
SIP Trunking Configuration Guide for Cisco Unified Communications Manager Version 8.6.2.20000-2 With CUBE 15.2.1T1 c3900e-universalk9-mz.SPA.152-1.T1.bin

Document Revision 2.1

© 2012, Cox Communications, Inc. All rights reserved.

This documentation is the confidential and proprietary intellectual property of Cox Communications, Inc. Any unauthorized use, reproduction, preparation of derivative works, performance, or display of this document, or software represented by this document is strictly prohibited.



Table of Contents

1	Audience	5
2	Introduction	5
2.1	tekVizion Labs	6
3	SIP Trunking Network Components	7
3.1	Hardware Components	8
3.2	Software Requirements	8
4	Features	9
4.1	Features Supported	9
4.2	Features Not Supported	9
5	Caveats and Limitations	10
6	Configuration	11
6.1	Configuration Checklist	11
6.2	IP Address Worksheet	12
6.3	CUCM with CUBE Detailed Configuration Steps	12
6.3.1	System IP Address	12
6.3.2	Cisco Unified Border Element (CUBE) Configuration	13
6.3.3	Cisco Unified Communications Manager (CUCM)	16
6.3.4	Enterprise Parameters	16
6.3.5	Service Parameters	22
6.3.6	Device Pools	40
6.3.7	SIP Trunks	41
6.3.8	SIP Profiles	47
6.3.9	SIP Trunk Security Profile	50
6.3.10	Route Pattern	51
6.3.11	Line Groups	54
6.3.12	Hunt Lists	57
6.3.13	Hunt Pilot Numbers	60
6.3.14	Client Matter Codes	65
6.3.15	Forced Authorization Codes	67
6.3.16	Call Park Numbers	69
6.3.17	Call Pickup Groups	71
6.3.18	Route Plan Report	73
6.3.19	Unity Voice Mail Ports	75
6.3.20	Message Waiting Indicator	77
6.3.21	Voice Mail Pilot	80
6.3.22	Voice Mail Profile	82
6.3.23	IP Phone Service	84
6.3.24	Linksys ATA	85



Table of Figures

Figure 1 - Cox Fiber Network.....	5
Figure 2 - SIP Trunk Lab Reference Network.....	7
Figure 3 Enterprise Parameters.....	17
Figure 4 Enterprise Parameters (Cont.).....	18
Figure 5 Enterprise Parameters (Cont.).....	19
Figure 6 Enterprise Parameters (Cont.).....	20
Figure 7 Enterprise Parameters (Cont.).....	21
Figure 8 Enterprise Parameters (Cont.).....	22
Figure 9 Service Parameters.....	22
Figure 10 Service Parameters (Cont.).....	23
Figure 11 Service Parameters (Cont.).....	24
Figure 12 Service Parameters (Cont.).....	25
Figure 13 Service Parameters (Cont.).....	26
Figure 14 Service Parameters (Cont.).....	27
Figure 15 Service Parameters (Cont.).....	28
Figure 16 Service Parameters (Cont.).....	29
Figure 17 Service Parameters (Cont.).....	30
Figure 18 Service Parameters (Cont.).....	31
Figure 19 Service Parameters (Cont.).....	32
Figure 20 Service Parameters (Cont.).....	33
Figure 21 Service Parameters (Cont.).....	34
Figure 22 Service Parameters (Cont.).....	35
Figure 23 Service Parameters (Cont.).....	36
Figure 24 Service Parameters (Cont.).....	37
Figure 25 Service Parameters (Cont.).....	38
Figure 26 Service Parameters (Cont.).....	39
Figure 27 Service Parameters (Cont.).....	40
Figure 28 Device Pools.....	40
Figure 29 SIP Trunks.....	41
Figure 30 SIP Trunk (Cont.).....	42
Figure 31 SIP Trunk (Cont.).....	43
Figure 32 SIP Trunk (Cont.).....	44
Figure 33 SIP Trunk (Cont.).....	45
Figure 34 SIP Trunk (Cont.).....	46
Figure 35 SIP Profile.....	47
Figure 36 SIP Profile (Cont.).....	48
Figure 37 SIP Profile (Cont.).....	49
Figure 38 SIP Trunk Security Profile.....	50
Figure 39 Route Pattern.....	51
Figure 40 Route Pattern (Cont.).....	52
Figure 41 Route Pattern (Cont.).....	53
Figure 42 Line Groups.....	54
Figure 43 Sequential Line Group.....	55
Figure 44 Simultaneous Line Group.....	56
Figure 45 Hunt Lists.....	57
Figure 46 Hunt Lists (Cont.).....	58
Figure 47 Hunt Lists (Cont.).....	59
Figure 48 Hunt Pilot Numbers.....	60
Figure 49 Hunt Pilot Number Unity.....	61



Figure 50 Hunt Pilot Number Unity (Cont.)	62
Figure 51 Hunt Pilot Number Sequential	63
Figure 52 Hunt Pilot Number Simultaneous.....	64
Figure 53 Client Matter Codes	65
Figure 54 Client Matter Codes (Cont.).....	66
Figure 55 Forced Authorization Codes	67
Figure 56 Forced Authorization Codes (Cont.).....	68
Figure 57 Call Park Numbers.....	69
Figure 58 Call Park Numbers (Cont.).....	70
Figure 59 Call Pickup Groups	71
Figure 60 Call Pickup Groups (Cont.)	72
Figure 61 Route Plan Report	73
Figure 62 Route Plan Report (Cont.)	74
Figure 63 Route Plan Report (Cont.)	75
Figure 64 Unity Voice Mail Ports.....	75
Figure 65 Unity Voice Mail Ports (Cont.).....	76
Figure 66 Message Waiting Indicator	77
Figure 67 Message Waiting Indicator (Cont.)	78
Figure 68 Message Waiting Indicator (Cont.)	79
Figure 69 Voice Mail Pilot	80
Figure 70 Voice Mail Pilot (Cont.)	81
Figure 71 Voice Mail Profile	82
Figure 72 Voice Mail Profile (Cont.)	83
Figure 73 IP Phone Service	84
Figure 74 Linksys WAN Setup	85
Figure 75 Linksys Line Configuration.....	87
Figure 76 Linksys Line Configuration (Cont.).....	88
Figure 77 Linksys Line Configuration (Cont.).....	89
Figure 78 Phone Configuration	91
Figure 79 Phone Configuration (Cont.).....	92
Figure 80 Directory Number.....	93
Figure 81 End User Configuration	95

Table of Tables

Table 1 – PBX Configuration Steps	11
Table 2 – IP Addresses.....	12

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 configuration steps for Cox SIP trunking with the Cisco Unified Communications Manager (CUCM) 8.6.2 and the Cisco Unified Border Element (CUBE) for connectivity to Cox's SIP Trunking service. 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 (i.e., flood, fire, loss of power, 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

Cox National IP Backbone

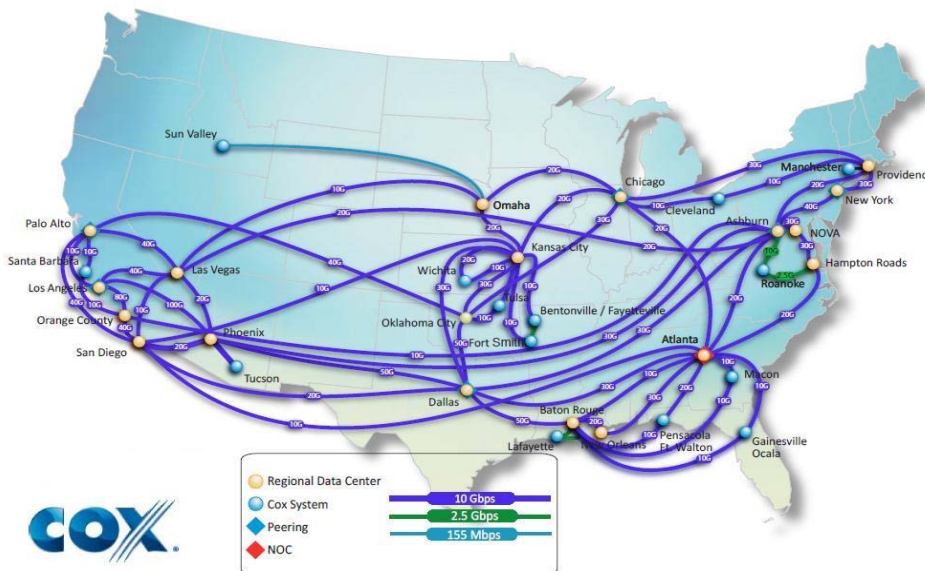


Figure 1 - Cox Fiber Network



2.1 tekVizion Labs

tekVizion Labs™ is an independent testing and Verification facility offered by tekVizion PVS, Inc. ("tekVizion"). tekVizion Labs offers several types of testing services including:

- Remote Testing – provides secure, remote access to certain products in tekVizion Labs for pre-Verification and ad hoc testing
- Verification Testing – Verification of interoperability performed on-site at tekVizion Labs between two products or in a multi-vendor configuration ("solution Verification")
- Product Assessment – independent assessment and verification of product functionality, interface usability, assessment of differentiating features as well as suggestions for added functionality, stress and performance testing, etc.

tekVizion is a systems integrator specifically dedicated to the telecommunications industry. Our core services include consulting/solution design, interoperability/Verification testing, integration, custom software development and solution support services. Our services help service providers achieve a smooth transition to packet-voice networks, speeding delivery of integrated services. While we have expertise covering a wide range of technologies, we have extensive experience surrounding our FastForward>> practice areas which include: SIP Trunking, Packet Voice, Service Delivery, and Integrated Services.

The tekVizion team brings together experience from the leading service providers and vendors in telecom. Our unique expertise includes legacy switching services and platforms, and unparalleled product knowledge, interoperability and integration experience on a vast array of VoIP and other next-generation products. We rely on this combined experience to do what we do best: help our clients advance the rollout of services that excite customers and result in new revenues for the bottom line. tekVizion leverages this real-world, multi-vendor integration and test experience and proven processes to offer services to vendors, network operators, enhanced service providers, large enterprises and other professional services firms. tekVizion's headquarters, along with a state-of-the-art test lab and Executive Briefing Center, is located in the Telecom Corridor® in Richardson, Texas.

(For more information on tekVizion and its practice areas, please visit tekVizion Labs's web site at www.tekVizionlabs.com.)

3 SIP Trunking Network Components

The network for the SIP trunk reference configuration is illustrated below and is representative of a CUCM with CUBE configuration

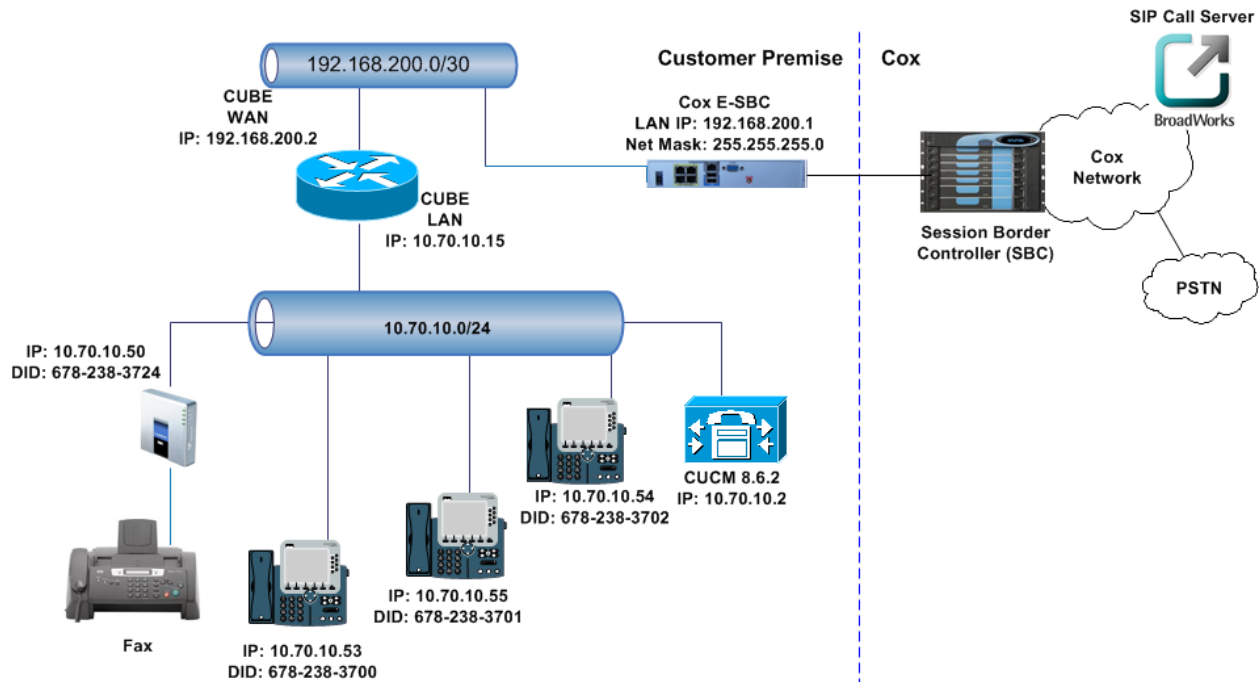


Figure 2 - SIP Trunk Lab Reference Network

Note: The CUCM does not offer DHCP server for dynamic IP address assignment for the SIP phones; however, the Cox Enterprise Session Border Controller (E-SBC) requires a static LAN IP address that must be manually assigned by the LAN network administrator. The DHCP server is provisioned on the Ethernet switch. The DHCP's IP address pool is constrained so that the E-SBC can be assigned an IP address outside of the pool.

The lab network consists of the following components:

- CUCM PBX for voice features, SIP proxy and SIP trunk termination.
- CUBE for routing between internal networks and to the E-SBC on the external network
- Various SIP phones on the local LAN.
- The Cox E-SBC is the Edgewater Networks (www.edgewaternetworks.com) EdgeMarc appliance. The EdgeMarc is the service demarcation point between customer's LAN network and Cox's WAN network and provides firewall/NAT traversal, B2BUA and SIP Application-level gateway. The EdgeMarc has diverse routes to a primary and secondary Acme SBC.
- Acme Packet Net-Net 9200 Session Border Controllers (SBC).



3.1 Hardware Components

- CUCM installed on Cisco 7800 Series
- Cisco IOS gateway (3900 series) running CUBE
- EdgeMarc 5300LF2 E-SBC Release 11.6.5
- Cisco IP Phones (7970, 7975)
- Analog Fax Machine

3.2 Software Requirements

- Cisco Unified Communications Manager 8.6.2.20000-2
- Cisco Unified Border Element (CUBE) 15.2.1T1
(c3900e-universalk9-mz.SPA.152-1.T1.bin)
- EdgeMarc 5300LF2 E-SBC Release 11.6.5



4 Features

4.1 Features Supported

- Basic calls using G.711ulaw
- Calling Party Number Presentation
- Anonymous call
- Call Transfer
- Call Forwarding
- Call Hold and Resume
- Call Pickup
- Call Waiting
- DND
- Call Park
- Hunt groups (Simultaneous and Sequential Ring)
- Three-Way Calling
- PBX Account Codes
- PBX Authorization Codes
- Fax Receive
- Pass Thru Fax
- E911 Call
- RFC2833 transcoding
- PBX-Defined Caller ID (spoofing)

4.2 Features Not Supported

- Dial-Up Modem
- T.38 Fax



5 Caveats and Limitations

- **Cox Required Configuration:**
To enable Early Media with RFC2833 In-band DTMF transport, the Cisco Unified Border Element (CUBE) must be configured with the following two commands.:
 - allow-connections sip to sip
 - early-offer forced
- T.38 fax may be supported by the Linksys ATA SPA2102, but at this time the device would not offer T.38. G711 fax is successful.
- At the time of this writing, Blind Transfer has not passed using G711. It will work when configured with G729, but with G711, there is no talk path. A trouble ticket has been opened with ACME and the results are pending.
- Modem test did not pass. Test originated from PBX, and receiving side did not connect. This is most likely a lab environment artifact.
- Unable to test Auto Attendant with CUCM.



6 Configuration

6.1 Configuration Checklist

In this section we present an overview of the steps that are required to configure CUCM and CUBE for SIP Trunking as well as the PBX features that were tested.

Table 1 – PBX Configuration Steps

Step	Description	Reference
Step 1	System IP Address	Section 6.3.1
Step 2	Cisco Unified Border Element (CUBE) Configuration	Section 6.3.2
Step 3	Cisco Unified Communications Manager Configuration	Section 6.3.3
Step 4	Enterprise Parameters	Section 6.3.4
Step 5	Service Parameters	Section 6.3.5
Step 6	Device Pools	Section 6.3.6
Step 7	SIP Trunks	Section 6.3.7
Step 8	SIP Profiles	Section 6.3.8
Step 9	SIP Trunk Security Profile	Section 6.3.9
Step 10	Route Pattern	Section 6.3.10
Step 11	Line Groups	Section 6.3.11
Step 12	Hunt Lists	Section 6.3.12
Step 13	Hunt Pilot Numbers	Section 6.3.13
Step 14	Client Matter Codes	Section 6.3.14
Step 15	Forced Authorization Codes	Section 6.3.15
Step 16	Call Park Numbers	Section 6.3.16
Step 17	Call Pickup Groups	Section 6.3.17
Step 18	Directory Numbers	Section 6.3.18
Step 19	Route Plan Report	Section 6.3.19
Step 20	Unity Voice Mail Ports	Section 6.3.20
Step 21	Message Waiting Indicator	Section 6.3.21
Step 22	Voice Mail Pilot	Section 6.3.22
Step 23	Voice Mail Profile	Section 6.3.23
Step 24	IP Phone Service	Section 6.3.24
Step 25	Linksys ATA	Section 6.3.25



6.2 IP Address Worksheet

The specific values listed in the table below and in subsequent sections are used in the lab configuration described in this document, and are for **illustrative purposes only**. The customer must obtain and use the values for your deployment.

Table 2 – IP Addresses

Component	Cox Lab Value	Customer Value
EdgeMarc E-SBC		
• LAN IP Address	192.168.200.1	
• LAN Subnet Mask	255.255.255.0	
CUCM IP PBX		
• System IP Address This is the IP address of the CUCM. This IP address is typically on the same subnet as the LAN IP Address of the E-SBC. If this is not the case, then Layer 3 routing must be in place.	10.70.10.2	
• CUBE LAN	10.70.10.15	
• CUBE WAN	192.168.200.2	
• Default Gateway The Default Gateway must be the LAN Network default Gateway. This will allow the administrator to log in via his/her workstation if the workstation is on a different network	10.70.10.1	
• DNS This is the DNS server for the Enterprise network. Cox Communications does not supply DNS services.	10.64.1.3	

6.3 CUCM with CUBE Detailed Configuration Steps

Equipment used for configuration setup:

- CUCM 8.6.2.20000-2 installed on Cisco 7800 Series
- CUBE installed on Cisco 3900 Series with c3900e-universalk9-mz.SPA.152-1.T1.bin
- Cisco IP Phones (7970, 7975)

6.3.1 System IP Address

The IP Address of the CUCM server is 10.70.10.2 with a subnet mask of 255.255.255.0



6.3.2 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 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, in-call signaling, and SIP profile activation was enabled using the following commands.

```
voice service voip
ip address trusted list
ipv4 10.70.10.21
ipv4 192.168.200.12
address-hiding3
mode border-element
allow-connections sip to sip
no supplementary-service sip refer
fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
sip
asserted-id pai4
privacy pstn5
early-offer forced6
midcall-signaling passthru7
```

When the CUCM is configured with the CUBE, the trunk is pointed to the LAN side of the CUBE with the sip-server definition

```
sip-ua
sip-server ipv4:192.168.200.1:5060
```

¹ This is the IP address of the CUCM

² This is the IP address of the E-SBC LAN

³ Hides the signaling and media peer addresses from the endpoints

⁴ To enable the translation to PAID headers in the outgoing header at a global level

⁵ To support the User Privacy Policy on the CUCM, this flag is set on the CUBE to preserve the P-Asserted-Identity and Privacy header on the outgoing SIP INVITE

⁶ This feature alters the default configuration of the CUBE from not distinguishing SIP Delayed-Offer to Early-Offer call flows, to forcing the CUBE to generate an Early-Offer with the configured codecs for an incoming Delayed-Offer INVITE. This is required for RFC 2833 in-band DTMF from the CUCM to interwork with Cox's service

⁷ This command is for SIP-to-SIP calls only



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

```
dial-peer voice 1 voip8
destination-pattern 67823837..
session protocol sipv2
session target ipv4:10.70.10.2
voice-class codec 1
voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
!
dial-peer voice 10 voip9
destination-pattern 1[2-9]..[2-9].....
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
!
dial-peer voice 11 voip10
translation-profile outgoing PSTN_Outgoing
preference 1
destination-pattern [2-9]..[2-9].....
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad

dial-peer voice 12 voip
translation-profile outgoing PSTN_Outgoing
preference 1
destination-pattern 011T
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip early-offer forced
dtmf-relay rtp-nte
```

⁸ This dial-peer is for all incoming calls

⁹ This dial-peer is for outgoing long distance calls

¹⁰ This dial-peer is for outgoing local calls



```
ip qos dscp cs5 media
ip qos dscp cs4 signaling
no vad
```

```
dial-peer voice 13 voip
description **0 or 00 calls to Local or International Operator**
translation-profile outgoing PSTN_Outgoing
preference 1
destination-pattern 0T
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip dtmf-relay force rtp-nte
voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs5 media
ip qos dscp cs3 signaling
no vad
```

```
dial-peer voice 14 voip
description **CCA*North American-10-Digit*Service Numbers**
translation-profile outgoing PSTN_Outgoing
preference 1
destination-pattern [2-9]11
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip dtmf-relay force rtp-nte
voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs3 signaling
no vad
```

```
dial-peer voice 2003 voip
description **CCA*North American-10-Digit*Service Numbers**
translation-profile outgoing PSTN_Outgoing
preference 1
destination-pattern [2-9]11
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip dtmf-relay force rtp-nte
voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs3 signaling
no vad
```

```
dial-peer voice 2005 voip
description **0 or 00 calls to Local or International Operator**
translation-profile outgoing PSTN_Outgoing
preference 1
```



```
destination-pattern 0T
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip dtmf-relay force rtp-nte
voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs3 signaling
no vad
```

```
dial-peer voice 2006 voip
description **Dial Carrier Access Code**
translation-profile outgoing PSTN_Outgoing
preference 1
destination-pattern 101....1[2-9]..[2-9].....
session protocol sipv2
session target sip-server
voice-class codec 1
voice-class sip dtmf-relay force rtp-nte
no voice-class sip early-offer forced
dtmf-relay rtp-nte
ip qos dscp cs3 signaling
no vad
```

The Codec Preference determines the priority of the entries

```
voice class codec 1
codec preference 1 g711ulaw
codec preference 2 g729r8
```

6.3.3 Cisco Unified Communications Manager (CUCM)

The following sections detail the configuration of the CUCM.

