Function (CAPF) Information**

Certificate Operation*	No Pending Operation
Authentication Mode*	By Null String
Authentication String	<input type="text"/>
<span>Generate String</span>	
Key Size (Bits)*	1024
Operation Completes By	2010 11 26 12 (YYYY:MM:DD:HH)

Certificate Operation Status: None  
Note: Security Profile Contains Addition CAPF Settings.

Figure 64 - Detail Phone Configuration - Continued

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Phone Configuration**

Save Delete Copy Reset Apply Config Add New

**Expansion Module Information**

Module 1	< None >
Module 1 Load Name	
Module 2	< None >
Module 2 Load Name	

**External Data Locations Information (Leave blank to use default)**

Information	
Directory	
Messages	
Services	
Authentication Server	
Proxy Server	
Idle	
Idle Timer (seconds)	

**Extension Information**

Enable Extension Mobility

Log Out Profile -- Use Current Device Settings --

Log in Time < None >

Log out Time < None >

**MLPP Information**

MLPP Domain	< None >
-------------	----------

Figure 65 - Detail Phone Configuration - Continued

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Phone Configuration Related Links: [Back To Find/Lists](#)

Video Capabilities*	Disabled
Auto Line Select*	Disabled
Web Access*	Enabled
Days Display Not Active	Sunday
Display On Time	07:30
Display On Duration	10:30
Display Idle Timeout	01:00
Span to PC Port*	Disabled
Logging Display*	PC Controlled
Load Server	
Recording Tone*	Disabled
Recording Tone Local Volume*	100
Recording Tone Remote Volume*	50
Recording Tone Duration	
Display On When Incoming Call*	Disabled
RTCP*	Disabled
"more" Soft Key Timer	5
Auto Call Select*	Enabled
Log Server	
Advertise G.722 Codec*	Use System Default
Wideband Headset UI Control*	Enabled
Wideband Handset UI Control*	Enabled

Figure 66 - Detail Phone Configuration - Continued


**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Phone Configuration Related Links: [Back To Find/Lists](#)

Wideband Handset UI Control*	Enabled
Wideband Headset*	Enabled
Wideband Handset*	Use Phone Default
Peer Firmware Sharing*	Disabled
Cisco Discovery Protocol (CDP): Switch Port*	Enabled
Cisco Discovery Protocol (CDP): PC Port*	Enabled
Link Layer Discovery Protocol - Media Endpoint Discover (LLDP-MED): Switch Port*	Enabled
Link Layer Discovery Protocol (LLDP): PC Port*	Enabled
LLDP Asset ID	
LLDP Power Priority*	Unknown
IPv6 Load Server	
IPv6 Log Server	
802.1x Authentication*	User Controlled
Detect Unified CM Connection Failure*	Normal
Minimum Ring Volume*	0-Silent
Headset Sidetone Level*	Use Phone Default
Enbloc Dialing*	Enabled







Figure 67 - Detail Phone Configuration - Continued


**Cisco Unified CM Administration**  
 For Cisco Unified Communications Solutions


---

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help

**Directory Number Configuration**



 Save
  Delete
  Copy
  Reset
  Apply Config
  Add New

---

**Status**  
 Status: Ready

---

**Directory Number Information**  
 Directory Number\*   
 Route Partition  ▾  
 Description   
 Alerting Name   
 ASCII Alerting Name   
 Allow Control of Device from CTI  
 Line Group  ▾ [Edit Line Group](#)  
 Associated Devices   

[Edit Device](#)  
[Edit Line Appearance](#)

---

**Directory Number Settings**  
 Voice Mail Profile  ▾ (Choose <None> to use system default)  
 Calling Search Space  ▾  
 Presence Group\*  ▾  
 User Hold MOH Audio Source  ▾

**Figure 68 - Directory Number Services Configuration - Continued**

Cisco Unified CM Administration For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration admin About Logout

System - Call Routing - Media Resources - Voice Mail - Device - Application - User Management - Bulk Administration - Help -

**Directory Number Configuration** Related Links: [Back To Find/List](#)

Save Delete Copy Reset Apply Config Add New

Forward No Coverage Internal	<input checked="" type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage External	<input checked="" type="checkbox"/> or	<input type="text"/>	< None >
Forward on CTI Failure	<input checked="" type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered Internal	<input checked="" type="checkbox"/> or	<input type="text"/>	COS4-Site1
Forward Unregistered External	<input checked="" type="checkbox"/> or	<input type="text"/>	COS4-Site1