6.3.4 Enterprise Parameters

The Enterprise Parameters Configuration section defines the settings for IP phone service. The Cluster ID parameter value will be a custom value. All of the remaining values are default settings.

adm

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application

Enterprise Parameters Configuration

Save Set to Default Reset Apply Config

Status

Status: Ready

Enterprise Parameters Configuration

Parameter Name	Parameter Value
Cluster ID *	cluster9
Synchronization Between Auto Device Profile and Phone Configuration *	True
Max Number of Device Level Trace *	12
DSCP for Phone-based Services *	default DSCP (000000)
DSCP for Phone Configuration *	CS3(precedence 3) DSCP (011000)
DSCP for Cisco CallManager to Device Interface *	CS3(precedence 3) DSCP (011000)
Connection Monitor Duration *	120
Auto Registration Phone Protocol *	SCCP
BLF For Call Lists *	Disabled
Advertise G.722 Codec *	Enabled
Phone Personalization *	Disabled
Services Provisioning *	Internal
Feature Control Policy	< None >
IMS Inter Operator Id *	IMS Inter Operator Identification

CCMAdmin Parameters

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

CCMUser Parameters




Show Ring Settings *	False
Show Call Forwarding *	Show All Settings

Figure 3 Enterprise Parameters

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Enterprise Parameters Configuration

 Save
  Set to Default
  Reset
  Apply Config

Show Speed Dial Settings *	True	▾
Show Cisco IP Phone Services Settings *	True	▾
Show Personal Address Book Settings *	True	▾
Show Message Waiting Lamp Policy Settings *	True	▾
Show Line Text Label Settings *	False	▾
Show Locale for Phone Settings *	True	▾
Show Locale for Web Pages Settings *	True	▾
Show Change Password Option *	True	▾
Show Change PIN Option *	True	▾
Show Download Plugin Option *	True	▾
Show Online Guide Option *	True	▾
Show Directory *	True	▾
Show Mobility Features Option *	True	▾
Show Manager Name in Directory *	True	▾
Show User Id in Directory *	True	▾
Show Extension in Directory *	True	▾
Show LDAP Extension in Directory *	True	▾

CDR Parameters

CDR File Time Interval *	1
--	---

Localization Parameters

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

MLPP Parameters

MLPP Domain Identifier *	000000	▾
MLPP Indication Status *	MLPP Indication turned off	▾
MLPP Preemption Setting *	No preemption allowed	▾
Precedence Alternate Party Timeout *	30	

Figure 4 Enterprise Parameters (Cont.)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

administrator | S

Enterprise Parameters Configuration

Save Set to Default Reset Apply Config

[Use Standard VM Handling For Precedence Calls](#) * False

Security Parameters

Cluster Security Mode *	0
CAPF Phone Port *	3804
CAPF Operation Expires in (days) *	10
Enable Caching *	False

Prepare Cluster for Rollback

Prepare Cluster for Rollback to pre 8.0 *	False
---	-------

Phone URL Parameters

URL Authentication	http://clus9pubsub:8080/ccmcip/authenticate.jsp
URL Directories	http://clus9pubsub:8080/ccmcip/xmldirectory.jsp
URL Idle	
URL Idle Time	0
URL Information	http://clus9pubsub:8080/ccmcip/GetTelecasterHelpText.js
URL Messages	
IP Phone Proxy Address	
URL Services	http://clus9pubsub:8080/ccmcip/getservicesmenu.jsp

Secured Phone URL Parameters

Secured Authentication URL	https://clus9pubsub:8443/ccmcip/authenticate.jsp
Secured Directory URL	https://clus9pubsub:8443/ccmcip/xmldirectory.jsp
Secured Idle URL	
Secured Information URL	https://clus9pubsub:8443/ccmcip/GetTelecasterHelpText.js
Secured Messages URL	
Secured Services URL	https://clus9pubsub:8443/ccmcip/getservicesmenu.jsp

Figure 5 Enterprise Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Enterprise Parameters Configuration

Save Set to Default Reset Apply Config

User Data Service Parameters

Enable All User Search *	True
User Search Limit *	64
Number of Digits to Match *	4

CCM Web Services Parameters

Allowed Performance Queries Per Minute *	50
Allowed Device Queries Per Minute *	15
Performance Queue Limit *	100
Allowed CDRonDemand get file Queries Per Minute *	10
Allowed CDRonDemand get file list Queries Per Minute *	20

Trace Parameters

File Close Thread Flag *	True
FileCloseThreadQueueWatermark *	100

User Management Parameters

Effective Access Privileges For Overlapping User Groups and roles *	Maximum
---	---------

Service Manager TCP ports parameters

Service Manager TCP Server communication port number *	8888
Service Manager TCP Client communication port number *	8889

CRS Application Parameters

Auto Attendant Installed *	false
IPCC Express Installed *	false

Clusterwide Domain Configuration





Organization Top Level Domain	
Cluster Fully Qualified Domain Name	clus9pubsub.lab.tekvizion.com

Figure 6 Enterprise Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Enterprise Parameters Configuration

 Save
  Set to Default
  Reset
  Apply Config

Denial-of-Service Protection

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

TLS Handshake Timer

[TLS Handshake Timer](#) *

Cisco Support Use

[Cisco Support Use 1](#)

[Cisco Support Use 2](#)

Ipv6 configuration Modes

[Enable IPv6](#) *

[IP Addressing Mode Preference for Media](#) *

[IP Addressing Mode Preference for Signaling](#) *

[Allow Auto-Configuration for Phones](#) *

Cisco Syslog Agent

[Remote Syslog Server Name](#)

[Syslog Severity For Remote Syslog messages](#) *

CUCReports Parameters

[Report Socket Connection Timeout](#) *

[Report Socket Read Timeout](#) *

Logical Partitioning Configuration

[Enable Logical Partitioning](#) *

[Default Geolocation](#) *

[Logical Partitioning Default Policy](#) *

[Logical Partitioning Default Filter](#)

Call Trace Log Configuration for Session Trace

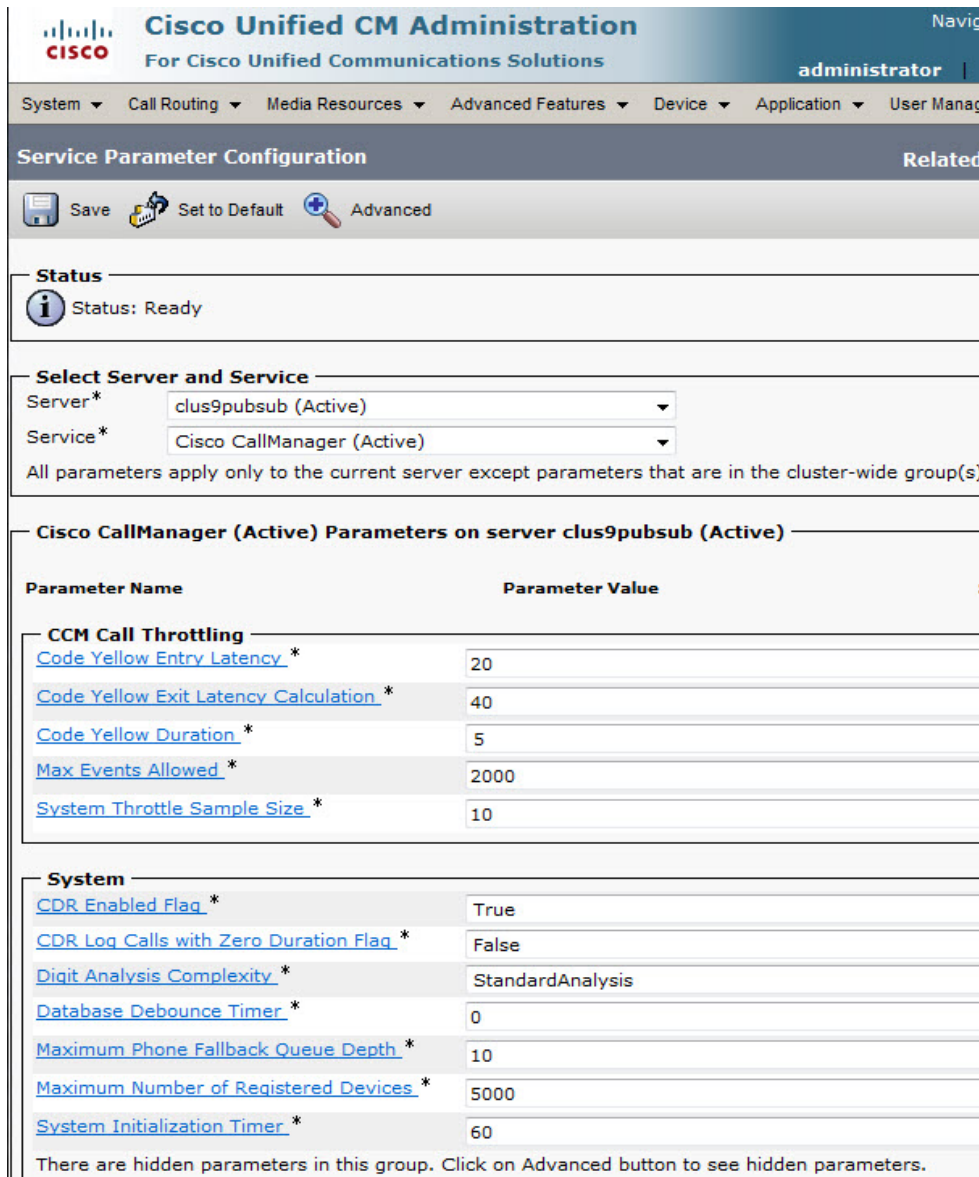
[Enable Call Trace Log](#) *

Figure 7 Enterprise Parameters (Cont.)

Call Trace Log Configuration for Session Trace	
Enable Call Trace Log *	Enabled
Max Number of Call Trace Log Files *	2000
Call Trace Log File Size (MB) *	2

Figure 8 Enterprise Parameters (Cont.)

6.3.5 Service Parameters




The screenshot shows the Cisco Unified CM Administration interface for Service Parameter Configuration. The page title is "Service Parameter Configuration" and the user is logged in as "administrator". The status is "Ready". The selected server is "clus9pubsub (Active)" and the service is "Cisco CallManager (Active)".

Cisco CallManager (Active) Parameters on server clus9pubsub (Active)

Parameter Name	Parameter Value
CCM Call Throttling	
Code Yellow Entry Latency *	20
Code Yellow Exit Latency Calculation *	40
Code Yellow Duration *	5
Max Events Allowed *	2000
System Throttle Sample Size *	10
System	
CDR Enabled Flag *	True
CDR Log Calls with Zero Duration Flag *	False
Digit Analysis Complexity *	StandardAnalysis
Database Debounce Timer *	0
Maximum Phone Fallback Queue Depth *	10
Maximum Number of Registered Devices *	5000
System Initialization Timer *	60

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Figure 9 Service Parameters






Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

Navigat
 administrator | S

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Managen

Service Parameter Configuration Related L

Save 
Set to Default 
Advanced 

SDL Trace

SDL Trace Data Flags *	0x00000111
SDL Trace Flush Immediately *	False ▾
SDL Trace Data Size *	0
SDL Trace Flag *	True ▾
SDL TraceType Flags *	0x8000EB15

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Device - General)

Call Diagnostics Enabled *	Enabled Only When CDR Enabled Flag is True ▾
Show Line Group Member DN in finalCalledPartyNumber CDR Field *	False ▾
Show Line Group Member Non Masked DN in finalCalledPartyNumber CDR Field *	False ▾
CTI New Call Accept Timer *	4
CTI Generate Digits Interval *	250
CTI Dial Digits Interval *	250
CTI Await Further Digits *	False ▾
CTI Use Wildcard Pattern as calledPartyDN *	False ▾
Retain Media on Disconnect with PI for Active Call *	False ▾
Station and Backup Server KeepAlive Interval *	60
Station KeepAlive Interval *	30
Status Enquiry Poll Flag *	False ▾
Strip # Sign from Called Party Number *	True ▾
Session Handoff Alerting Timer *	10
T301 Timer *	180000
T302 Timer *	15000
T303 Timer *	4000
T304 Timer *	30000

Figure 10 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

Save Set to Default Advanced

T305 Timer *	30000
T306 Timer *	30000
T308 Timer *	4000
T309 Timer *	90000
T310 Timer *	60000
T313 Timer *	4000
T316 Timer *	120000
T317 Timer *	100000
T321 Timer *	30000
T322 Timer *	4000
Tone on Hold Timer *	10
Unknown Caller ID Flag *	True ▾
Call Classification *	OffNet ▾
Always Display Original Dialed Number *	False ▾
Always Use PIs With Original Dialed Number *	False ▾
Fail Call If Trusted Relay Point Allocation Fails *	True ▾
Display Calling/Called ID When PI is Not Available *	False ▾
Enable Transit Counter Processing on QSIG Trunks *	False ▾
Egress FacilityIE Count *	6 ▾

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Device - Phone)

Always Use Prime Line *	False ▾
Always Use Prime Line for Voice Message *	False ▾
Builtin Bridge Enable *	Off ▾
Device Mobility Mode *	Off ▾

Figure 11 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | S

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

Save Set to Default Advanced




Display Device Mobility Location During Phone Registration *	True
Auto Answer Timer *	1
Extension Display on Cisco IP Phone Model 7910 *	False
Alternate Idle Phone Auto-Answer Behavior Enabled *	False
Hold Type *	False
Line State Update Enabled *	True
Off-hook to First Digt Timer *	15000
Override Auto Answer If Speaker Is Disabled *	True
Out-of-Bandwidth Text *	Not Enough Bandwidth
Forced Authorization Code Prompt Text *	Enter Authorization Code
Client Matter Code Prompt Text *	Enter Client Matter Code
AAR Network Congestion Rerouting Text *	Network Congestion. Rerouting.
Ring Setting of Busy Station Policy *	Only Apply Ring Setting of Busy Station When Incomin
Transfer On-hook Enabled *	False
Ring Setting of Busy Station *	Beep Only
Ring Setting of Idle Station *	Ring
Call Pickup Group Audio Alert Setting of Idle Station *	Ring Once
Call Pickup Group Audio Alert Setting of Busy Station *	Beep Only
BLF Pickup Audio Alert Setting of Idle Station *	Disable
BLF Pickup Audio Alert Setting of Busy Station *	Disable
Privacy Setting *	False
Enforce Privacy Setting on Held Calls *	False
SIP Station KeepAlive Interval *	120
SIP Station Realm *	ccmsipline
Hunt Group Logoff Notification *	None

Figure 12 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

 Save
  Set to Default
  Advanced

Speed Dial Await Further Digits *	False	▾
Display CTI Route Point Name or DN *	False	▾
Display Original Calling Number on Transfer from Cisco Unity *	False	▾
Insert Hyphens in 12-Digit Numbers *	False	▾
Allow Call Waiting During an In-Progress Outbound Analog Call *	True	▾

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Device - PRI and MGCP Gateway)

Calling Party Number Screening Indicator *	CallManager sets the screening indicator value - Default ▾	
Clear Calls Flag When Datalink Is Down *	True	▾
Device Status Poll Interval *	3000	
Disable Alerting Progress Indicator *	False	▾
Discard Non Inband Progress in Overlap Sending *	False	▾
Disable Resume from Shared-line MGCP FXS Port *	True	▾
DTMF Silence Tone Flag *	False	▾
Enable Display IE in Codeset 6 *	False	▾
Enable Sending PRI NI2 Service Message *	False	▾
Flash Hook Duration *	500	
Gateway Poll Timer *	10	
Location In PRI Progress Indicator IE (User Side Only) *	Use the Network Side PRI progress indicator IE ▾	
Matching Calling Party with Attendant Flag *	False	▾
MGCP Database Query Delay Timer *	1000	
MGCP FXS On-Hook Pending Timer *	3	
MGCP Response Timer *	30	
MGCP Timer *	3	

Figure 13 Service Parameters (Cont.)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

administrator | Settings

Service Parameter Configuration

Save Set to Default Advanced

Numbering Plan Info *	1
Overlap Receiving Flag for PRI *	True ▾
Outgoing Media Connect Time for PRI *	Connect ASAP ▾
Port Release Timer *	0
SMDI Call Delay Timer *	0
Stable in State 4 Flag *	False ▾
Optimize MGCP Registration *	True ▾
Suppress Out-of-Channels Alarms *	True ▾
I-Frame Timer *	2000
User-to-User IE Status *	False ▾
Convert European Progress Message to Alerting *	False ▾
Enable DMS PRI Notify Message from User to Network *	True ▾
Audit OOS Channels Interval *	10
Digital and Analog Ports Enabled *	True ▾

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Device - H323)

Accept Unknown TCP Connection *	False ▾
BRQ Enabled *	False ▾
Call Present Disconnect Flag *	False ▾
Check Progress Indicator Before Establishing Media *	False ▾
H225 Block Setup Destination *	False ▾
H225 DB Retry Timer *	0
H225 Device Connect Timer *	0
H225 DTMF Duration *	100
H225 TspReq Retry *	2
H225 Intercluster Call Throttle Timer *	30 ▾

Figure 14 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

Save Set to Default Advanced




H225 T301 Timer *	180000
H225 T302 Timer *	15000
H225 T303 Timer *	4000
H225 T304 Timer *	30000
H225 T305 Timer *	30000
H225 T310 Timer *	60000
H225 TCP Timer *	5
H245 TCS Timeout *	10
H323 Calling Party Number Screening Indicator *	Calling number screened and passed ▾
Apply External Phone Number Mask for H.323 Calls *	False ▾
Tone on Connect *	False ▾
RAS ARQ Timer *	3
RAS BRQ Timer *	3
RAS DRQ Timer *	3
RAS RRQ Timer *	3
Ras URQ Timer *	3
Retry Count for ARQ *	2
Retry Count for BRQ *	2
Retry Count for DRQ *	2
Retry Count for RRQ *	2
Retry Count for URQ *	1
Send Product ID and Version ID *	False ▾
Send Unified CM Version as Version ID in H225Setup *	False ▾
Send Progress Timer *	3000
Send H225 User Info Message *	User Info for Call Progress Tone ▾
Status Enquiry Poll Timer *	10000

Figure 15 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

 Save
  Set to Default
  Advanced

Device Name of GK-controlled Trunk That Will Use Port 1720 *	None
Host Name/IP Address of GK That Will Use RAS UDP Port 1719 *	None
Fail Call If MTP Allocation Fails *	False ▾
Overlap Receiving Flag for H323 *	False ▾
Allocate Transcoder for H.323 on Early Offer SIP Trunk for Calls with Early Media *	False ▾
Allocate Transcoder for H.323 on Early Offer SIP Trunk for Calls with Early Media *	False ▾

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Device - SIP)

SIP Interoperability Enabled *	True ▾
Retry Count for SIP Bye *	10
Retry Count for SIP Cancel *	10
Retry Count for SIP Invite *	6
Retry Count for SIP PRACK *	6
Retry Count for SIP Rel1XX *	10
Retry Count for SIP Publish *	6
Retry Count for SIP Response *	6
SIP Connect Timer *	500
SIP Disconnect Timer *	500
SIP Expires Timer *	180000
SIP PRACK Timer *	500
SIP Rel1XX Timer *	500
SIP Trying Timer *	500
SIP Publish Timer *	500
SIP Min-SE Value *	1800
SIPS URI Handling *	Reject ▾

Figure 16 Service Parameters (Cont.)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration

Save Set to Default Advanced

SIP statistics Periodic update Timer *	2
SIP Session Expires Timer *	1800
SIP Trunk TspReq Retry *	2
SIP TCP Unused Connection Timer *	14
SIP TCP Timer *	5
SIP Station UDP Port Throttle Threshold *	50
SIP Trunk UDP Port Throttle Threshold *	200
SIP Station TCP Port Throttle Threshold *	100
SIP Trunk TCP Port Throttle Threshold *	250
SIP V.150 Outbound SDP Offer Filtering *	No Filtering ▾
Send SIP Multicast TTL in SDP *	False ▾
Default PUBLISH Expiration Timer *	3600
Minimum PUBLISH Expiration Timer *	60
CUP PUBLISH Trunk	< None > ▾
Send 181 Call Is Being Forwarded *	False ▾
Fail Call Over SIP Trunk if MTP Allocation Fails *	False ▾
Log Call-Related REFER/NOTIFY/SUBSCRIBE SIP Messages for Session Trace *	True ▾
Port Received Timer for Outbound Call Setup *	2

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Feature - General)




Call Park Display Timer *	10
Caller ID Display Priority Enabled *	True ▾
Call Park Reversion Timer *	60
Park Monitoring Reversion Timer *	60
Park Monitoring Periodic Reversion Timer *	30
Park Monitoring Forward No Retrieve Timer *	300

Figure 17 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

 Save
  Set to Default
  Advanced

Preserve globalCallId for Parked Calls *	True	▾
Maximum Call Duration Timer *	720	
Maximum Hold Duration Timer *	360	
Party Entrance Tone *	True	▾
Message Waiting Lamp Policy *	Primary Line - Light and Prompt	▾
Audible Message Waiting Indication Policy *	OFF	▾
Message Waiting Indicator Inbound Calling Search Space	< None >	▾
Multiple Tenant MWI Modes *	False	▾
MWI Non Message Center Signaling Call Duration *	0	
Message Waiting Indicator APDU Digit Translation CSS	< None >	▾
Block OffNet To OffNet Transfer *	False	▾
Use Original Call Classification for Transferred Calls *	False	▾
Use Restriction attribute of ID/Name Presentation of Transferring Party *	True	▾

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Feature - Conference)

Suppress MOH to Conference Bridge *	True	▾
Drop Ad Hoc Conference *	Never	▾
Maximum Ad Hoc Conference *	4	
Maximum MeetMe Conference Unicast *	4	
Advanced Ad Hoc Conference Enabled *	False	▾
Choose Encrypted Audio Conference Instead Of Video Conference *	True	▾
Minimum Video Capable Participants To Allocate Video Conference *	2	
Enable Click-to-Conference for Third-Party Applications *	False	▾
Ignore BFCP Application Line Encryption Status When Designating Call Security Status *	True	▾

Figure 18 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | S

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

Save Set to Default Advanced

Clusterwide Parameters (Feature - Forward)

Forward Maximum Hop Count *	12
Forward No Answer Timer *	12
Max Forward Hops to DN *	12
Retain Forward Information *	False ▾
Forward By Reroute Enabled *	False ▾
Transform Forward by Reroute Destination *	True ▾
Always Forward Switch Voice Mail Calls *	True ▾
Forward By Reroute T1 Timer *	10
Include Original Called Info for Q.SIG Call Diversions *	Only after the first diversion ▾
Set Private Numbering Plan for Call Forward *	False ▾
Set Type of Number for Call Forward *	Level1RegionalNumber ▾
Max Forward UnRegistered Hops to DN *	0
CFA CSS Activation Policy *	With Configured CSS ▾
Cause Code When Maximum Forward Hop Count is Triggered *	Normal Unspecified ▾

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Feature - Hold Reversion)

Hold Reversion Duration *	0
Hold Reversion Notification Interval *	30
CFA Destination Override *	False ▾

Clusterwide Parameters (Feature - Call Pickup)

Auto Call Pickup Enabled *	False ▾
Call Pickup Locating Timer *	1
Call Pickup No Answer Timer *	12

Clusterwide Parameters (Feature - Refer)

Validate Refer-to URI *	Validate Except for Anonymous Users ▾
---	---------------------------------------

Figure 19 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

Save Set to Default Advanced

Clusterwide Parameters (Feature - Replaces)

Block OffNet To OffNet Replaces *	False
---	-------

Clusterwide Parameters (Feature - Redirection [3xx])

Redirection Ring No Answer Reversion Timer *	24
Maximum Redirection Count *	70

Clusterwide Parameters (Feature - Multilevel Precedence and Preemption)

Locations-based MLPP Enable *	False
Executive Override Call Preemptable *	False
Location-based Maximum Bandwidth Enforcement Level for MLPP Calls *	Lenient

Clusterwide Parameters (Feature - Path Replacement)

Path Replacement Enabled *	False
Path Replacement on Tromboned Calls *	True
Start Path Replacement Minimum Delay Time *	0
Start Path Replacement Maximum Delay Time *	0
Path Replacement T1 Timer *	30
Path Replacement T2 Timer *	15
Path Replacement PINX ID	
Path Replacement Calling Search Space	< None >

Clusterwide Parameters (Feature - Call Back)

Call Back Enabled Flag *	True
Call Back Notification Audio File Name *	CallBack.raw
Connection Proposal Type *	Connection Retention
Connection Response Type *	Default to Connection Retention
Call Back Request Protection T1 Timer *	10
Call Back Recall T3 Timer *	20

Figure 20 Service Parameters (Cont.)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Manager ▾

administrator | S

Service Parameter Configuration

Save Set to Default Advanced

Call Back Calling Search Space	< None >
No Path Reservation *	True
Set Private Numbering Plan for Call Back *	False
Set Type of Number for Call Back *	Level1RegionalNumber

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Feature - Call Recording)

Play Recording Notification Tone To Observed Target *	True
Play Recording Notification Tone To Observed Connected Parties *	True

Clusterwide Parameters (Feature - Monitoring)

Play Monitoring Notification Tone To Observed Target *	True
Play Monitoring Notification Tone To Observed Connected Parties *	True

Clusterwide Parameters (Feature - Join Across Lines And Single Button Barge Feature Set)

Join Across Lines Policy *	Off
Single Button Barge/CBarge Policy *	Off
Allow Barging When Ringing *	False

Clusterwide Parameters (Feature - Secure Tone)

Play Tone to Indicate Secure/Non-Secure Call Status *	False
---	-------

Clusterwide Parameters (Feature - External Call Control)

External Call Control Diversion Maximum Hop Count *	12
Maximum External Call Control Diversion Hops to Pattern or DN *	12
External Call Control Routing Request Timer *	2000
External Call Control Fully Qualified Role And Resource *	CISCO:UC:UCMPolicy:VoiceOrVideoCall
External Call Control Initial Connection Count To PDP *	2

Figure 21 Service Parameters (Cont.)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

administrator | Settings

Service Parameter Configuration

Save Set to Default Advanced

[External Call Control Maximum Connection Count To PDP](#) * 4

Clusterwide Parameters (Route Plan)

Stop Routing on Out of Bandwidth Flag *	False
Stop Routing on Unallocated Number Flag *	True
Stop Routing on User Busy Flag *	True

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (Route Class Signaling)

Route Class Trunk Signaling Enabled *	True
SIP Route Class Naming Authority *	cisco.com

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.


Clusterwide Parameters (Hunt List)

Stop Hunting on Out of Bandwidth Flag *	False
Use Pickup Group Of Line Group Member DN *	False

Clusterwide Parameters (Service)

Default Network Hold MOH Audio Source ID *	1
Default User Hold MOH Audio Source ID *	1
Duplex Streaming Enabled *	False
Media Exchange Interface Capability Timer *	8
Send Multicast MOH in H.245 OLC Message *	True
Media Exchange Timer *	12
Media Exchange Stop Streaming Timer *	8
Open Video Channel Response Timer for SIP Interop *	500
Port Received Timer After Call Connection *	500
Media Resource Allocation Timer *	12
MTP and Transcoder Resource Throttling Percentage *	95

Figure 22 Service Parameters (Cont.)






Cisco Unified CM Administration

For Cisco Unified Communications Solutions

Navigati
administrator | Se

System ▾
Call Routing ▾
Media Resources ▾
Advanced Features ▾
Device ▾
Application ▾
User Managem

Service Parameter Configuration
Related L

 Save
 Set to Default
 Advanced

Intercluster Capabilities Mismatch Timer *	1000
Silence Suppression *	False ▾
Silence Suppression for Gateways *	False ▾
Strip G.729 Annex B (Silence Suppression) from Capabilities *	True ▾
Enable Source IP Address Verification for Software Media Devices *	True ▾

Clusterwide Parameters (System - General)


Always Use Dial Tone Setting *	Default ▾
Restart Cisco CallManager on Initialization Exception *	True ▾
Digit Analysis Timer *	6
Statistics Enabled *	True ▾

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

Clusterwide Parameters (System - QOS)

Priority Class *	Normal Priority ▾
DSCP for Audio Calls *	EF DSCP (101110) ▾
DSCP for Priority Audio Calls *	EF DSCP (101101) ▾
DSCP for Immediate Audio Calls *	EF DSCP (101100) ▾
DSCP for Flash Audio Calls *	EF DSCP (101001) ▾
DSCP for Flash Override Audio Calls *	EF DSCP (101010) ▾
DSCP for Executive Override Audio Calls *	EF DSCP (101010) ▾
DSCP for Video Calls *	AF41 DSCP (100010) ▾
DSCP for G.Clear Calls *	EF DSCP (101110) ▾
DSCP for Priority G.Clear Calls *	EF DSCP (101101) ▾
DSCP for Immediate G.Clear Calls *	EF DSCP (101100) ▾
DSCP for Flash G.Clear Calls *	EF DSCP (101001) ▾
DSCP for Flash Override G.Clear Calls *	EF DSCP (101010) ▾
DSCP for Executive Override G.Clear Calls *	EF DSCP (101010) ▾
DSCP for Audio Calls when RSVP Fails *	default DSCP (000000) ▾

Figure 23 Service Parameters (Cont.)



Cisco Unified CM Administration

For Cisco Unified Communications Solutions

Navigat
administrator | S

System ▾
Call Routing ▾
Media Resources ▾
Advanced Features ▾
Device ▾
Application ▾
User Managem

Service Parameter Configuration Related L

Save
 Set to Default
 Advanced

DSCP for Video Calls when RSVP Fails *	default DSCP (000000)	▾
DSCP for ICCP Protocol Links *	CS3(precedence 3) DSCP (011000)	▾
DSCP for TelePresence Calls *	CS4(precedence 4) DSCP (100000)	▾

Clusterwide Parameters (System - SDL)

SDL Listening Port Number *	8002	▾
SDL Max Router Latency *	20	▾
Suppress Debug Info for Router Death *	0	▾
Asynchronous SDL Logging Enabled *	False	▾

Clusterwide Parameters (System - Location and Region)

Enforce Millisecond Packet Size *	True	▾
Locations Trace Details Enabled *	False	▾
Preferred G.711 Millisecond Packet Size *	20	▾
Preferred G.722 Millisecond Packet Size *	20	▾
Preferred G.723.1 Millisecond Packet Size *	30	▾
Preferred G.729 Millisecond Packet Size *	20	▾
Always Use Preferred G.729 Packet Size For SIP Trunk Answers *	False	▾
Preferred GSM EFR Bytes Packet Size *	31	▾
G.711 A-law Codec Enabled *	Enabled for All Devices	▾
G.711 mu-law Codec Enabled *	Enabled for All Devices	▾
G.722 Codec Enabled *	Enabled for All Devices	▾
iLBC Codec Enabled *	Enabled for All Devices	▾
iSAC Codec Enabled *	Enabled for All Devices	▾
Default Intraregion Max Audio Bit Rate *	64 kbps (G.722, G.711)	▾
Default Interregion Max Audio Bit Rate *	8 kbps (G.729)	▾
Default Intraregion Max Video Call Bit Rate (Includes Audio) *	384	▾
Default Interregion Max Video Call Bit Rate (Includes Audio) *	384	▾

Figure 24 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | S

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Manager ▾

Service Parameter Configuration Related L

Save Set to Default Advanced

Default Intraregion and Interregion Link Loss Type *	Low Loss	▾
G.Clear Bandwidth Override *	False	▾

Clusterwide Parameters (System - CCM Automated Alternate Routing)

Automated Alternate Routing Enable *	False	▾
--	-------	---

Clusterwide Parameters (System - RSVP)

Default inter-location RSVP Policy *	No Reservation	▾
RSVP Retry Timer *	60	
Mandatory RSVP Mid-call Retry Counter *	1	
Mandatory RSVP mid call error handle option *	Call becomes best effort	▾
RSVP Video Tspec Burst Size Factor *	5	
MLPP EXECUTIVE_OVERRIDE To RSVP Priority Mapping *	65535	
MLPP FLASH_OVERRIDE To RSVP Priority Mapping *	65534	
MLPP FLASH To RSVP Priority Mapping *	65533	
MLPP IMMEDIATE To RSVP Priority Mapping *	65532	
MLPP PL_PRIORITY To RSVP Priority Mapping *	65531	
MLPP PL_ROUTINE To RSVP Priority Mapping *	65530	
RSVP Audio Application ID *	AudioStream	
RSVP Video Application ID *	VideoStream	
RSVP Response Timer *	2	

TLS Packet Capture Configurations

Packet Capture Enable *	False	▾
Packet Capture Max File Size (MB) *	2	

Clusterwide Parameters(System - Presence)

Presence Subscription Throttling Threshold *	15000	
--	-------	--

Figure 25 Service Parameters (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Settings

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Service Parameter Configuration Related Links

Save Set to Default Advanced

Presence Subscription Resume Threshold *	80
Default Inter-Presence Group Subscription *	Disallow Subscription ▾
BLF Status Depicts DND *	False ▾

Clusterwide Parameters (System - Mobility)

Enterprise Feature Access Code for Hold *	*81
Enterprise Feature Access Code for Exclusive Hold *	*82
Enterprise Feature Access Code for Resume *	*83
Enterprise Feature Access Code for Transfer *	*84
Enterprise Feature Access Code for Conference *	*85
Enterprise Feature Access Code for Session Handoff *	*74
Smart Mobile Phone Interdigit Timer *	500
Non-Smart Mobile Phone Interdigit Timer *	2000
Send Call to Mobile Menu Timer *	60
SIP Dual Mode Alert Timer *	1500
Call Screening Timer *	4000
Session Resumption Await Timer *	180
Inbound Calling Search Space for Remote Destination *	Trunk or Gateway Inbound Calling Search Space ▾
Enable Enterprise Feature Access *	False ▾
Dial-via-Office Forward Service Access Number	
Enable Mobile Voice Access *	False ▾
Mobile Voice Access Number	
Matching Caller ID with Remote Destination *	Complete Match ▾
Number of Digits for Caller ID Partial Match *	10
System Remote Access Blocked Numbers	
Enable Use of Called Party Transformed Number for Mobile-terminated Calls *	False ▾

Figure 26 Service Parameters (Cont.)

Clusterwide Parameters (Feature - Reroute Remote Destination Calls to Enterprise Number)	
Reroute Remote Destination Calls to Enterprise Number *	False
Log Mobile Number in CDR for Rerouted RD Calls *	False
Ignore Call Forward All on Enterprise DN *	True

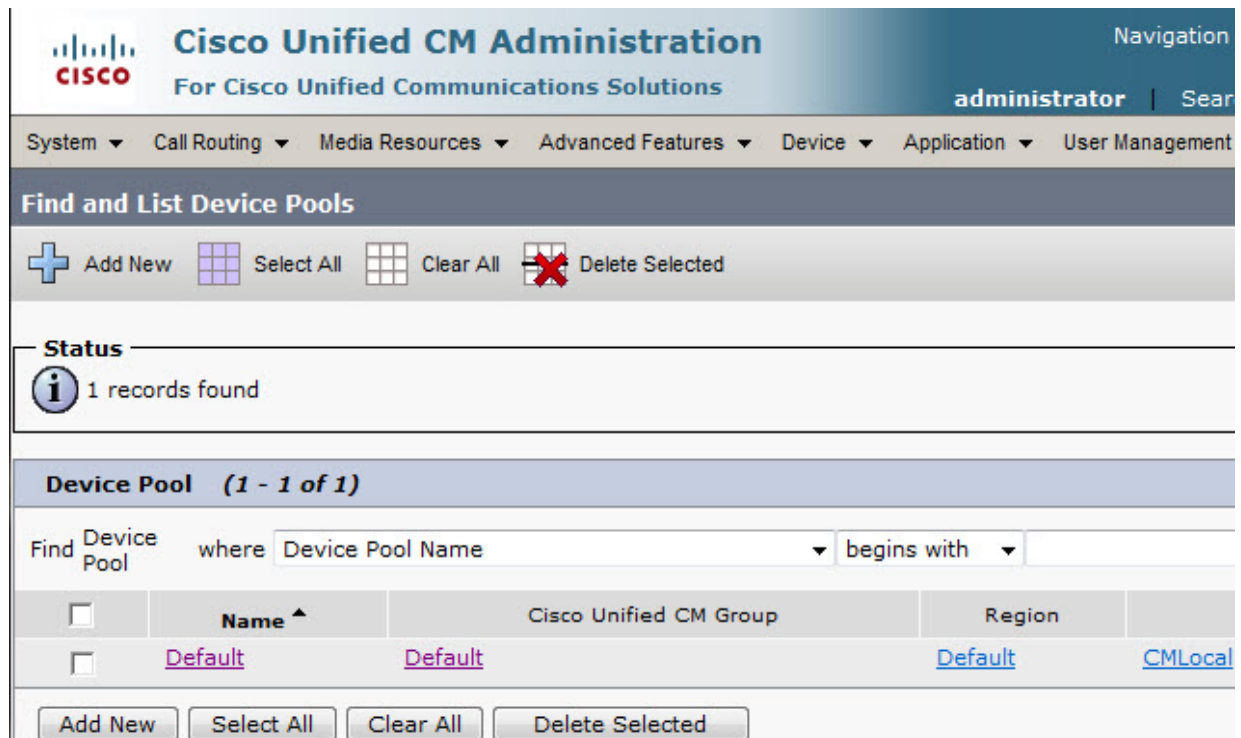
Clusterwide Parameters (Feature - Immediate Divert)	
Use Legacy Immediate Divert *	True
Allow QSIG during iDivert *	False
Immediate Divert User Response Timer *	5

Clusterwide Parameters (Call Admission Control)	
Call Counting CAC Enabled *	False
Audio Bandwidth For Call Counting CAC *	102
Video Bandwidth For Call Counting CAC *	500

Figure 27 Service Parameters (Cont.)

6.3.6 Device Pools

Device pools are used to define sets of common characteristics for devices.



The screenshot shows the Cisco Unified CM Administration interface. The top navigation bar includes the Cisco logo, the title "Cisco Unified CM Administration", and the user role "administrator". Below the navigation bar, there are several tabs: System, Call Routing, Media Resources, Advanced Features, Device, Application, and User Management. The "Device" tab is selected, and the sub-tab "Find and List Device Pools" is active. The interface includes a search bar with the text "Find Device Pool where Device Pool Name begins with". Below the search bar, there is a table with one row of data. The table has columns for Name, Cisco Unified CM Group, Region, and a link. The row contains the value "Default" for Name, "Default" for Cisco Unified CM Group, "Default" for Region, and a link "CMLocal". At the bottom of the table, there are buttons for "Add New", "Select All", "Clear All", and "Delete Selected".

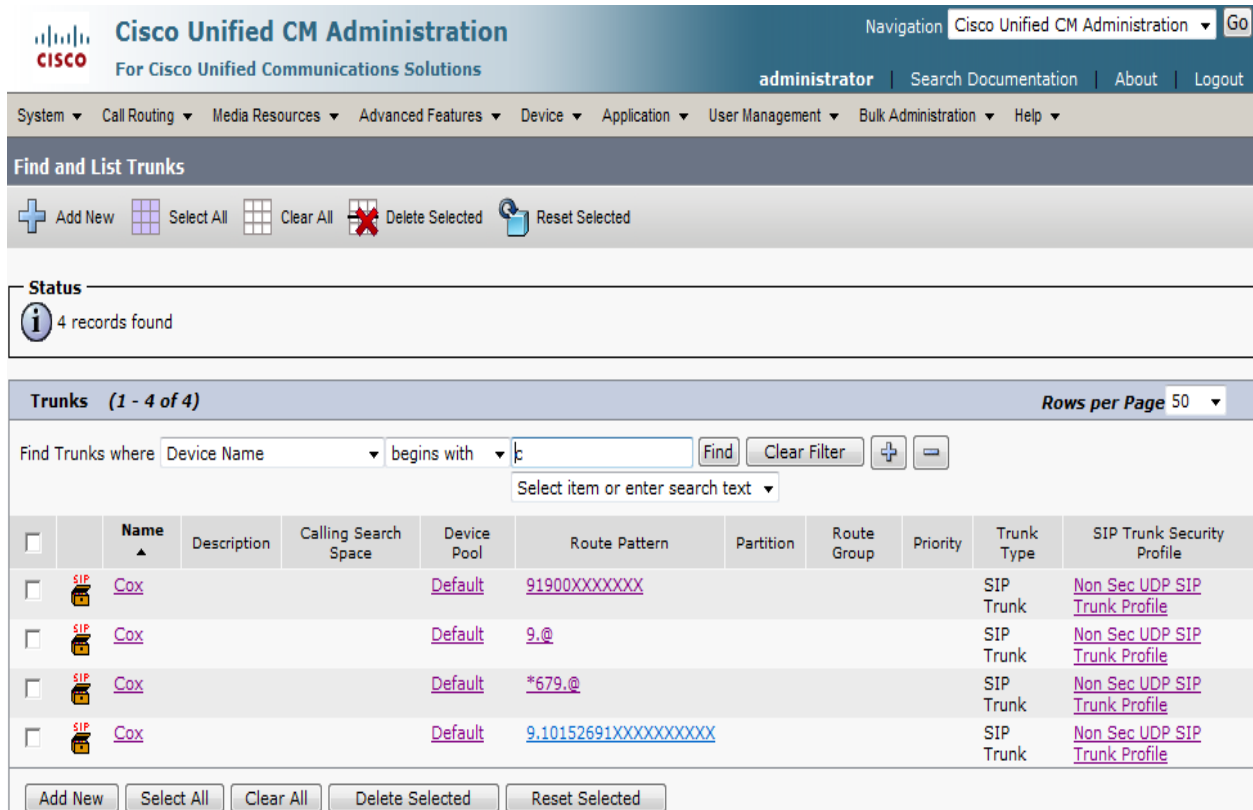
Figure 28 Device Pools

6.3.7 SIP Trunks

SIP Trunk configuration is described below. Figure 29 shows a list of active trunks. This section will describe the procedures for adding a new trunk.