No Answer Ring Duration (seconds)

Call Pickup Group

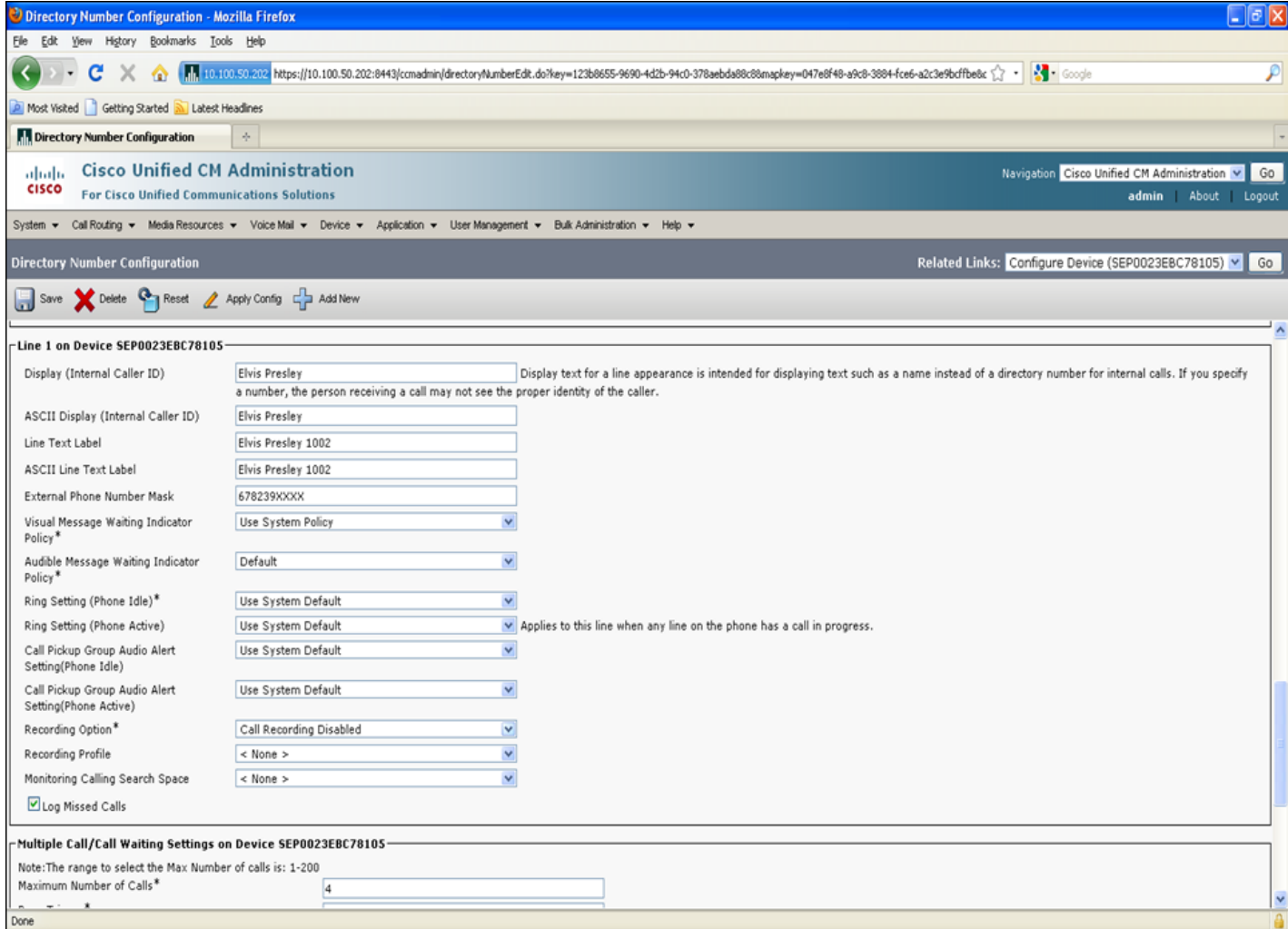
---

**Park Monitoring**

	Voice Mail	Destination	Calling Search Space
Park Monitoring Forward No Retrieve Destination External	<input type="checkbox"/> or	<input type="text"/>	< None > A blank value means to call the parker's line.
Park Monitoring Forward No Retrieve Destination Internal	<input type="checkbox"/> or	<input type="text"/>	< None > A blank value means to call the parker's line.