1. Navigate to Device > Trunk > Add New
2. In the Trunk Type menu, select SIP Trunk (Figure 30)
3. The Device Protocol (SIP) and Trunk Service Type None (Default) are default settings.
4. Select Next
5. Assign a Device Name: Cox
6. Set the Device Pool to Default
7. In the Inbound Calls section, Define the Significant Digits: 4
8. In the SIP Information section, assign a Destination Address: 10.70.10.15 (This is the LAN address of the CUBE)
9. In the SIP Trunk Security Profile drop-down menu, select Non Sec UDP SIP Trunk Profile (Refer to [Section 6.3.9](#) for more details)
10. In the SIP Profile drop-down menu, select Cox SIP Profile (SIP Profiles are described in more detail in [Section 6.3.8](#))
11. For the DTMF Signaling Method, select RFC 2833
12. Select Save

NOTE: When route patterns are assigned they will show up in the trunk screen.



The screenshot shows the Cisco Unified CM Administration interface. The top navigation bar includes "Cisco Unified CM Administration" and "For Cisco Unified Communications Solutions". The main menu includes "System", "Call Routing", "Media Resources", "Advanced Features", "Device", "Application", "User Management", "Bulk Administration", and "Help". The "Find and List Trunks" section is active, showing 4 records found. The table below lists the trunks:


Name	Description	Calling Search Space	Device Pool	Route Pattern	Partition	Route Group	Priority	Trunk Type	SIP Trunk Security Profile
Cox			Default	91900XXXXXX				SIP Trunk	Non Sec UDP SIP Trunk Profile
Cox			Default	9.@				SIP Trunk	Non Sec UDP SIP Trunk Profile
Cox			Default	*679.@				SIP Trunk	Non Sec UDP SIP Trunk Profile
Cox			Default	9.10152691XXXXXXXXXX				SIP Trunk	Non Sec UDP SIP Trunk Profile

Figure 29 SIP Trunks


Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Trunk Configuration

 Next

Status

 Status: Ready

Trunk Information

Trunk Type*	SIP Trunk ▾
Device Protocol*	SIP ▾
Trunk Service Type*	None(Default) ▾

Figure 30 SIP Trunk (Cont.)

Cisco Unified CM Administration Navigation
 For Cisco Unified Communications Solutions administrator | Search

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾


Trunk Configuration Related

Save Delete Reset Add New

Device Information

Product:	SIP Trunk
Device Protocol:	SIP
Trunk Service Type	None(Default)
Device Name*	Cox
Description	
Device Pool*	Default ▾
Common Device Configuration	< None > ▾
Call Classification*	Use System Default ▾
Media Resource Group List	< None > ▾
Location*	Hub_None ▾
AAR Group	< None > ▾
Tunneled Protocol*	None ▾
QSIG Variant*	No Changes ▾
ASN.1 ROSE OID Encoding*	No Changes ▾
Packet Capture Mode*	None ▾
Packet Capture Duration	0
<input type="checkbox"/> Media Termination Point Required	
<input checked="" type="checkbox"/> Retry Video Call as Audio	
<input type="checkbox"/> Path Replacement Support	
<input type="checkbox"/> Transmit UTF-8 for Calling Party Name	
<input type="checkbox"/> Transmit UTF-8 Names in QSIG APDU	
<input type="checkbox"/> Unattended Port	
<input type="checkbox"/> SRTP Allowed - When this flag is checked, Encrypted TLS needs to be configured in the network to provide will expose keys and other information.	
Consider Traffic on This Trunk Secure*	When using both sRTP and TLS ▾
Route Class Signaling Enabled*	Default ▾
Use Trusted Relay Point*	Default ▾
<input checked="" type="checkbox"/> PSTN Access	
<input type="checkbox"/> Run On All Active Unified CM Nodes	

Figure 31 SIP Trunk (Cont.)







Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

Navigation Cisco Unified

administrator
Search Documenta

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Admin

Trunk Configuration Related Links: [Back](#)

Save 
Delete 
Reset 
Add New 

Intercompany Media Engine (IME)
 E.164 Transformation Profile < None >

Multilevel Precedence and Preemption (MLPP) Information
 MLPP Domain < None >

Call Routing Information
 Remote-Party-Id
 Asserted-Identity
 Asserted-Type* Default
 SIP Privacy* Default

Inbound Calls
 Significant Digits* 4
 Connected Line ID Presentation Default
 Connected Name Presentation* Default
 Calling Search Space < None >
 AAR Calling Search Space < None >
 Prefix DN
 Redirecting Diversion Header Delivery - Inbound

Incoming Calling Party Settings

If the administrator sets the prefix to Default this indicates call processing will use prefix at the next level setting (Device Parameter). Otherwise, the value configured is used as the prefix unless the field is empty in which case there is no prefix.

Clear Prefix Settings
Default Prefix Settings

Number Type	Prefix	Strip Digits	Calling Search Space
Incoming Number	Default	0	< None >

Connected Party Settings
 Connected Party Transformation CSS < None >

Figure 32 SIP Trunk (Cont.)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

administrato

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User

Trunk Configuration

Save Delete Reset Add New

Connected Party Settings

Connected Party Transformation CSS < None >

Use Device Pool Connected Party Transformation CSS

Outbound Calls

Called Party Transformation CSS < None >

Use Device Pool Called Party Transformation CSS

Calling Party Transformation CSS < None >

Use Device Pool Calling Party Transformation CSS

Calling Party Selection* Originator

Calling Line ID Presentation* Default

Calling Name Presentation* Default

Caller ID DN

Caller Name

Redirecting Diversion Header Delivery - Outbound

Redirecting Party Transformation CSS < None >

Use Device Pool Redirecting Party Transformation CSS

SIP Information

Destination

Destination Address is an SRV

	Destination Address	Destination Address IPv6
1*	10.70.10.15	

MTP Preferred Originating Codec* 711ulaw


Presence Group* Standard Presence group

SIP Trunk Security Profile* Non Sec UDP SIP Trunk Profile

Rerouting Calling Search Space < None >

Out-Of-Dialog Refer Calling Search Space < None >





Figure 33 SIP Trunk (Cont.)


Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

administrato

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User

Trunk Configuration

 Save
  Delete
  Reset
  Add New

SIP Information

Destination

Destination Address is an SRV

	Destination Address	Destination Address IPv6
1*	<input type="text" value="10.70.10.15"/>	<input type="text"/>

MTP Preferred Originating Codec*

Presence Group*

SIP Trunk Security Profile*

Rerouting Calling Search Space

Out-Of-Dialog Refer Calling Search Space

SUBSCRIBE Calling Search Space

SIP Profile*

DTMF Signaling Method*

Normalization Script

Normalization Script

Enable Trace

	Parameter Name	Parameter Value
1	<input type="text"/>	<input type="text"/>

Geolocation Configuration

Geolocation

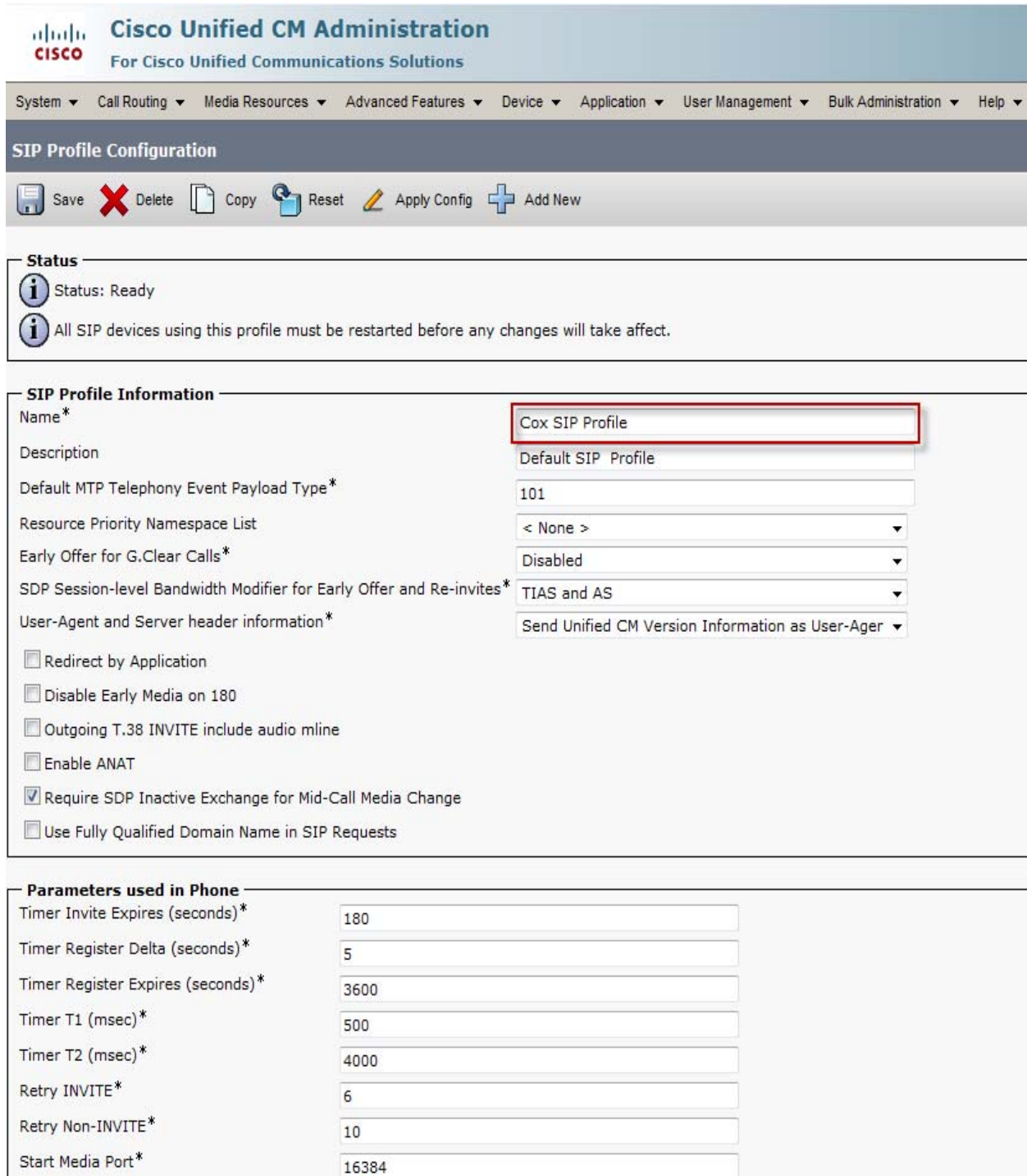
Geolocation Filter

Send Geolocation Information

Figure 34 SIP Trunk (Cont.)

6.3.8 SIP Profiles

The Cox SIP Profile is created by modifying the Standard SIP Profile.



The screenshot shows the Cisco Unified CM Administration interface for SIP Profile Configuration. The page title is "SIP Profile Configuration" and it includes a navigation menu with options like System, Call Routing, Media Resources, etc. Below the navigation menu are icons for Save, Delete, Copy, Reset, Apply Config, and Add New. The main content area is divided into three sections: Status, SIP Profile Information, and Parameters used in Phone.

Status

- Status: Ready
- All SIP devices using this profile must be restarted before any changes will take affect.

SIP Profile Information

Name*	Cox SIP Profile
Description	Default SIP Profile
Default MTP Telephony Event Payload Type*	101
Resource Priority Namespace List	< None >
Early Offer for G.Clear Calls*	Disabled
SDP Session-level Bandwidth Modifier for Early Offer and Re-invites*	TIAS and AS
User-Agent and Server header information*	Send Unified CM Version Information as User-Ager

Redirect by Application

Disable Early Media on 180

Outgoing T.38 INVITE include audio mline

Enable ANAT

Require SDP Inactive Exchange for Mid-Call Media Change

Use Fully Qualified Domain Name in SIP Requests

Parameters used in Phone

Timer Invite Expires (seconds)*	180
Timer Register Delta (seconds)*	5
Timer Register Expires (seconds)*	3600
Timer T1 (msec)*	500
Timer T2 (msec)*	4000
Retry INVITE*	6
Retry Non-INVITE*	10
Start Media Port*	16384

Figure 35 SIP Profile



SIP Profile Configuration

 Save
  Delete
  Copy
  Reset
  Apply Config
  Add New

Stop Media Port*	32766
Call Pickup URI*	x-cisco-serviceuri-pickup
Call Pickup Group Other URI*	x-cisco-serviceuri-opickup
Call Pickup Group URI*	x-cisco-serviceuri-gpickup
Meet Me Service URI*	x-cisco-serviceuri-meetme
User Info*	None ▾
DTMF DB Level*	Nominal ▾
Call Hold Ring Back*	Off ▾
Anonymous Call Block*	Off ▾
Caller ID Blocking*	Off ▾
Do Not Disturb Control*	User ▾
Telnet Level for 7940 and 7960*	Disabled ▾
Timer Keep Alive Expires (seconds)*	120
Timer Subscribe Expires (seconds)*	120
Timer Subscribe Delta (seconds)*	5
Maximum Redirections*	70
Off Hook To First Digit Timer (milliseconds)*	15000
Call Forward URI*	x-cisco-serviceuri-cfwdall
Speed Dial (Abbreviated Dial) URI*	x-cisco-serviceuri-abbrdial
<input checked="" type="checkbox"/> Conference Join Enabled <input type="checkbox"/> RFC 2543 Hold <input checked="" type="checkbox"/> Semi Attended Transfer <input type="checkbox"/> Enable VAD <input type="checkbox"/> Stutter Message Waiting	

Trunk Specific Configuration

Reroute Incoming Request to new Trunk based on*	Never ▾
RSVP Over SIP*	Local RSVP ▾
<input checked="" type="checkbox"/> Fall back to local RSVP	

Figure 36 SIP Profile (Cont.)



SIP Rel1XX Options* Send PRACK for all 1xx Messages ▾

Deliver Conference Bridge Identifier

Early Offer support for voice and video calls (insert MTP if needed)

Send send-receive SDP in mid-call INVITE

Allow Presentation Sharing using BFCP

SIP OPTIONS Ping

Enable OPTIONS Ping to monitor destination status for Trunks with Service Type "None (Default)"

Ping Interval for In-service and Partially In-service Trunks (seconds)*

Ping Interval for Out-of-service Trunks (seconds)*

Ping Retry Timer (milliseconds)*

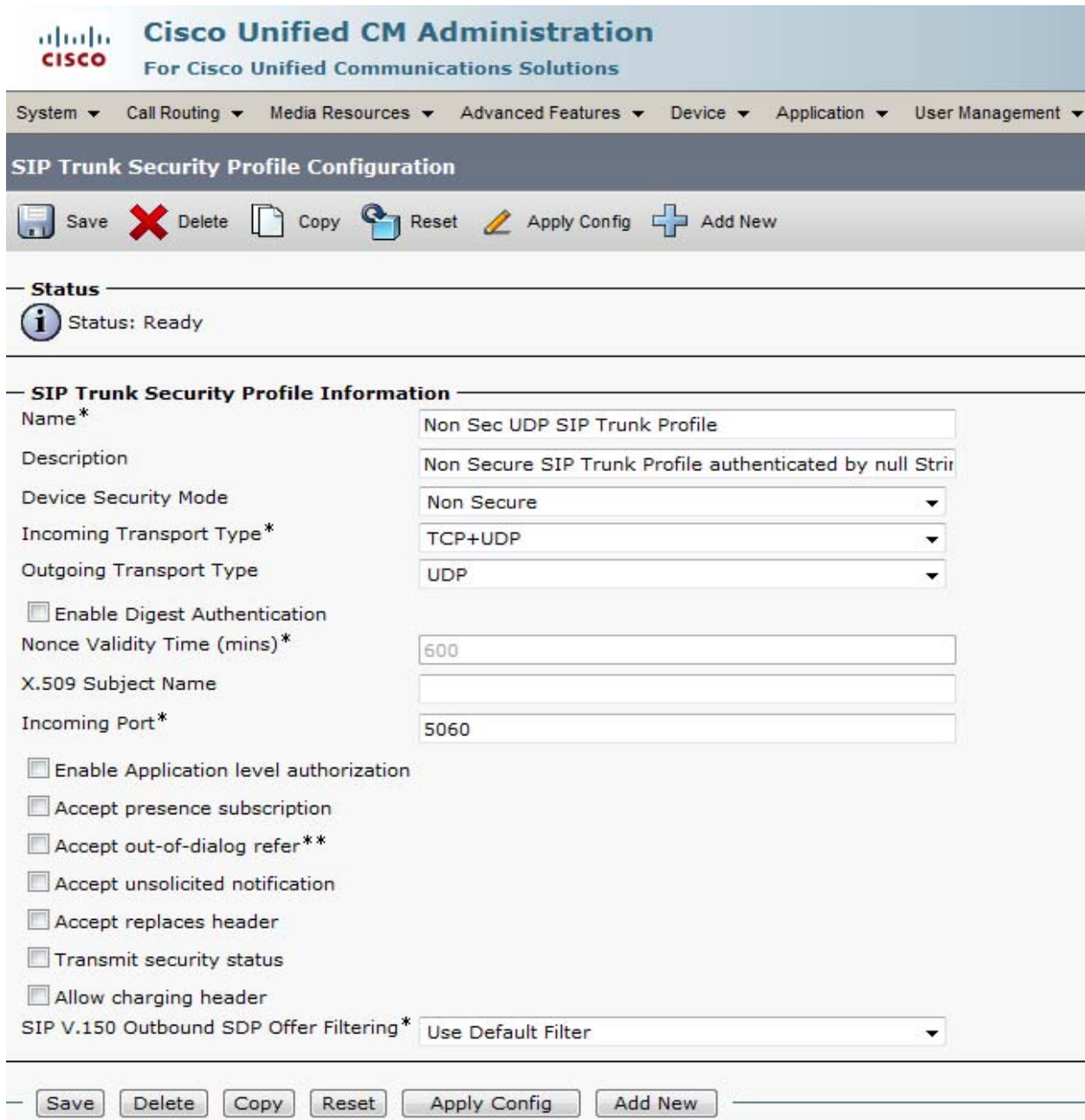
Ping Retry Count*

*- indicates required item.

Figure 37 SIP Profile (Cont.)

6.3.9 SIP Trunk Security Profile

1. Navigate to System > Security > SIP Trunk Security Profile
2. Select Add New
3. Assign a SIP Trunk Security Profile name
4. The Incoming Transport Type and Outgoing Transport Type are default settings
5. Select Save



The screenshot shows the Cisco Unified CM Administration interface for configuring a SIP Trunk Security Profile. The page title is "SIP Trunk Security Profile Configuration". At the top, there is a navigation menu with options: System, Call Routing, Media Resources, Advanced Features, Device, Application, and User Management. Below the navigation menu, there are several action buttons: Save, Delete, Copy, Reset, Apply Config, and Add New. The main content area is divided into sections: Status, SIP Trunk Security Profile Information, and a bottom row of action buttons.

Status
 Status: Ready

SIP Trunk Security Profile Information

Name*	Non Sec UDP SIP Trunk Profile
Description	Non Secure SIP Trunk Profile authenticated by null Strir
Device Security Mode	Non Secure
Incoming Transport Type*	TCP+UDP
Outgoing Transport Type	UDP
<input type="checkbox"/> Enable Digest Authentication	
Nonce Validity Time (mins)*	600
X.509 Subject Name	
Incoming Port*	5060
<input type="checkbox"/> Enable Application level authorization	
<input type="checkbox"/> Accept presence subscription	
<input type="checkbox"/> Accept out-of-dialog refer**	
<input type="checkbox"/> Accept unsolicited notification	
<input type="checkbox"/> Accept replaces header	
<input type="checkbox"/> Transmit security status	
<input type="checkbox"/> Allow charging header	
SIP V.150 Outbound SDP Offer Filtering*	Use Default Filter

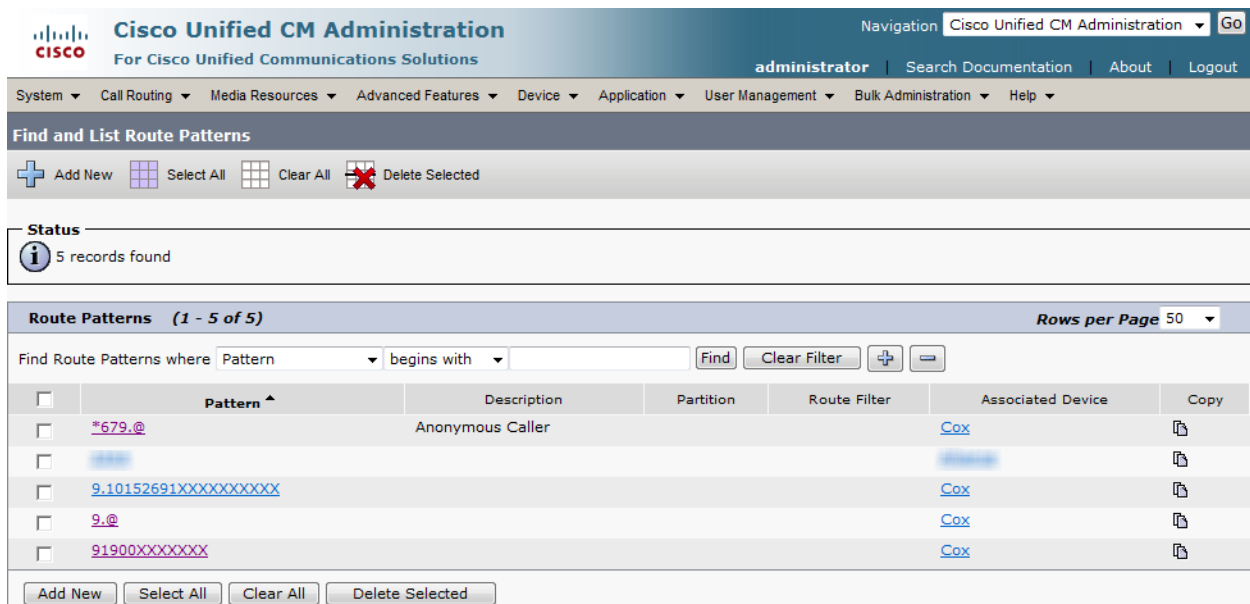
At the bottom of the configuration area, there are buttons for Save, Delete, Copy, Reset, Apply Config, and Add New.

Figure 38 SIP Trunk Security Profile

6.3.10 Route Pattern

The Route Pattern is the essence of the CUCM. It works in conjunction with route filters and route lists to direct calls to specific devices and to include, exclude, or modify specific digit patterns. Figure 34 is the Route Pattern list. The following steps describe adding a new route pattern.


1. Select Add New
2. Define a Route Pattern
3. Select a Gateway/Route List
4. In the Calling Party Transformations section, define the Calling Party Transform Mask. In this case 678238XXXX is used. This setting manipulates the appearance of the calling party's number for outgoing calls (CLID).
5. In the Called Party transformations section, define the Discard Digits. PreDot is used for this example. In this case, the leading 9 will be stripped from the dialed digit string.
6. Select Save



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". Below this is a menu bar with options like System, Call Routing, Media Resources, etc. The main content area is titled "Find and List Route Patterns" and includes buttons for "Add New", "Select All", "Clear All", and "Delete Selected". A status box indicates "5 records found". Below this is a table of route patterns with columns for Pattern, Description, Partition, Route Filter, Associated Device, and Copy. The table lists five patterns, including "*679.@", "9.10152691XXXXXXXXXX", "9.@", and "91900XXXXXXXXX".

Pattern	Description	Partition	Route Filter	Associated Device	Copy
*679.@	Anonymous Caller			Cox	
9.10152691XXXXXXXXXX				Cox	
9.@				Cox	
91900XXXXXXXXX				Cox	





Figure 39 Route Pattern


Cisco Unified CM Administration
 For Cisco Unified Communications Solutions


Navigation
administrator

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

Route Pattern Configuration

 Save
 Delete
 Copy
 Add New

Status

 Status: Ready

Pattern Definition

Route Pattern*	<input type="text" value="9.@"/>
Route Partition	<input style="width: 100%;" type="text" value=" < None > "/>
Description	<input type="text"/>
Numbering Plan*	<input style="width: 100%;" type="text" value=" NANP "/>
Route Filter	<input style="width: 100%;" type="text" value=" < None > "/>
MLPP Precedence*	<input style="width: 100%;" type="text" value=" Default "/>
<input type="checkbox"/> Apply Call Blocking Percentage	<input type="text"/>
Resource Priority Namespace Network Domain	<input style="width: 100%;" type="text" value=" < None > "/>
Route Class*	<input style="width: 100%;" type="text" value=" Default "/>
Gateway/Route List*	<input style="width: 100%;" type="text" value=" Cox "/>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input style="width: 100%;" type="text" value=" No Error "/>
Call Classification*	<input style="width: 100%;" type="text" value=" OffNet "/>
<input type="checkbox"/> Allow Device Override <input checked="" type="checkbox"/> Provide Outside Dial Tone <input type="checkbox"/> Allow Overlap Sending <input type="checkbox"/> Urgent Priority	
<input type="checkbox"/> Require Forced Authorization Code	
Authorization Level*	<input style="width: 100%;" type="text" value=" 0 "/>
<input type="checkbox"/> Require Client Matter Code	

Figure 40 Route Pattern (Cont.)

admin

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾

Route Pattern Configuration

Save ✖ Delete Copy + Add New

Require Short Pattern Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask:

Prefix Digits (Outgoing Calls):

Calling Line ID Presentation*:

Calling Name Presentation*:

Calling Party Number Type*:

Calling Party Numbering Plan*:

Connected Party Transformations

Connected Line ID Presentation*:

Connected Name Presentation*:

Called Party Transformations

Discard Digits:

Called Party Transform Mask:

Prefix Digits (Outgoing Calls):

Called Party Number Type*:

Called Party Numbering Plan*:

ISDN Network-Specific Facilities Information Element

Network Service Protocol:

Carrier Identification Code:

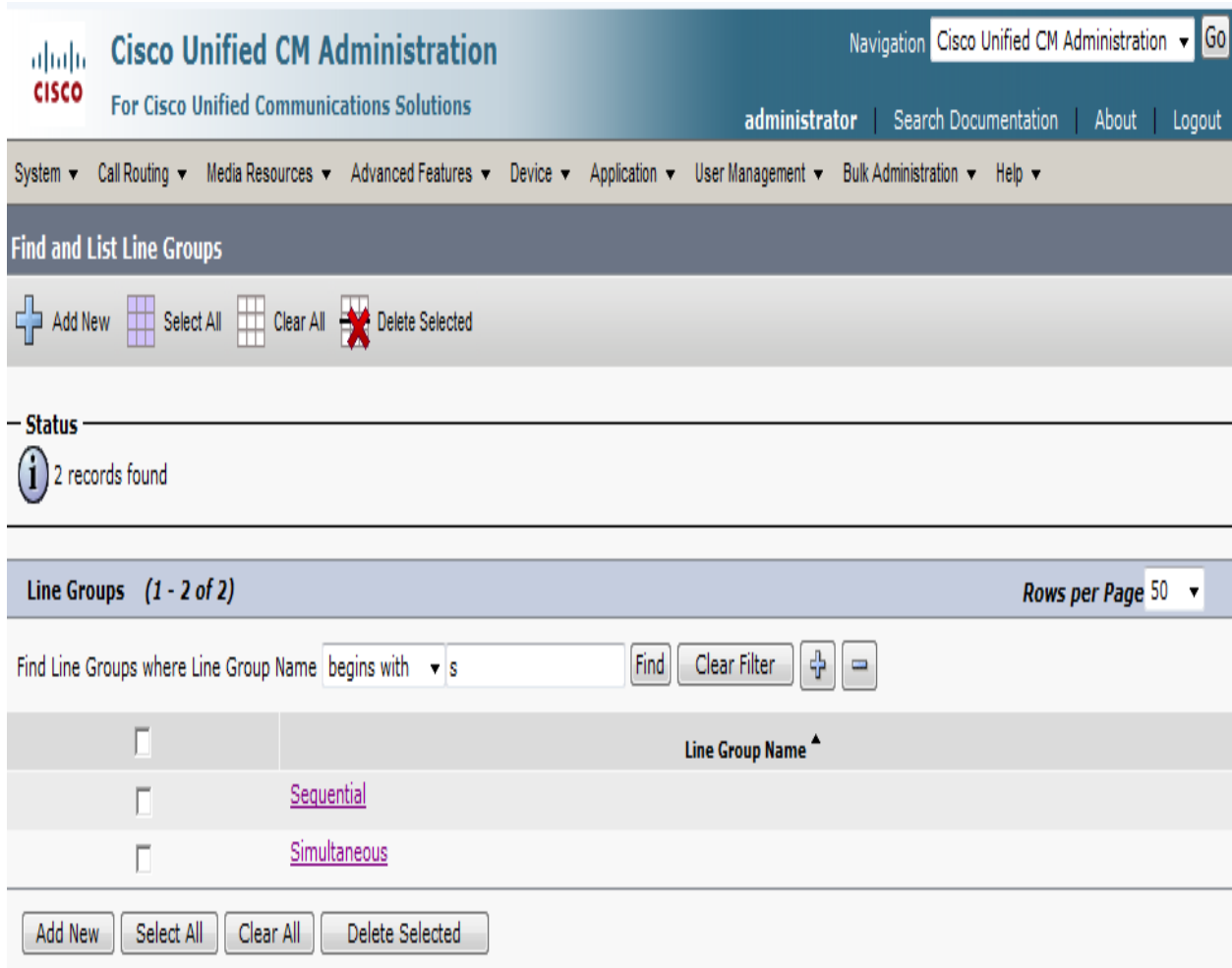
Network Service	Service Parameter Name
<input type="text" value="-- Not Selected --"/>	<input type="text" value="< Not Exist >"/>

Save Delete Copy Add New

Figure 41 Route Pattern (Cont.)

6.3.11 Line Groups

Line groups are referenced by Hunt Lists



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

administrator | Search Documentation | About | Logout

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Find and List Line Groups

— Status —

i 2 records found

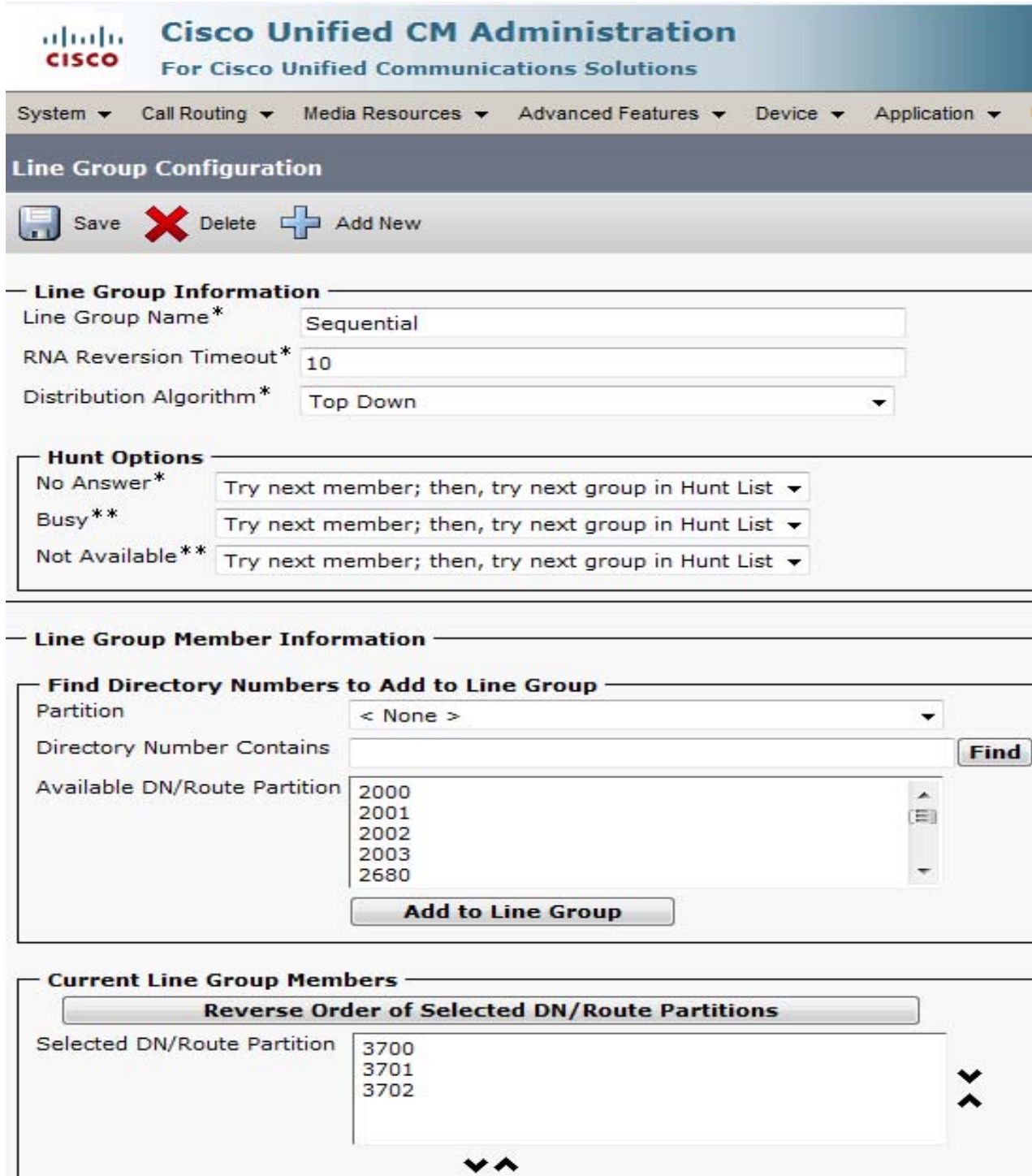
Line Groups (1 - 2 of 2) Rows per Page 50 ▾

Find Line Groups where Line Group Name begins with

<input type="checkbox"/>	Line Group Name ^
<input type="checkbox"/>	Sequential
<input type="checkbox"/>	Simultaneous

Figure 42 Line Groups



Configure the Distribution Algorithm to determine the order in which Line Group members are selected. For Sequential, select Top Down distribution



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾

Line Group Configuration

Save  Delete  Add New

Line Group Information

Line Group Name*

RNA Reversion Timeout*

Distribution Algorithm*

Hunt Options

No Answer*

Busy**

Not Available**

Line Group Member Information

Find Directory Numbers to Add to Line Group

Partition

Directory Number Contains

Available DN/Route Partition

- 2000
- 2001
- 2002
- 2003
- 2680

Current Line Group Members

Selected DN/Route Partition

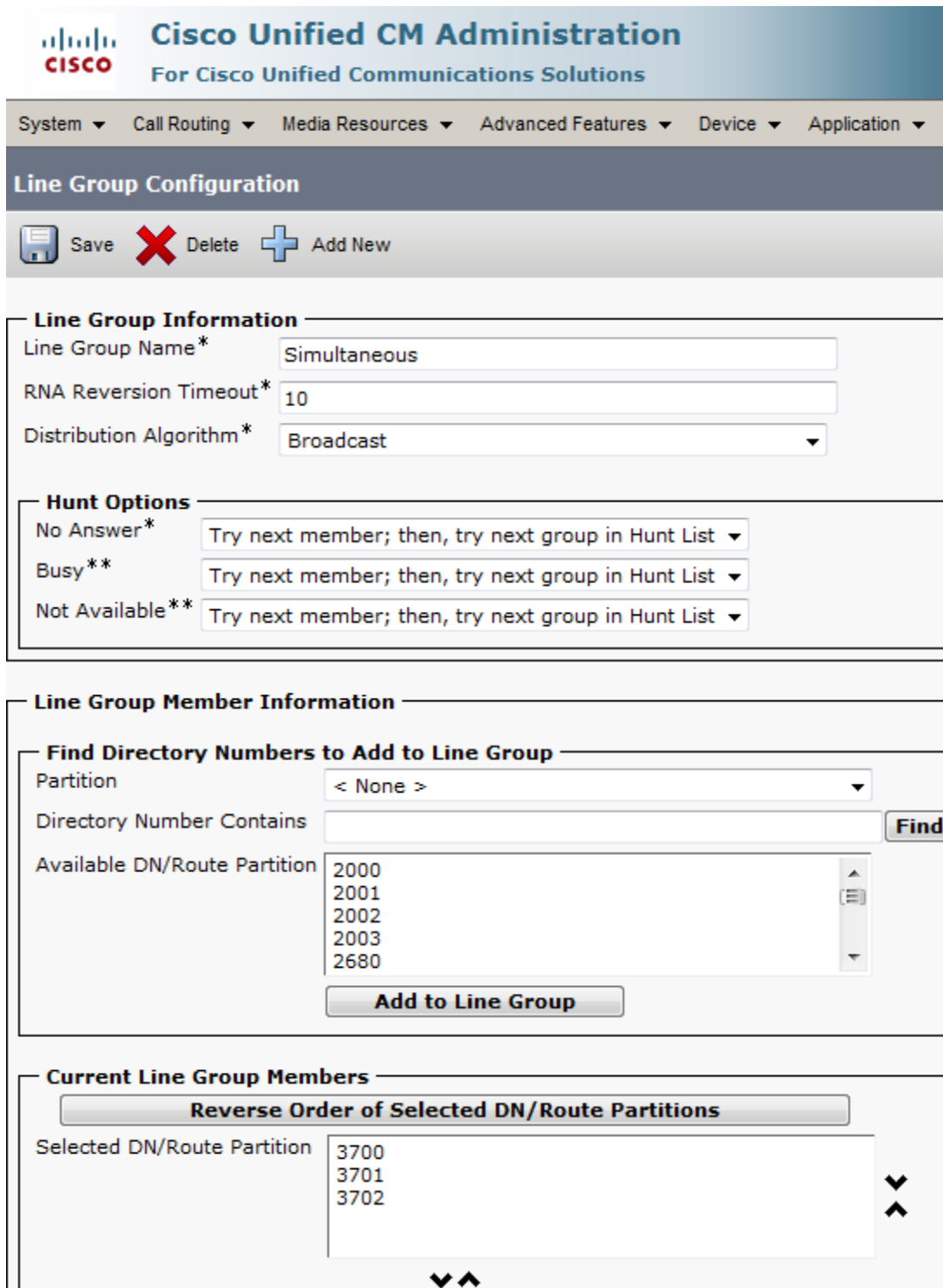
- 3700
- 3701
- 3702

⌵
⌶

⌵ ⌶

Figure 43 Sequential Line Group

For Simultaneous distribution, select Broadcast as the Distribution Algorithm



The screenshot shows the Cisco Unified CM Administration interface for configuring a Line Group. The page title is "Cisco Unified CM Administration" with the subtitle "For Cisco Unified Communications Solutions". The navigation menu includes System, Call Routing, Media Resources, Advanced Features, Device, and Application. The main heading is "Line Group Configuration".

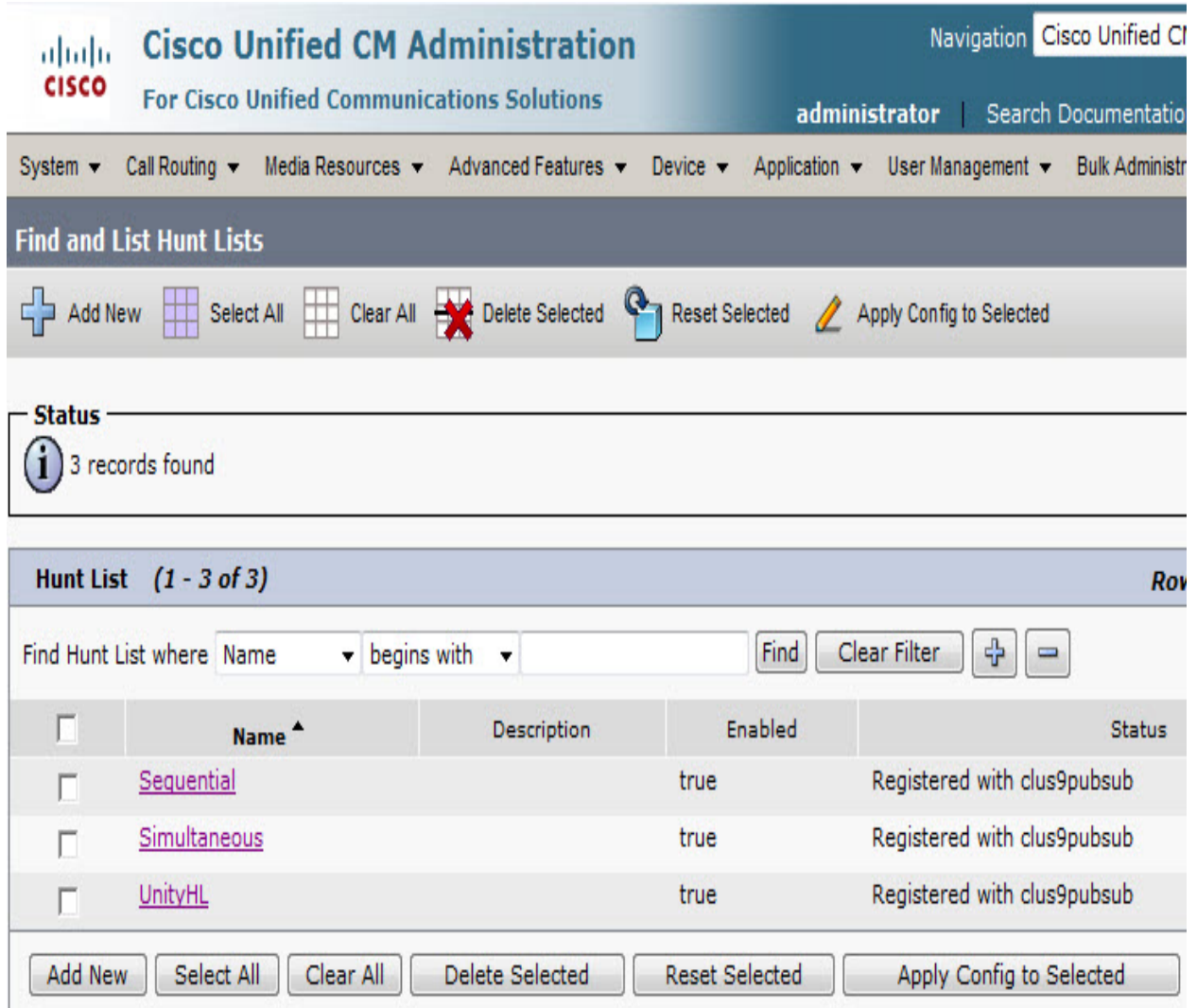
Below the heading are three buttons: "Save" (floppy disk icon), "Delete" (red X icon), and "Add New" (plus icon). The configuration is divided into three sections:

- Line Group Information:**
 - Line Group Name*: Simultaneous
 - RNA Reversion Timeout*: 10
 - Distribution Algorithm*: Broadcast
- Hunt Options:**
 - No Answer*: Try next member; then, try next group in Hunt List
 - Busy**: Try next member; then, try next group in Hunt List
 - Not Available**: Try next member; then, try next group in Hunt List
- Line Group Member Information:**
 - Find Directory Numbers to Add to Line Group:**
 - Partition: < None >
 - Directory Number Contains: [Empty field]
 - Find: [Button]
 - Available DN/Route Partition: 2000, 2001, 2002, 2003, 2680
 - Add to Line Group: [Button]
 - Current Line Group Members:**
 - Reverse Order of Selected DN/Route Partitions: [Button]
 - Selected DN/Route Partition: 3700, 3701, 3702

Figure 44 Simultaneous Line Group

6.3.12 Hunt Lists

Hunt Lists are populated with Line Groups. Each Line Group contains Line Group Members.