Park Monitoring Reversion Timer  A blank value will use value set in Park Monitoring Reversion Timer service parameter

Figure 69 - Directory Number Services Configuration - Continued



The screenshot shows the Cisco Unified CM Administration web interface in Mozilla Firefox. The page title is "Directory Number Configuration". The breadcrumb navigation shows "System > Call Routing > Media Resources > Voice Mail > Device > Application > User Management > Bulk Administration > Help". The current page is "Directory Number Configuration" for device "SEP0023EBC78105".

At the top, there are navigation links for "Cisco Unified CM Administration" and "admin | About | Logout". Below that, there are tabs for "System", "Call Routing", "Media Resources", "Voice Mail", "Device", "Application", "User Management", "Bulk Administration", and "Help".

The main content area is titled "Directory Number Configuration" and includes a "Related Links" section with "Configure Device (SEP0023EBC78105)". Below this, there are action buttons: Save, Delete, Reset, Apply Config, and Add New.

The configuration is for "Line 1 on Device SEP0023EBC78105". The fields are as follows:

- Display (Internal Caller ID): Elvis Presley
- ASCII Display (Internal Caller ID): Elvis Presley
- Line Text Label: Elvis Presley 1002
- ASCII Line Text Label: Elvis Presley 1002
- External Phone Number Mask: 678239XXXX
- Visual Message Waiting Indicator Policy\*: Use System Policy
- Audible Message Waiting Indicator Policy\*: Default
- Ring Setting (Phone Idle)\*: Use System Default
- Ring Setting (Phone Active): Use System Default (Applies to this line when any line on the phone has a call in progress.)
- Call Pickup Group Audio Alert Setting(Phone Idle): Use System Default
- Call Pickup Group Audio Alert Setting(Phone Active): Use System Default
- Recording Option\*: Call Recording Disabled
- Recording Profile: < None >
- Monitoring Calling Search Space: < None >
- Log Missed Calls






Below the line configuration, there is a section for "Multiple Call/Call Waiting Settings on Device SEP0023EBC78105". A note states: "Note: The range to select the Max Number of calls is: 1-200". The "Maximum Number of Calls\*" field is set to 4.

Figure 70 - Directory Number Services Configuration - Continued

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Cal Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### Directory Number Configuration

 Save
  Delete
  Reset
  Apply Config
  Add New

Setting(Phone Active)

Recording Option\*

Recording Profile

Monitoring Calling Search Space

Log Missed Calls

---

**Multiple Call/Call Waiting Settings on Device SEP0023EBC78105**

Note: The range to select the Max Number of calls is: 1-200

Maximum Number of Calls\*

Busy Trigger\*  (Less than or equal to Max. Calls)

---

**Forwarded Call Information Display on Device SEP0023EBC78105**

Caller Name  
 Caller Number  
 Redirected Number  
 Dialed Number

---

**Users Associated with Line**

---



 \* - indicates required item.  
 \*\* - Changes to Line or Directory Number settings require restart.

Figure 71 - Directory Number Services Configuration - Continued



## 7.5 SIP Message Trace Examples

### 7.5.1 Incoming SIP INVITE – PSTN (E-SBC) to Cisco CUBE

```
INVITE sip:6782391001@172.16.1.5:5060 SIP/2.0
Via: SIP/2.0/UDP 172.16.1.1:5060;branch=z9hG4bKm3d0m89bite5c408406o4rdqk7
Record-Route: <sip:6782391001@172.16.1.1;lr>
From: "PSTNLINETEST1" <sip:4046691360@172.16.1.1:5060;user=phone>;tag=SDjcurc01-1438275345-1273243620664-
To: "6782391001 6782391001" <sip:6782391001@172.16.1.1:5060>
Call-ID: SDjcurc01-5ad26d17fa988ebc728d8b51189bf9ea-vrvvfv3
CSeq: 966650525 INVITE
Contact: <sip:172.16.1.1:5060;transport=udp>
Supported: 100rel
Max-forwards: 69
Allow: ACK, BYE, CANCEL, INFO, INVITE, OPTIONS, PRACK, REFER, NOTIFY, UPDATE
Content-Type: application/sdpAccept: multipart/mixed, application/media_control+xml, application/sdp
Content-Length: 247
v=0
o=BroadWorks 89489 1 IN IP4 172.16.1.1
s=-c=IN IP4 172.16.1.1
t=0 0
m=audio 17468 RTP/AVP 0 101
a=rtpmap:0 PCMU/8000/1
a=sqn: 0
a=cdsc: 1 image udptl t38
a=mptime:20
a=ptime:20
a=rtpmap:101 telephone-event/8000/1
a=fmtp:101 0-15
```