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are several menu items: System, Call Routing, Media Resources, Advanced Features, Device, Application, User Management, and Bulk Administration. The main heading is "Find and List Hunt Lists". Below this heading, there are several action buttons: Add New, Select All, Clear All, Delete Selected, Reset Selected, and Apply Config to Selected. A status bar indicates "3 records found". Below the status bar, there is a table titled "Hunt List (1 - 3 of 3)". The table has columns for Name, Description, Enabled, and Status. The table contains three rows: Sequential, Simultaneous, and UnityHL. Below the table, there are several action buttons: Add New, Select All, Clear All, Delete Selected, Reset Selected, and Apply Config to Selected.

Status

3 records found


Hunt List (1 - 3 of 3)

Find Hunt List where Name begins with Find Clear Filter + -

<input type="checkbox"/>	Name ^	Description	Enabled	Status
<input type="checkbox"/>	Sequential		true	Registered with clus9pubsub
<input type="checkbox"/>	Simultaneous		true	Registered with clus9pubsub
<input type="checkbox"/>	UnityHL		true	Registered with clus9pubsub

Add New Select All Clear All Delete Selected Reset Selected Apply Config to Selected







Figure 45 Hunt Lists


Cisco Unified CM Administration
 For Cisco Unified Communications Solutions


administrato

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User ▾

Hunt List Configuration

 Save
  Delete
  Copy
  Reset
  Apply Config
  Add New

Status

 Status: Ready

Hunt List Information

Device is trusted

Name*

Description

Cisco Unified Communications Manager Group*

Enable this Hunt List (change effective on Save; no reset required)

For Voice Mail Usage

Hunt List Member Information


Add Line Group

Selected Groups**

▼ ▲

Removed Groups***

Figure 46 Hunt Lists (Cont.)









Cisco Unified CM Administration

For Cisco Unified Communications Solutions


administrato

System ▾
Call Routing ▾
Media Resources ▾
Advanced Features ▾
Device ▾
Application ▾
User

Hunt List Configuration

 Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Status


Status: Ready

Hunt List Information

Device is trusted

Name*

Description

Cisco Unified Communications Manager Group*

Enable this Hunt List (change effective on Save; no reset required)

For Voice Mail Usage

Hunt List Member Information

Add Line Group

Selected Groups**

Simultaneous

▼
▲

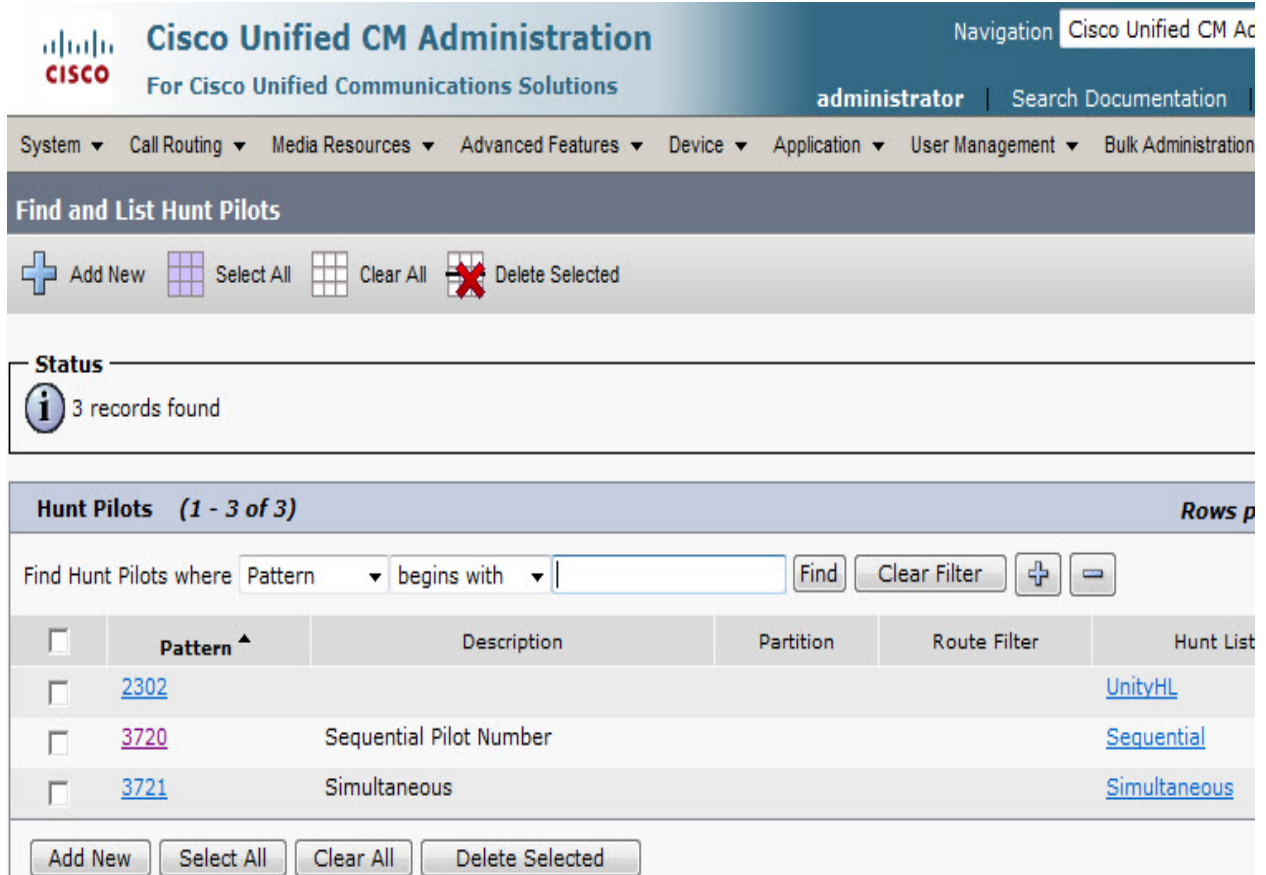
▼ ▲

Removed Groups***

Figure 47 Hunt Lists (Cont.)

6.3.13 Hunt Pilot Numbers


To configure Hunt Pilot Numbers, navigate to Call Routing > Route/Hunt > Hunt Pilot



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are several tabs: System, Call Routing, Media Resources, Advanced Features, Device, Application, User Management, and Bulk Administration. The "Call Routing" tab is selected, and the "Hunt Pilots" page is displayed. The page title is "Find and List Hunt Pilots". Below the title, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected". A "Status" section indicates "3 records found". Below this, there is a table titled "Hunt Pilots (1 - 3 of 3)". The table has columns for "Pattern", "Description", "Partition", "Route Filter", and "Hunt List". The table contains three rows of data. Below the table, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected".





Pattern	Description	Partition	Route Filter	Hunt List
2302				UnityHL
3720	Sequential Pilot Number			Sequential
3721	Simultaneous			Simultaneous

Figure 48 Hunt Pilot Numbers


Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Hunt Pilot Configuration

 Save
  Delete
  Copy
  Add New

Pattern Definition

Hunt Pilot*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Hunt List*

Alerting Name

ASCII Alerting Name

Route Option

Route this pattern
 Block this pattern

Provide Outside Dial Tone
 Urgent Priority


Hunt Forward Settings

	Use Personal Preferences	Destination
Forward Hunt No Answer	<input type="checkbox"/> or	<input type="text"/>
Forward Hunt Busy	<input type="checkbox"/> or	<input type="text"/>
Call Pickup Group		<input type="text" value=" < None >"/>
Maximum Hunt Timer		<input type="text"/>

Park Monitoring





	Destination
Park Monitoring Forward No Retrieve Destination	<input type="text"/>

Figure 49 Hunt Pilot Number Unity


Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Hunt Pilot Configuration

 Save
  Delete
  Copy
  Add New

Park Monitoring

	Destination
Park Monitoring Forward No Retrieve Destination	<input style="width: 95%;" type="text"/>

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation*

Calling Name Presentation*

Calling Party Number Type*

Calling Party Numbering Plan*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Number Type*


Called Party Numbering Plan*

AAR Group Settings

AAR Group





External Number Mask

Figure 50 Hunt Pilot Number Unity (Cont.)



Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Hunt Pilot Configuration

 Save
 Delete
 Copy
 Add New

Status

 Status: Ready

Pattern Definition

Hunt Pilot*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Hunt List*

Alerting Name

ASCII Alerting Name

Route Option

Route this pattern

Block this pattern

Provide Outside Dial Tone Urgent Priority

Hunt Forward Settings

	Use Personal Preferences	Destination
Forward Hunt No Answer	<input type="checkbox"/> or	<input type="text"/>
Forward Hunt Busy	<input type="checkbox"/> or	<input type="text"/>
Call Pickup Group		<input type="text" value=" < None >"/>
Maximum Hunt Timer		<input type="text"/>

Figure 51 Hunt Pilot Number Sequential



Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Hunt Pilot Configuration

 Save
  Delete
  Copy
  Add New

Pattern Definition

Hunt Pilot*	3721
Route Partition	< None >
Description	Simultaneous
Numbering Plan	< None >
Route Filter	< None >
MLPP Precedence*	Default
Hunt List*	Simultaneous
Alerting Name	
ASCII Alerting Name	
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern No Error
<input checked="" type="checkbox"/> Provide Outside Dial Tone <input type="checkbox"/> Urgent Priority	

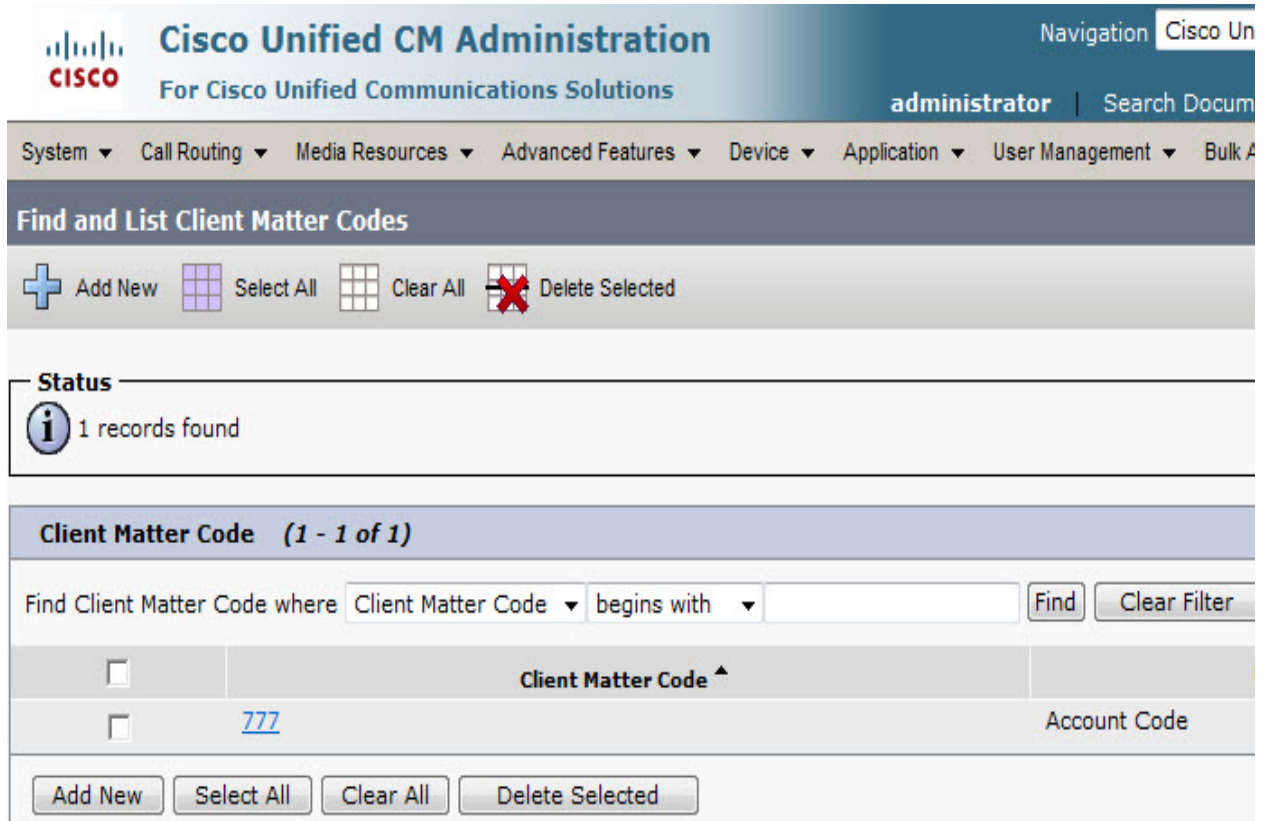
Hunt Forward Settings

	Use Personal Preferences	Destination
Forward Hunt No Answer	<input type="checkbox"/> or	
Forward Hunt Busy	<input type="checkbox"/> or	
Call Pickup Group		< None >
Maximum Hunt Timer		

Figure 52 Hunt Pilot Number Simultaneous

6.3.14 Client Matter Codes

Client Matter Codes are configured to track phone calls for billing purposes. To configure Client Matter Codes, navigate to Call Routing > Client Matter Codes > Add New. After a code is created, it must be activated at the route pattern level.



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are several menu items: System, Call Routing, Media Resources, Advanced Features, Device, Application, User Management, and Bulk A. The main content area is titled "Find and List Client Matter Codes". Below this title, there are several action buttons: Add New, Select All, Clear All, and Delete Selected. A status bar indicates "1 records found". Below the status bar, there is a table with the following columns: Client Matter Code and Account Code. The table contains one row with the value "777" in the Client Matter Code column. At the bottom of the table, there are buttons for Add New, Select All, Clear All, and Delete Selected.

Figure 53 Client Matter Codes

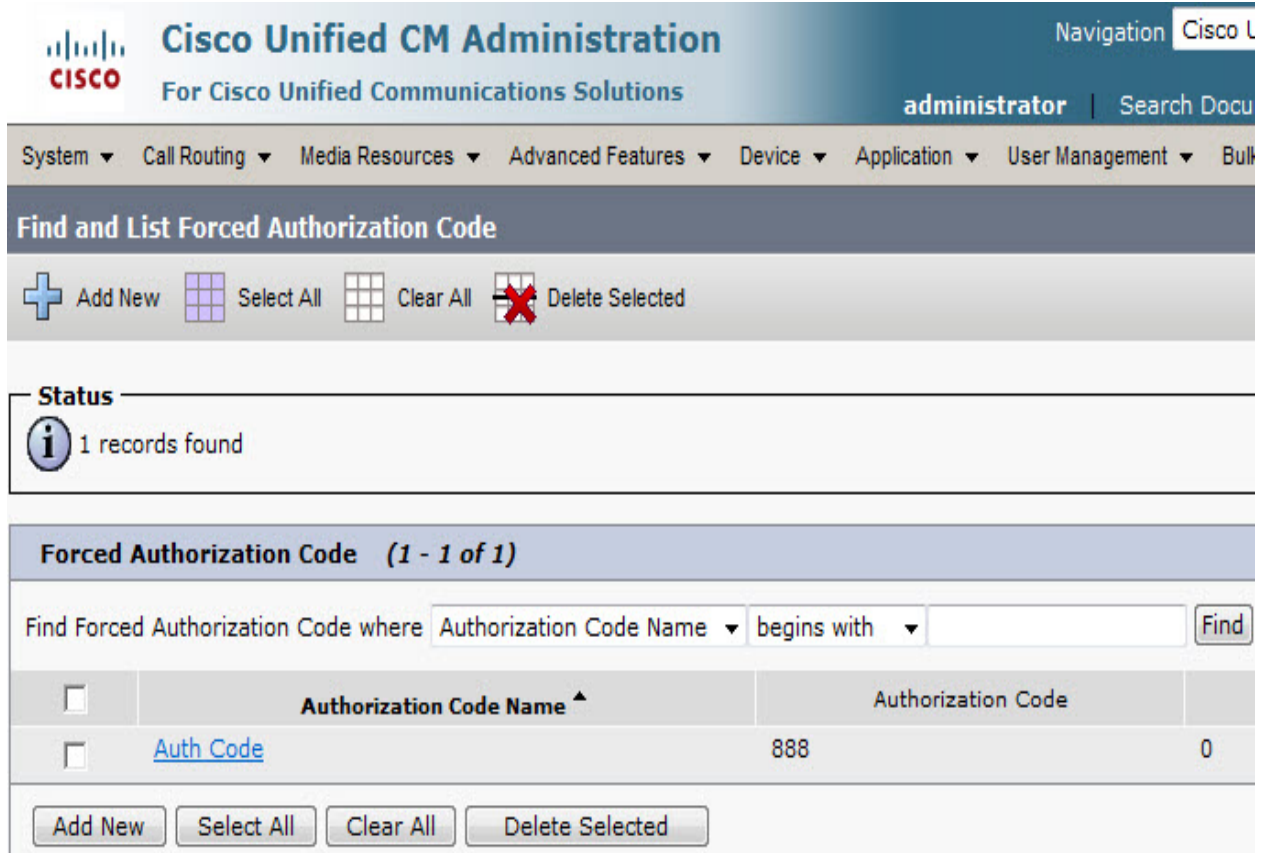


The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". Below this, there are four menu items: "System", "Call Routing", "Media Resources", and "Advanced Features". The main heading is "Client Matter Codes Configuration". Below the heading, there are three buttons: "Save" (with a floppy disk icon), "Delete" (with a red X icon), and "Add New" (with a blue plus icon). The interface is divided into two sections. The first section, titled "Status", shows a status of "Ready" with an information icon. The second section, titled "CMC Information", contains two input fields: "Client Matter Code*" with the value "777" and "Description" with the value "Account Code". Below these fields are three buttons: "Save", "Delete", and "Add New". At the bottom, there is an information icon followed by the text "*- indicates required item."

Figure 54 Client Matter Codes (Cont.)

6.3.15 Forced Authorization Codes

Authorization Codes are configured for security reasons. The caller must enter the code in order to complete the call. Navigate to Call Routing > Forced Authorization Codes > Add New. After a code is created, it must be activated at the route pattern level.



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are several tabs: System, Call Routing, Media Resources, Advanced Features, Device, Application, User Management, and Bulk. The "Call Routing" tab is selected, and the "Forced Authorization Code" sub-tab is active. The page title is "Find and List Forced Authorization Code". Below the title, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected". A "Status" section indicates "1 records found". Below this, there is a search bar with the text "Find Forced Authorization Code where" and a dropdown menu set to "Authorization Code Name" and "begins with". A "Find" button is next to the search bar. Below the search bar, there is a table with the following data:

<input type="checkbox"/>	Authorization Code Name ^	Authorization Code	
<input type="checkbox"/>	Auth Code	888	0

At the bottom of the table, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected".

Figure 55 Forced Authorization Codes



Cisco Unified CM Administration

For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Forced Authorization Code Configuration



Save



Delete



Add New

Status



Status: Ready

Forced Authorization Code Information

Authorization Code Name*	<input type="text" value="Auth Code"/>
Authorization Code*	<input type="text" value="888"/>
Authorization Level*	<input type="text" value="0"/>

Save

Delete

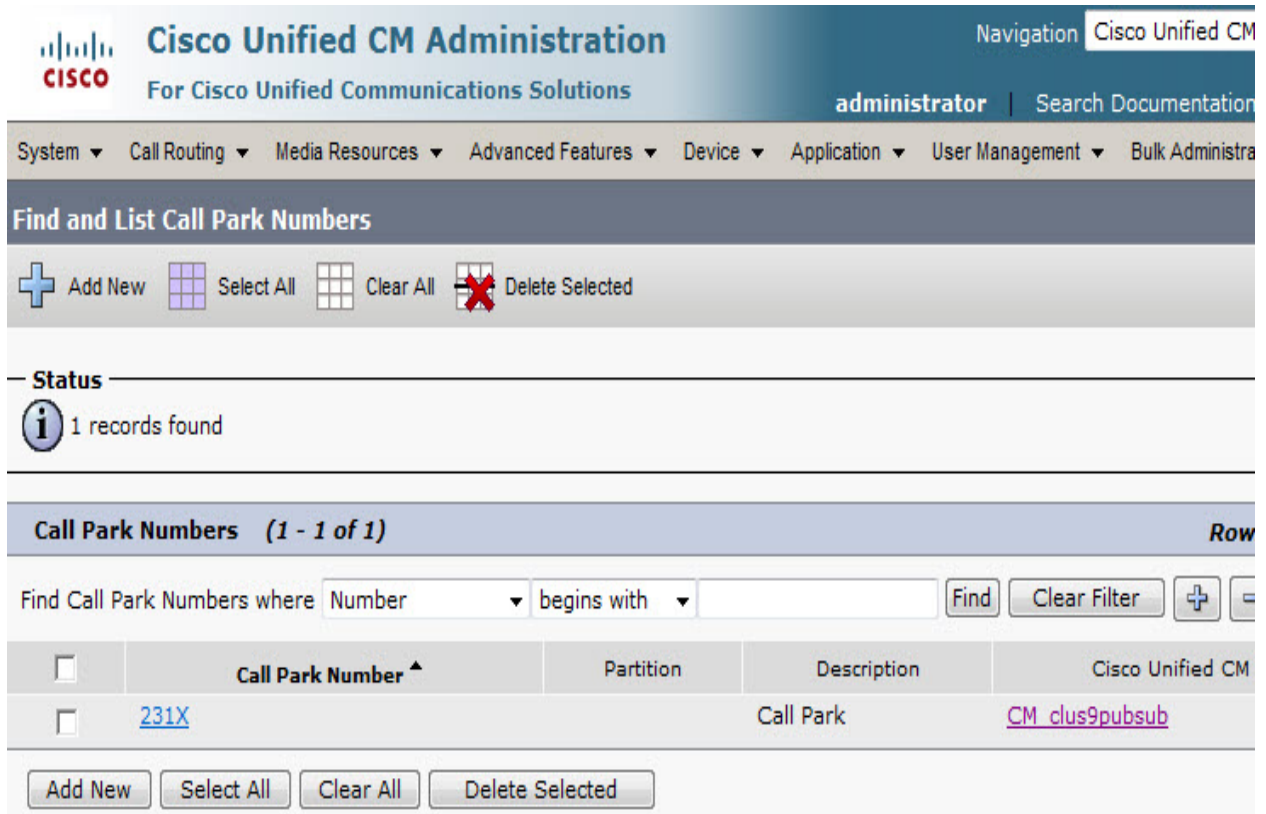
Add New



*- indicates required item.