### 7.5.2 Outgoing SIP INVITE – Cisco CUBE to PSTN (E-SBC)

```
INVITE sip:4046691360@172.16.1.1:5060;user=phone SIP/2.0
Via: SIP/2.0/UDP 172.16.1.5:5060;branch=z9hG4bK2531301
From: "James Dean" <sip:6782391001@172.16.1.5;user=phone>;tag=56E64F88-35E
To: <sip:4046691360@172.16.1.1;user=phone>
Date: Fri, 07 May 2010 14:50:06 GMT
Call-ID: A8DD7589-591E11DF-BFAFAA4A-35F18573@172.16.1.5
Supported: 100rel,timer,resource-priority,replaces,sdp-anat
Min-SE: 1800
Cisco-Guid: 2832845825-1495142879-3215567434-905020787
User-Agent: Cisco-SIPGateway/IOS-12.x
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY,
INFO, REGISTER
CSeq: 101 INVITE
Timestamp: 1273243806
Contact: <sip:6782391001@172.16.1.5:5060;user=phone>
Expires: 180
Allow-Events: telephone-event
```

Max-Forwards: 69  
Session-Expires: 2200  
P-Asserted-Identity: "James Dean" <sip:6782391001@172.16.1.5>  
Content-Type: application/sdp  
Content-Disposition: session;handling=required  
Content-Length: 241  
v=0  
o=CiscoSystemsSIP-GW-UserAgent 3969 9006 IN IP4 172.16.1.5  
s=SIP Callc=IN IP4 172.16.1.5  
t=0 0  
m=audio 18982 RTP/AVP 0 101  
c=IN IP4 172.16.1.5  
a=rtpmap:0 PCMU/8000  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15  
a=ptime:20

### 7.5.3 Transfer SIP UPDATE – Cisco CUBE to PSTN (E-SBC)

UPDATE sip:172.16.1.1:5060;transport=udp SIP/2.0  
Via: SIP/2.0/UDP 172.16.1.5:5060;branch=z9hG4bK25B1BF9  
From: "6782391001 6782391001" <sip:6782391001@172.16.1.1:5060>;tag=56E796F4-22DB  
To: "PSTNLINETEST1" <sip:4046691360@172.16.1.1:5060;user=phone>;tag=SDjcurc01-1438275345-1273243620664-  
Date: Fri, 07 May 2010 14:51:33 GMT  
Call-ID: SDjcurc01-5ad26d17fa988ebc728d8b51189bf9ea-vrvvfv3  
User-Agent: Cisco-SIPGateway/IOS-12.x  
Max-Forwards: 70  
Route: <sip:6782391001@172.16.1.1;lr>  
Supported: 100rel,timer,resource-priority,replaces,sdp-anat  
Timestamp: 1273243911  
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER  
CSeq: 101 UPDATE  
Contact: <sip:6782391001@172.16.1.5:5060>  
Remote-Party-ID: <sip:4046691323@172.16.1.5>;party=called;screen=no;privacy=off  
Content-Length: 0

UPDATE sip:172.16.1.1:5060;transport=udp SIP/2.0  
Via: SIP/2.0/UDP 172.16.1.5:5060;branch=z9hG4bK25CC1D  
From: "James Dean" <sip:6782391001@172.16.1.5>;tag=56E7CDA0-48E  
To: <sip:4046691323@172.16.1.1>;tag=SD3po2899-1307487053-1273243634795  
Date: Fri, 07 May 2010 14:51:43 GMT  
Call-ID: E32BF056-591E11DF-BFC4AA4A-35F18573@172.16.1.5  
User-Agent: Cisco-SIPGateway/IOS-12.x  
Max-Forwards: 70  
Route: <sip:EWGW\_0@172.16.1.1;lr>  
Supported: 100rel,timer,resource-priority,replaces,sdp-anat  
Timestamp: 1273243911  
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER  
CSeq: 103 UPDATE



Contact: <sip:6782391001@172.16.1.5:5060>  
Remote-Party-ID: "INFOSYSTEST" <sip:4046691360@172.16.1.5>;party=calling;screen=yes;privacy=off  
Content-Length: 0

#### 7.5.4 Call Forward SIP INVITE – Cisco CUBE to PSTN (E-SBC)

INVITE sip:4046691323@172.16.1.1:5060;user=phone SIP/2.0  
Via: SIP/2.0/UDP 172.16.1.5:5060;branch=z9hG4bK26125E2  
From: "PSTNLINETEST1" <sip:4046691360@172.16.1.5;user=phone>;tag=56E8B114-27C  
To: <sip:4046691323@172.16.1.1;user=phone>  
Date: Fri, 07 May 2010 14:52:42 GMT  
Call-ID: 5E16542-591F11DF-BFD6AA4A-35F18573@172.16.1.5  
Supported: 100rel,timer,resource-priority,replaces,sdp-anat  
Min-SE: 1800  
Cisco-Guid: 98417594-1495208415-3218123338-905020787  
User-Agent: Cisco-SIPGateway/IOS-12.x  
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY,  
INFO, REGISTER  
CSeq: 101 INVITE  
Timestamp: 1273243962  
Contact: <sip:4046691360@172.16.1.5:5060;user=phone>  
Expires: 180  
Allow-Events: telephone-event  
Max-Forwards: 66  
Session-Expires: 2200  
P-Asserted-Identity: "PSTNLINETEST1" <sip:4046691360@172.16.1.5>  
Diversion: <sip:6782391001@172.16.1.5>;privacy=off;reason=unconditional;screen=yes  
Content-Type: application/sdp  
Content-Disposition: session;handling=required  
Content-Length: 240  
v=0  
o=CiscoSystems  
SIP-GW-UserAgent 5232 531 IN IP4 172.16.1.5  
s=SIP Callc=IN IP4 172.16.1.5  
t=0 0  
m=audio 16636 RTP/AVP 0 101  
c=IN IP4 172.16.1.5  
a=rtpmap:0 PCMU/8000  
a=rtpmap:101 telephone-event/8000  
a=fmtp:101 0-15  
a=ptime:20