Figure 56 Forced Authorization Codes (Cont.)

6.3.16 Call Park Numbers



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are several menu items: System, Call Routing, Media Resources, Advanced Features, Device, Application, User Management, and Bulk Administration. The main content area is titled "Find and List Call Park Numbers". Below this title, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected". A "Status" section indicates "1 records found". Below this, there is a table with the following columns: "Call Park Number", "Partition", "Description", and "Cisco Unified CM". The table contains one row with the value "231X" in the "Call Park Number" column, "Call Park" in the "Description" column, and "CM clus9pubsub" in the "Cisco Unified CM" column. Below the table, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected".

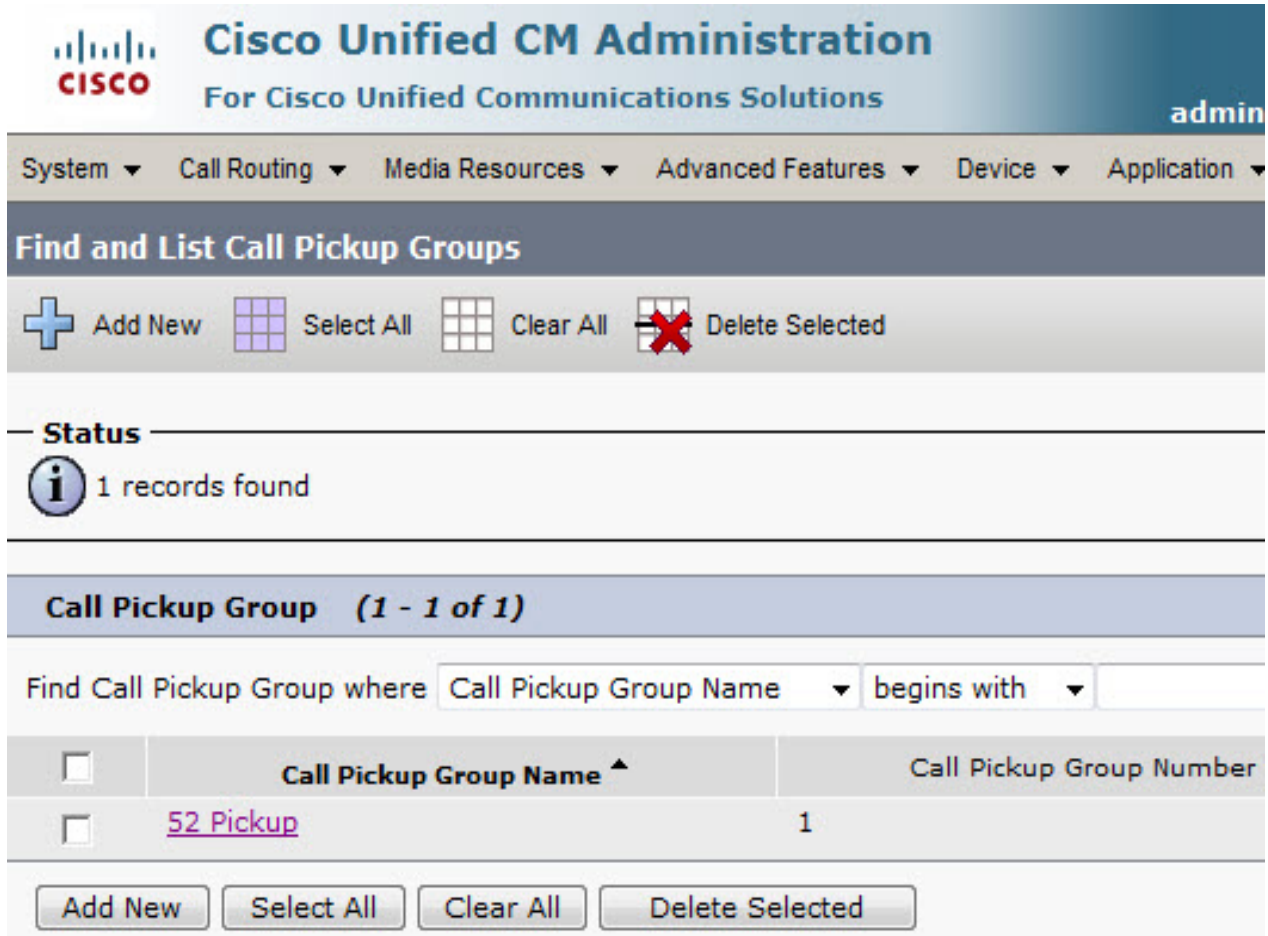
Figure 57 Call Park Numbers

The screenshot displays the Cisco Unified CM Administration web interface. At the top, the Cisco logo and 'Cisco Unified CM Administration' are visible, along with the text 'For Cisco Unified Communications Solutions'. A navigation menu includes 'System', 'Call Routing', 'Media Resources', 'Advanced Features', 'Device', 'Application', and 'User'. The current page is titled 'Call Park Number Configuration'. Below the title, there are icons for 'Save', 'Delete', 'Copy', and 'Add New'. The main configuration area is divided into sections: 'Status' shows 'Status: Ready' with an information icon; 'Call Park Configuration.' contains four fields: 'Call Park Number/Range*' with the value '231X', 'Description' with 'Call Park', 'Partition' with a dropdown menu showing '< None >', and 'Cisco Unified Communications Manager*' with a dropdown menu showing 'CM_clus9pubsub'. At the bottom of the configuration area, there are buttons for 'Save', 'Delete', 'Copy', and 'Add New'. A note at the bottom left states '*- indicates required item.' with an information icon.

Figure 58 Call Park Numbers (Cont.)

6.3.17 Call Pickup Groups


A phone line can be assigned to only one pickup group. A user can pick up a call by pressing the Pickup softkey if they are in the same pickup group as the ringing phone. If not, the user must press the Group Pickup softkey and enter the pickup group number



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation menu with options: System, Call Routing, Media Resources, Advanced Features, Device, and Application. The main heading is "Find and List Call Pickup Groups". Below this, there are action buttons: Add New, Select All, Clear All, and Delete Selected. A status bar indicates "1 records found". The table below shows one record for a Call Pickup Group named "52 Pickup" with a group number of 1. At the bottom, there are buttons for Add New, Select All, Clear All, and Delete Selected.

<input type="checkbox"/>	Call Pickup Group Name ^	Call Pickup Group Number
<input type="checkbox"/>	52 Pickup	1

Figure 59 Call Pickup Groups



Cisco Unified CM Administration





For Cisco Unified Communications Solutions

Navigation


administrator | Settings

System ▾
Call Routing ▾
Media Resources ▾
Advanced Features ▾
Device ▾
Application ▾
User Management ▾

Call Pickup Group Configuration Related

 Save
  Delete
  Copy
  Add New

Status

 Status: Ready

Call Pickup Group Information

Call Pickup Group Name*

Call Pickup Group Number*

Description

Partition

Call Pickup Group Notification Settings

Call Pickup Group Notification Policy

Call Pickup Group Notification Timer (seconds)*

Call Information Display For Call Pickup Group Notification

Calling Party Information
 Called Party Information

Associated Call Pickup Group Information

Find Pickup Numbers by Numbers/Partition

Partition

Call Pickup Group Numbers Contain **Lookup**

Available Call Pickup Groups

(No Matches Found)


Add to Associated Call Pickup Groups

Current Associated Call Pickup Groups

Selected Call Pickup Groups

Figure 60 Call Pickup Groups (Cont.)

6.3.18 Route Plan Report



Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾
administrator | Search Documentation | About | Log

Find and List Route Plan Report Related Links: View in file

Status

i 31 records found

Find and List Route Plan Report (1 - 31 of 31) Rows per Page 50

Find All Patterns ▾ Find and List Route Plan Report where Pattern/Directory Number ▾ begins with ▾ Find

Select item or enter search text ▾






























		Pattern/Directory Number ^	Partition	Type	Route Detail
<input type="checkbox"/>		*679.@		Route Pattern	 Cox
		1		Call Pickup Group	
		2000		Voice Mail Port	 CiscoUM1-VI1
		2001		Voice Mail Port	 CiscoUM1-VI2
		2002		Voice Mail Port	 CiscoUM1-VI3
		2003		Voice Mail Port	 CiscoUM1-VI4
		2300		Message Waiting	
		2301		Message Waiting	
		2302		Hunt Pilot	 UnityHL  CiscoUM1  2002, None  2003, None  2000, None  2001, None
		231X		Call Park	
		2680		Directory Number	 SEP0050600C3922
		2681		Directory Number	 SEP0050600C3927
		2682		Directory Number	 SEP0007EB20B62F
		2683		Directory Number	 SEP001C58575C6B

Figure 61 Route Plan Report






































Cisco Unified CM Administration		Navigation Cisco Unified CM Administration	
For Cisco Unified Communications Solutions		administrator Search Documentation About Log	
System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾			
Find and List Route Plan Report			Related Links: View in file ▾
 2684	Directory Number	 SEP3037A61609D2	
 2685	Directory Number	 SEP001D45E95CD4	
 2686	Directory Number	 SEPFCFBFBCA22E7	
 2687	Directory Number		
 2688	Directory Number		
 2689	Directory Number		
 2690	Directory Number	 SEP003094C26E23	
 33XX	Route Pattern	 Alliance	
 3700	Directory Number	 SEPFCFBFBCA22FE	 
 3701	Directory Number	 SEPFCFBFBCA22A0	 
 3702	Directory Number	 SEP001818855C55	 
 3720	Hunt Pilot	 Sequential	  3700, None  3701, None  3702, None
 3721	Hunt Pilot	 Simultaneous	  3700, None  3701, None  3702, None

Figure 62 Route Plan Report (Cont.)



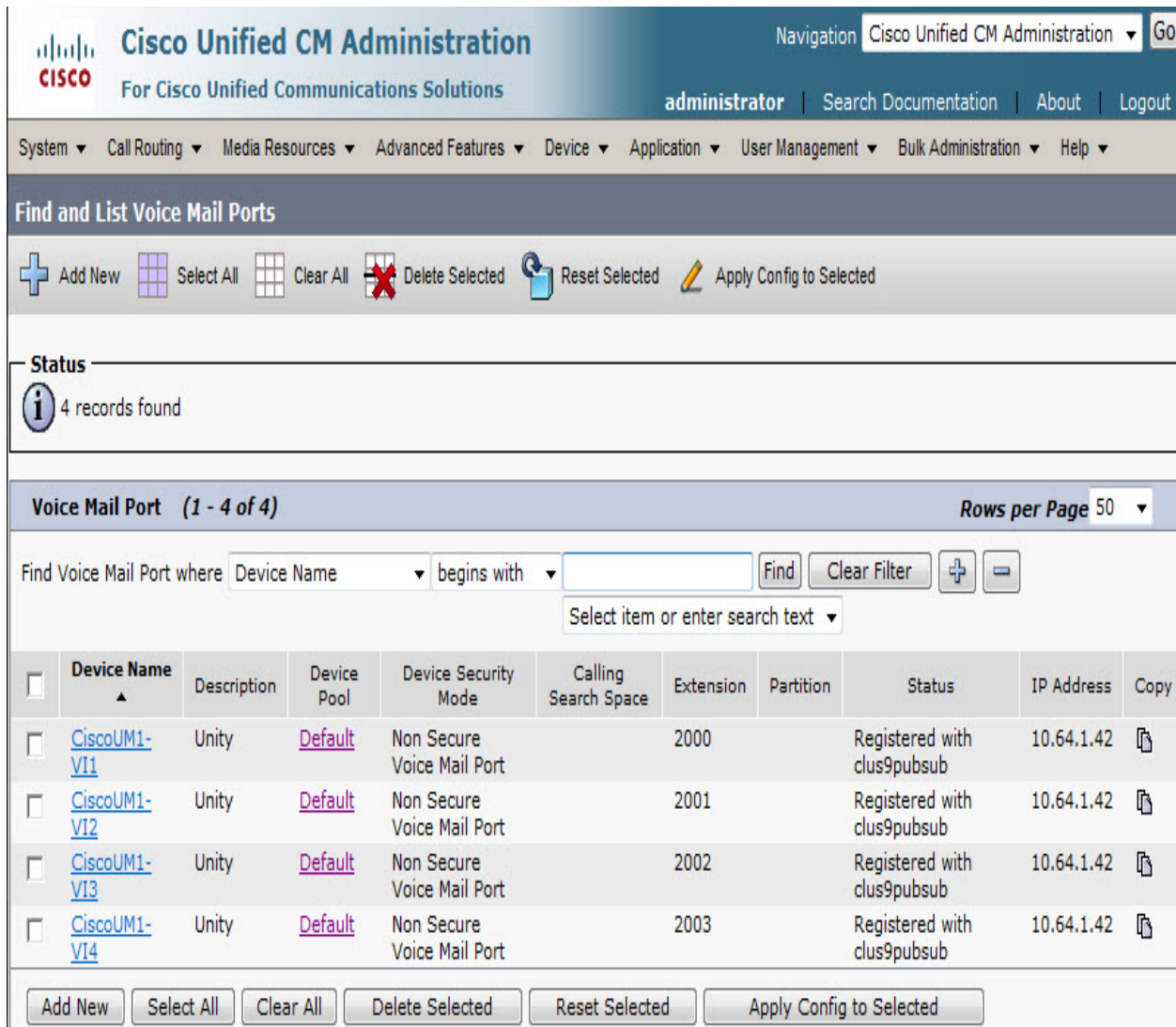
	9.10152691XXXXXXXXXX	Route Pattern	 Cox
	9.@	Route Pattern	 Cox
	91900XXXXXX	Route Pattern	 Cox
	9678xxxxxxx	Domain Routing	

Figure 63 Route Plan Report (Cont.)

6.3.19 Unity Voice Mail Ports

Navigate to Advanced Features > Voice Mail > Cisco Voice Mail Port



The screenshot shows the Cisco Unified CM Administration interface. The page title is "Find and List Voice Mail Ports". It includes a navigation menu with options like System, Call Routing, Media Resources, Advanced Features, Device, Application, User Management, Bulk Administration, and Help. Below the navigation is a toolbar with actions: Add New, Select All, Clear All, Delete Selected, Reset Selected, and Apply Config to Selected. A status bar indicates "4 records found". The main content area shows a table of Voice Mail Ports with columns for Device Name, Description, Device Pool, Device Security Mode, Calling Search Space, Extension, Partition, Status, IP Address, and Copy. The table lists four entries: CiscoUM1-VI1, CiscoUM1-VI2, CiscoUM1-VI3, and CiscoUM1-VI4, all with a status of "Registered with clus9pubsub".






Device Name	Description	Device Pool	Device Security Mode	Calling Search Space	Extension	Partition	Status	IP Address	Copy
CiscoUM1-VI1	Unity	Default	Non Secure Voice Mail Port	2000	2000		Registered with clus9pubsub	10.64.1.42	
CiscoUM1-VI2	Unity	Default	Non Secure Voice Mail Port	2001	2001		Registered with clus9pubsub	10.64.1.42	
CiscoUM1-VI3	Unity	Default	Non Secure Voice Mail Port	2002	2002		Registered with clus9pubsub	10.64.1.42	
CiscoUM1-VI4	Unity	Default	Non Secure Voice Mail Port	2003	2003		Registered with clus9pubsub	10.64.1.42	







Figure 64 Unity Voice Mail Ports

 **Cisco Unified CM Administration**
Name


For Cisco Unified Communications Solutions
administrator

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Ma

Voice Mail Port Configuration

 Save
 Delete
 Copy
 Reset
 Apply Config
 Add New

Status

 Status: Ready

Device Information

Registration	Registered with Cisco Unified Communications Manager clus9pubsub
IP Address	10.64.1.42
<input checked="" type="checkbox"/> Device is trusted	
Port Name*	<input type="text" value="CiscoUM1-VI1"/>
Description	<input type="text" value="Unity"/>
Device Pool*	<input type="text" value="Default"/>
Common Device Configuration	<input type="text" value="< None >"/>
Calling Search Space	<input type="text" value="< None >"/>
AAR Calling Search Space	<input type="text" value="< None >"/>
Location*	<input type="text" value="Hub_None"/>
Device Security Mode*	<input type="text" value="Non Secure Voice Mail Port"/>
Use Trusted Relay Point*	<input type="text" value="Default"/>
Geolocation	<input type="text" value="< None >"/>

Directory Number Information

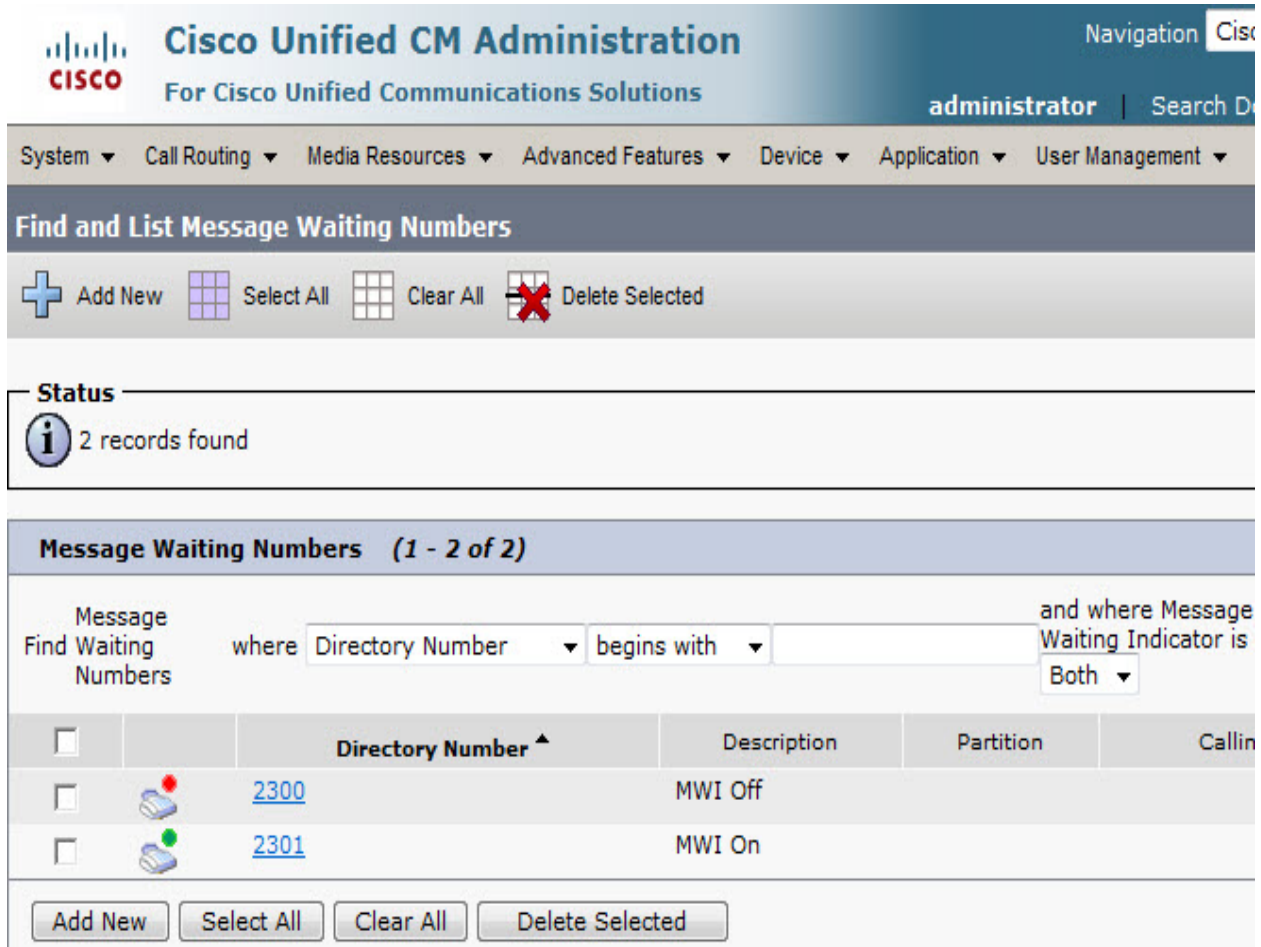
Directory Number*	<input type="text" value="2000"/>
Partition	<input type="text" value="< None >"/>
Calling Search Space	<input type="text" value="< None >"/>
AAR Group	<input type="text" value="< None >"/>
Internal Caller ID Display	<input type="text" value="VoiceMail"/>
Internal Caller ID Display (ASCII format)	<input type="text" value="VoiceMail"/>
External Number Mask	<input type="text" value=""/>

Save Delete Copy Reset Apply Config Add New



Figure 65 Unity Voice Mail Ports (Cont.)