#### 7.6 Full Detail IOS Configurations

```
! Site 1 – Grumpy -- CUBE IOS Configurations
!  
Current configuration : 6683 bytes
!  
! Last configuration change at 11:30:27 EST Mon Jun 7 2010 by admin
! NVRAM config last updated at 11:30:28 EST Mon Jun 7 2010 by admin
!
```

```
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
service sequence-numbers
!
hostname Grumpy
!
boot-start-marker
boot system flash c2800nm-ipvoice_ivs-mz.124-24.T2.bin
boot-end-marker
!
! card type command needed for slot/wwic-slot 0/0
logging message-counter syslog
logging buffered 1000000
no logging console
!
no aaa new-model
clock timezone EST -5
!
ip source-route
!
!
ip cef
!
!
no ip domain lookup
no ipv6 cef
multilink bundle-name authenticated
!
!
voice service voip
allow-connections sip to sip
fax protocol cisco
modem passthrough nse codec g711ulaw
sip
bind control source-interface Loopback0
bind media source-interface Loopback0
min-se 2000
header-passing
asserted-id pai
privacy pstn
midcall-signaling passthru
sip-profiles 1
!
!
voice class sip-profiles 1
request INVITE sip-header SIP-Req-URI modify " SIP/2.0" ";user=phone SIP/2.0"
request REINVITE sip-header SIP-Req-URI modify " SIP/2.0" ";user=phone SIP/2.0"
request INVITE sip-header Contact modify ">" ";user=phone>"
request REINVITE sip-header Contact modify ">" ";user=phone>"
request INVITE sip-header To modify ">" ";user=phone>"
```

```
request REINVITE sip-header To modify ">" ";user=phone>"
request INVITE sip-header From modify ">" ";user=phone>"
request REINVITE sip-header From modify ">" ";user=phone>"
!
!
voice translation-rule 39
rule 2 /^1\(...)\$/ /6782391\1/
!
!
voice translation-profile calling-mask
translate redirect-target 39
translate redirect-called 39
!
!
voice-card 0
dspfarm
dsp services dspfarm
!
!
username admin privilege 15 secret 5 $1$xscF$snZsx7K1jqcGNK6nW5PZn/
archive
log config
hidekeys
!
!
class-map match-any AutoQoS-VoIP-RTP-Trust
match ip dscp ef
class-map match-any AutoQoS-VoIP-Control-Trust
match ip dscp cs3
match ip dscp af31
!
!
policy-map AutoQoS-Policy-Trust
class AutoQoS-VoIP-RTP-Trust
priority percent 70
class AutoQoS-VoIP-Control-Trust
bandwidth percent 5
class class-default
fair-queue
!
interface Loopback0
description SIP Interface
ip address 172.16.1.5 255.255.255.252
!
interface FastEthernet0/0
description Internal Interface
no ip address
duplex full
speed 100
auto qos voip trust
service-policy output AutoQoS-Policy-Trust
!
interface FastEthernet0/0.1
```

```
description Management VLAN 1
encapsulation dot1Q 1 native
ip address 192.168.1.1 255.255.255.0
!
interface FastEthernet0/0.2
description SIP Trunk Access
encapsulation dot1Q 10
ip address 172.16.10.2 255.255.255.252
!
interface FastEthernet0/1
description Edgemark
ip address 172.16.1.2 255.255.255.252
duplex auto
speed auto
auto qos voip trust
service-policy output AutoQoS-Policy-Trust
!
ip forward-protocol nd
ip route 0.0.0.0 0.0.0.0 172.16.10.1
ip route 192.168.0.0 255.255.0.0 172.16.10.1
!
!
ip http server
ip http access-class 23
ip http authentication local
ip http timeout-policy idle 60 life 86400 requests 10000
!
!
control-plane
!
rmon event 33333 log trap AutoQoS description "AutoQoS SNMP traps for Voice Drops" owner AutoQoS
rmon alarm 33333 cbQoSCommandDropBitRate.18.3164929 30 absolute rising-threshold 1 33333 falling-
threshold 0 owner AutoQoS
!
!
sccp local FastEthernet0/0.2
sccp ccm 192.168.200.20 identifier 2 version 7.0
sccp ccm 192.168.100.20 identifier 1 version 7.0
sccp
!
sccp ccm group 1
associate ccm 1 priority 1
associate profile 2 register TRAN-SITE-1
associate profile 1 register MTP-SITE-1
!
dspfarm profile 2 transcode
codec g711ulaw
codec g711alaw
codec g729ar8
codec g729abr8
maximum sessions 24
associate application SCCP
```

```
!  
dspfarm profile 1 mtp  
  codec g711ulaw  
  maximum sessions software 100  
  associate application SCCP  
!  
!  
dial-peer voice 1 voip  
  destination-pattern 6782391...  
  session protocol sipv2  
  session target ipv4:192.168.100.20  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 2 voip  
  preference 1  
  destination-pattern 6782391...  
  session protocol sipv2  
  session target ipv4:192.168.200.20  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 10 voip  
  translation-profile outgoing calling-mask  
  destination-pattern 1[2-9]..[2-9].....  
  session protocol sipv2  
  session target ipv4:172.16.1.1  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 11 voip  
  translation-profile outgoing calling-mask  
  preference 1  
  destination-pattern [2-9]..[2-9].....  
  session protocol sipv2  
  session target ipv4:172.16.1.1  
  dtmf-relay rtp-nte  
  codec g711ulaw  
  ip qos dscp cs5 media  
  ip qos dscp cs4 signaling  
  no vad  
!  
dial-peer voice 12 voip
```

```
translation-profile outgoing calling-mask
destination-pattern 011T
session protocol sipv2
session target ipv4:172.16.1.1
dtmf-relay rtp-nte
codec g711ulaw
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
!
```

```
dial-peer voice 13 voip
translation-profile outgoing calling-mask
destination-pattern [2-9]11
session protocol sipv2
session target ipv4:172.16.1.1
dtmf-relay rtp-nte
codec g711ulaw
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
!
```

```
dial-peer voice 3 voip
destination-pattern 6782392...
session protocol sipv2
session target ipv4:192.168.100.20
dtmf-relay rtp-nte
codec g711ulaw
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
!
```

```
dial-peer voice 4 voip
preference 1
destination-pattern 6782392...
session protocol sipv2
session target ipv4:192.168.200.20
dtmf-relay rtp-nte
codec g711ulaw
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
!
```

```
dial-peer voice 14 voip
translation-profile outgoing calling-mask
preference 1
destination-pattern [2-9].....
session protocol sipv2
session target ipv4:172.16.1.1
dtmf-relay rtp-nte
codec g711ulaw
ip qos dscp cs5 media
ip qos dscp cs4 signaling
```





```
no vad
!
dial-peer voice 15 voip
translation-profile outgoing calling-mask
preference 1
destination-pattern 101....1[2-9]..[2-9].....
session protocol sipv2
session target ipv4:172.16.1.1
dtmf-relay rtp-nte
codec g711ulaw
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
!
!
sip-ua
retry invite 3
timers trying 100
!
!
gatekeeper
shutdown
!
!
line con 0
login local
line aux 0
line vty 0 4
access-class 23 in
privilege level 15
login local
line vty 5 15
access-class 23 in
privilege level 15
login local
!
scheduler allocate 20000 1000
ntp peer 192.168.100.20
ntp server 192.168.100.20
end

! Cisco Unified Express Voice Mail System
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Sneezy
!
boot-start-marker
boot-end-marker
```



```
!  
! card type command needed for slot/vwic-slot 0/0  
logging buffered 51200 warnings  
!  
no aaa new-model  
clock timezone EST -5  
dot11 syslog  
!  
!  
ip cef  
!  
!  
no ip domain lookup  
multilink bundle-name authenticated  
!  
!  
voice-card 0  
no dspfarm  
!  
!  
crypto pki trustpoint TP-self-signed-1016059772  
enrollment selfsigned  
subject-name cn=IOS-Self-Signed-Certificate-1016059772  
revocation-check none  
rsa-keypair TP-self-signed-1016059772  
!  
!  
crypto pki certificate chain TP-self-signed-1016059772  
certificate self-signed 01  
3082023E 308201A7 A0030201 02020101 300D0609 2A864886 F70D0101 04050030  
31312F30 2D060355 04031326 494F532D 53656C66 2D536967 6E65642D 43657274  
69666963 6174652D 31303136 30353937 3732301E 170D3130 30313237 32303334  
30315A17 0D323030 31303130 30303030 305A3031 312F302D 06035504 03132649  
4F532D53 656C662D 5369676E 65642D43 65727469 66696361 74652D31 30313630  
35393737 3230819F 300D0609 2A864886 F70D0101 01050003 818D0030 81890281  
8100E4EE B43F3ED3 3F4945EF 8E8C2B3D 1B2587FB 4D19964F 7AA27DAA A8B53433  
42A036DE A1FEFDD9 9F07FA3A AC94E2AE 8A76F86B E8CF4698 0E310A3C 74BC2114  
FD7777DE 362E21BC 01F71893 E30D4508 0026EDB0 EFB6B51F 1A4B277F BF24C995  
606081A2 5F51F91B 35A9A0B6 E4E0E224 62241BE5 371795C2 2750643F B6A23DD6  
FD550203 010001A3 66306430 0F060355 1D130101 FF040530 030101FF 30110603  
551D1104 0A300882 06536E65 657A7930 1F060355 1D230418 30168014 BE359A93  
2BC11314 24B68728 D1D66A03 44FB3607 301D0603 551D0E04 160414BE 359A932B  
C1131424 B68728D1 D66A0344 FB360730 0D06092A 864886F7 0D010104 05000381  
81005AD2 35E7F709 BC1D6CC8 FDA98BBA D52B78D4 50AAC2A6 BC5CA16C 32DDC65E  
BE9C729C CC43BC39 2E926AF8 22A80A89 EDCDEA7C 7DFB42F7 461551AF 4B541731  
700D0F12 361D887C 7D1B04BA 9DB4D67B 154EFCCB 8EEB6234 834516CC E153989F  
44AF91FF 80DF56FE 3EDAF6A B5D427FA 0018A8B1 9F57C21E 243A76B6 0462EE55 E8F7  
quit  
!  
!  
username admin privilege 15 secret 5 $1$Qfk7$cwTNvyLG9jxGfXrAatbyc1  
archive
```



```
log config
hidekeys
!
!
class-map match-any AutoQoS-VoIP-RTP-Trust
match ip dscp ef
class-map match-any AutoQoS-VoIP-Control-Trust
match ip dscp cs3
match ip dscp af31
!
!
policy-map AutoQoS-Policy-Trust
class AutoQoS-VoIP-RTP-Trust
priority percent 70
class AutoQoS-VoIP-Control-Trust
bandwidth percent 5
class class-default
fair-queue
!
!
interface FastEthernet0/0
description Internal Network
no ip address
duplex auto
speed auto
auto qos voip trust
service-policy output AutoQoS-Policy-Trust
!
interface FastEthernet0/0.1
encapsulation dot1Q 1 native
ip address 192.168.1.5 255.255.255.0
ip nat inside
ip virtual-reassembly
!
interface FastEthernet0/0.2
encapsulation dot1Q 220
ip address 192.168.220.1 255.255.255.0
ip nat inside
ip virtual-reassembly
!
interface FastEthernet0/1
description connection from COX Network
ip address 10.100.50.200 255.255.255.0
ip nat outside
ip virtual-reassembly
duplex auto
speed auto
auto qos voip trust
service-policy output AutoQoS-Policy-Trust
!
interface FastEthernet0/1/0
!
```

```
interface FastEthernet0/1/1
!
interface FastEthernet0/1/2
!
interface FastEthernet0/1/3
!
interface Integrated-Service-Engine1/0
 ip unnumbered FastEthernet0/0.2
 service-module ip address 192.168.220.30 255.255.255.0
 service-module ip default-gateway 192.168.220.1
 no keepalive
!
interface Vlan1
 no ip address
!
ip forward-protocol nd
ip route 0.0.0.0 0.0.0.0 10.100.50.1
ip route 172.16.0.0 255.255.0.0 192.168.220.2
ip route 192.168.0.0 255.255.0.0 192.168.220.2
ip route 192.168.220.30 255.255.255.255 Integrated-Service-Engine1/0
!
!
ip http server
ip http access-class 23
ip http authentication local
ip http secure-server
ip http timeout-policy idle 60 life 86400 requests 10000
ip nat inside source static 192.168.1.2 10.100.50.201
ip nat inside source static 192.168.100.20 10.100.50.202
ip nat inside source static 192.168.200.20 10.100.50.203
ip nat inside source static 192.168.100.30 10.100.50.204
!
control-plane
!
rmon event 33333 log trap AutoQoS description "AutoQoS SNMP traps for Voice Drops" owner AutoQoS
rmon alarm 33333 cbQoS CMDropBitRate.18.3164929 30 absolute rising-threshold 1 33333 falling-
threshold 0 owner AutoQoS
rmon alarm 33334 cbQoS CMDropBitRate.34.5364641 30 absolute rising-threshold 1 33333 falling-
threshold 0 owner AutoQoS
!
!
line con 0
 login local
line aux 0
line 66
 no activation-character
 no exec
 transport preferred none
 transport input all
 transport output pad telnet rlogin lapb-ta mop udptn v120 ssh
line vty 0 4
 access-class 23 in
```



```
login local
length 0
transport input telnet ssh
line vty 5 15
access-class 23 in
privilege level 15
login local
transport input telnet ssh
!
scheduler allocate 20000 1000
ntp clock-period 17180827
ntp peer 192.168.100.20
!
end

/** Cisco Analog Voice Gateway VG202 configuration **/

!
version 12.4
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname VG202
!
boot-start-marker
boot-end-marker
!
logging message-counter syslog
enable secret 5 $1$T8KF$UdA4F3MFMFxAMzEMBLnZu1
!
no aaa new-model
ip source-route
!
ip cef
no ipv6 cef
!
stcapp ccm-group 1
stcapp
!
stcapp feature access-code
!
stcapp feature speed-dial
!
!
voice service voip
  modem passthrough nse codec g711ulaw
!
!
voice-card 0
!
```

```
username admin privilege 15 secret 5 $1$OTG6$gmEKkbulgXiSRXA9Tqskg.
archive
log config
  hidekeys
!
interface FastEthernet0/0
ip address dhcp
duplex auto
speed auto
!
interface FastEthernet0/1
no ip address
shutdown
duplex auto
speed auto
!
ip forward-protocol nd
!
no ip http server
!
control-plane
!
voice-port 0/0
timeouts initial 60
timeouts interdigit 60
timeouts ringing infinity
!
voice-port 0/1
timeouts initial 60
timeouts interdigit 60
timeouts ringing infinity
!
ccm-manager fax protocol cisco
ccm-manager config server 192.168.100.20
ccm-manager sccp local FastEthernet0/0
ccm-manager sccp
!
mgcp fax t38 ecm
mgcp behavior g729-variants static-pt
!
sccp local FastEthernet0/0
sccp ccm 192.168.200.20 identifier 1 version 7.0
sccp ccm 192.168.100.20 identifier 2 version 7.0
sccp
!
sccp ccm group 1
  associate ccm 1 priority 1
!
!
dial-peer voice 999000 pots
service stcapp
port 0/0
```



PROPRIETARY & CONFIDENTIAL

```
!  
dial-peer voice 999001 pots  
service stcapp  
port 0/1  
!  
!  
line con 0  
login local  
no modem enable  
line aux 0  
line vty 0 4  
privilege level 15  
login local  
length 0  
!  
end
```