6.3.20 Message Waiting Indicator

Navigate to Advanced Features > Voice Mail > Message Waiting




The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are several dropdown menus: System, Call Routing, Media Resources, Advanced Features, Device, Application, and User Management. The main heading is "Find and List Message Waiting Numbers". Below this heading, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected". A "Status" section indicates "2 records found". The main content area is titled "Message Waiting Numbers (1 - 2 of 2)". It contains a search filter: "Message Find Waiting Numbers where Directory Number begins with and where Message Waiting Indicator is Both". Below the search filter is a table with the following data:

<input type="checkbox"/>		Directory Number ^	Description	Partition	Callin
<input type="checkbox"/>		2300	MWI Off		
<input type="checkbox"/>		2301	MWI On		





At the bottom of the table, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected".

Figure 66 Message Waiting Indicator


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

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾

Message Waiting Configuration

 Save  Delete  Copy  Add New


Status

 Status: Ready

Message Waiting Information





Message Waiting Number*	<input type="text" value="2300"/>
Partition	<input style="border: none;" type="text" value=" < None > "/>
Description	<input type="text" value="MWI Off"/>
Message Waiting Indicator*	<input type="radio"/> On <input checked="" type="radio"/> Off
Calling Search Space	<input style="border: none;" type="text" value=" < None > "/>

Figure 67 Message Waiting Indicator (Cont.)


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

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Applic

Message Waiting Configuration

 Save  Delete  Copy  Add New

Status

 Status: Ready

Message Waiting Information

Message Waiting Number* 2301

Partition < None > ▾

Description MWI On

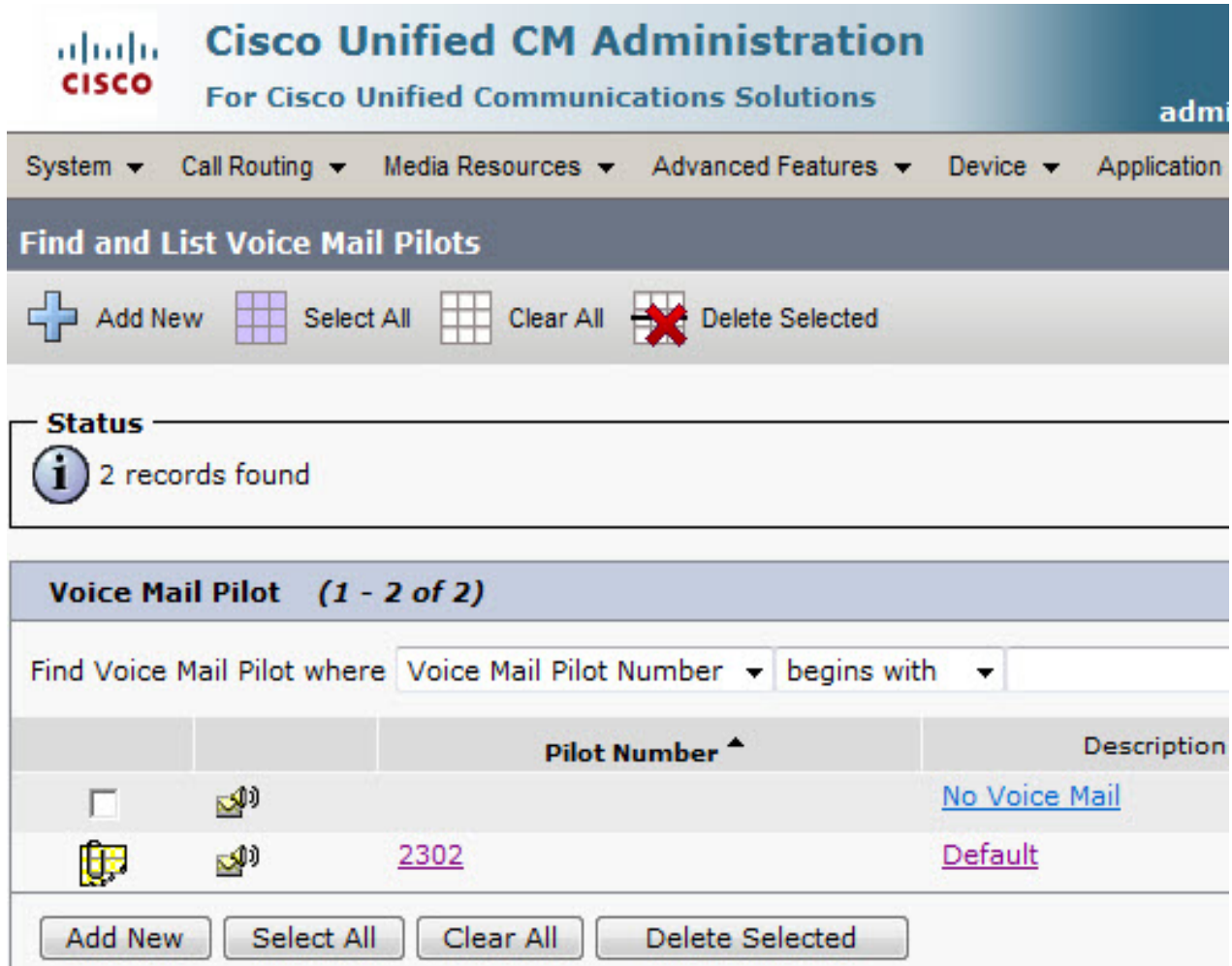
Message Waiting Indicator* On Off

Calling Search Space < None > ▾

Figure 68 Message Waiting Indicator (Cont.)

6.3.21 Voice Mail Pilot

Navigate to Advanced Features > Voice Mail > Voice Mail Pilot



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation menu with options: System, Call Routing, Media Resources, Advanced Features, Device, and Application. The main heading is "Find and List Voice Mail Pilots". Below this, there are action buttons: Add New, Select All, Clear All, and Delete Selected. A status bar indicates "2 records found". The main table displays two records:

		Pilot Number ^	Description
<input type="checkbox"/>			No Voice Mail
<input checked="" type="checkbox"/>		2302	Default

At the bottom of the table, there are buttons for Add New, Select All, Clear All, and Delete Selected.

Figure 69 Voice Mail Pilot



Cisco Unified CM Administration


For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Voice Mail Pilot Configuration

 Save  Delete  Add New

Status

 Status: Ready

Voice Mail Pilot Information

Voice Mail Pilot Number

Calling Search Space

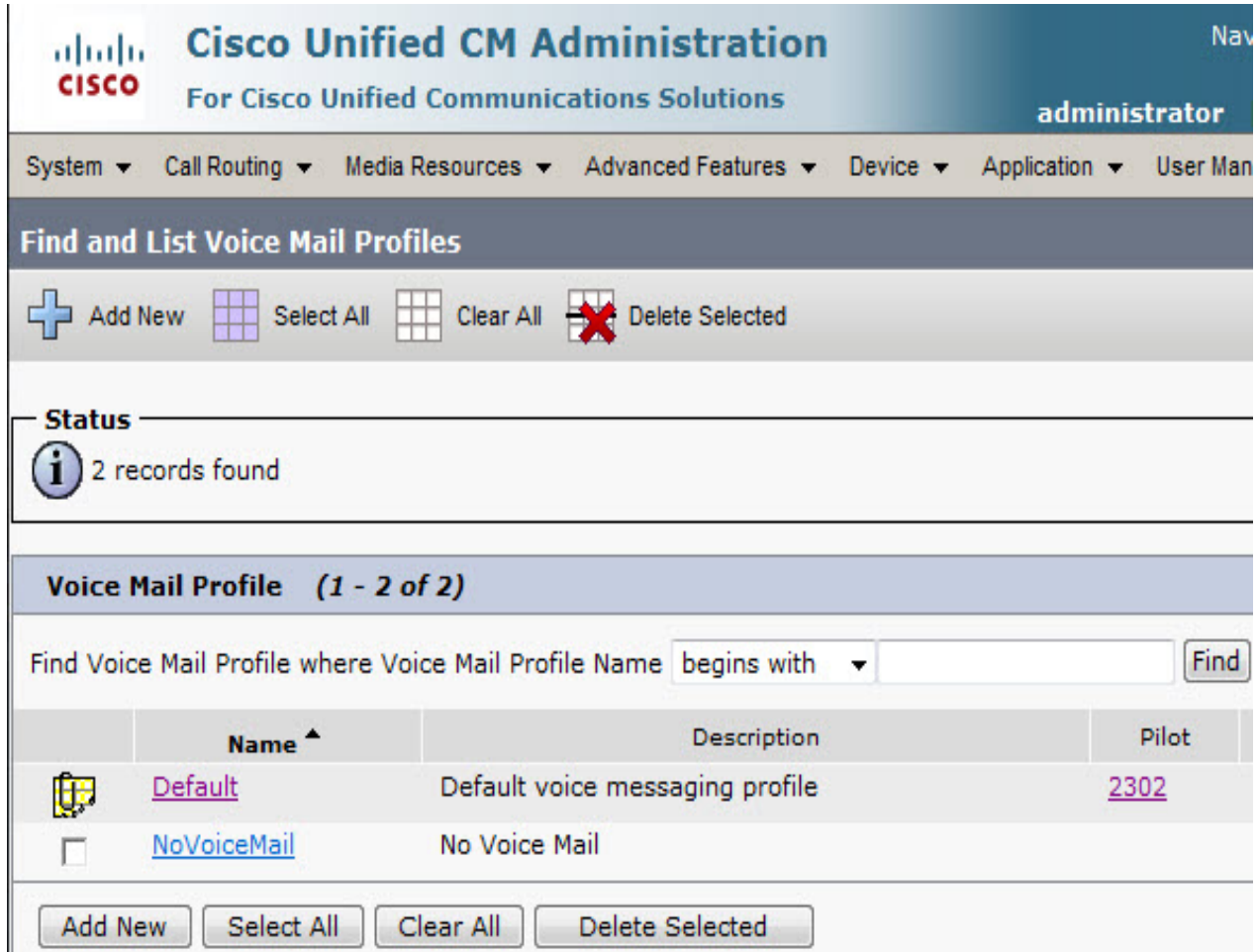
Description

Make this the default Voice Mail Pilot for the system

Figure 70 Voice Mail Pilot (Cont.)

6.3.22 Voice Mail Profile

Navigate to Advanced Features > Voice Mail > Voice Mail Profile



The screenshot shows the Cisco Unified CM Administration interface. At the top, the Cisco logo and 'Cisco Unified CM Administration' are displayed. Below the navigation menu, the page title is 'Find and List Voice Mail Profiles'. There are buttons for 'Add New', 'Select All', 'Clear All', and 'Delete Selected'. A status bar indicates '2 records found'. The main table lists two profiles: 'Default' and 'NoVoiceMail'. The 'Default' profile has a description 'Default voice messaging profile' and a pilot number of '2302'. The 'NoVoiceMail' profile has a description 'No Voice Mail'.


	Name ^	Description	Pilot
<input checked="" type="checkbox"/>	Default	Default voice messaging profile	2302
<input type="checkbox"/>	NoVoiceMail	No Voice Mail	

Figure 71 Voice Mail Profile

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Appl

Voice Mail Profile Configuration

 Save  Delete  Copy  Reset  Apply Config  Add New

Status

 Status: Ready

Voice Mail Profile Information

Voice Mail Profile Default (used by 11 devices)

Voice Mail Profile Name*

Description

Voice Mail Pilot**

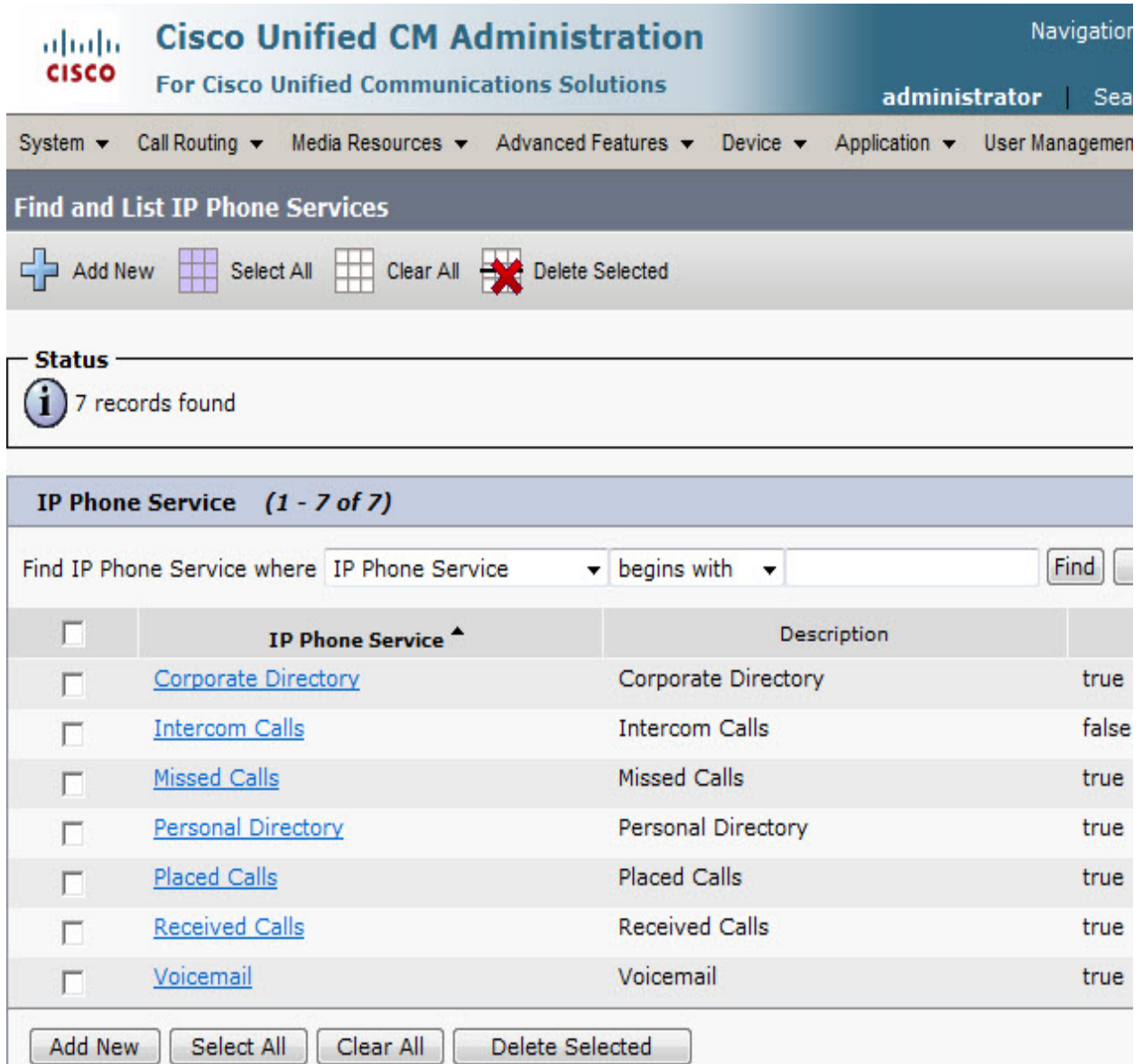
Voice Mail Box Mask

Make this the default Voice Mail Profile for the System

Figure 72 Voice Mail Profile (Cont.)

6.3.23 IP Phone Service

Navigate to Device > Device Settings > Phone Services



The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there are several tabs: System, Call Routing, Media Resources, Advanced Features, Device, Application, and User Management. The "Device" tab is selected, and the sub-tab "IP Phone Services" is active. The page title is "Find and List IP Phone Services". Below the title, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected". The "Delete Selected" button has a red X over it. Below the buttons, there is a "Status" section with an information icon and the text "7 records found". Below the status section, there is a table titled "IP Phone Service (1 - 7 of 7)". The table has a search bar at the top with the text "Find IP Phone Service where" and a dropdown menu set to "IP Phone Service" and "begins with". Below the search bar, there is a table with 4 columns: a checkbox, "IP Phone Service", "Description", and a boolean value. The table contains 7 rows of data. Below the table, there are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected".

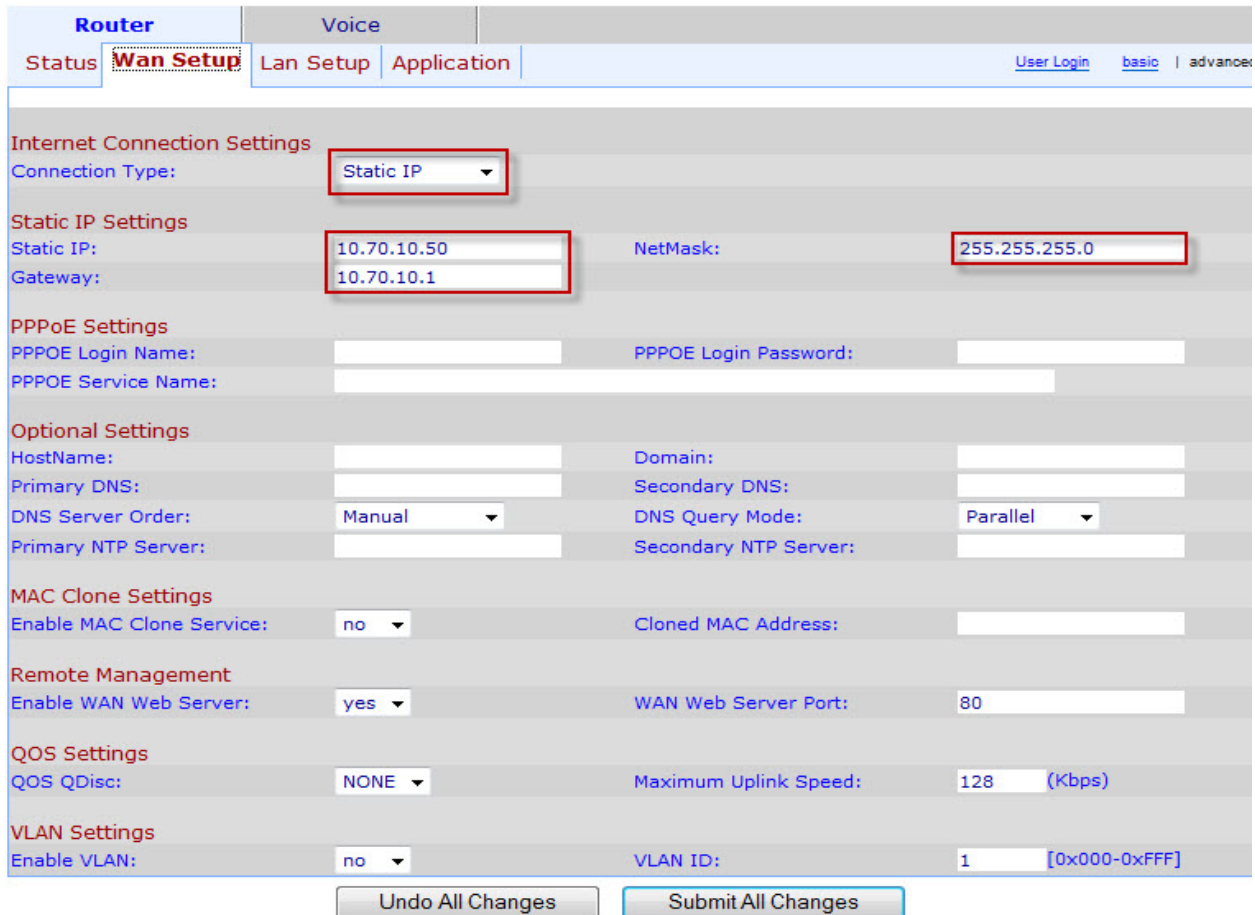
<input type="checkbox"/>	IP Phone Service ^	Description	
<input type="checkbox"/>	Corporate Directory	Corporate Directory	true
<input type="checkbox"/>	Intercom Calls	Intercom Calls	false
<input type="checkbox"/>	Missed Calls	Missed Calls	true
<input type="checkbox"/>	Personal Directory	Personal Directory	true
<input type="checkbox"/>	Placed Calls	Placed Calls	true
<input type="checkbox"/>	Received Calls	Received Calls	true
<input type="checkbox"/>	Voicemail	Voicemail	true

Figure 73 IP Phone Service

6.3.24 Linksys ATA

To set up a fax machine, a Linksys ATA was installed as a third-party SIP device. When the ATA is successfully registered with the CUCM, fax transmission capabilities should be established. The following sections detail these procedures.

1. Connect an Ethernet cable to the Ethernet port on the ATA.
2. After connecting the ATA to the LAN, launch the web browser and direct it to 192.168.0.1/advanced
3. A login screen should appear
4. Log in as user
5. Select Advanced
6. Log in as Administrator
7. Click the WAN Setup tab and assign an address
8. From the Connection Type drop-down menu, select Static IP
9. Assign an IP Address, Subnet Mask, and Default Gateway



The screenshot shows the Linksys WAN Setup configuration page. The 'Wan Setup' tab is selected. The 'Connection Type' is set to 'Static IP'. The 'Static IP Settings' section shows the 'Static IP' as 10.70.10.50 and the 'Gateway' as 10.70.10.1. The 'NetMask' is set to 255.255.255.0. Other sections include PPPoE Settings, Optional Settings, MAC Clone Settings, Remote Management, QoS Settings, and VLAN Settings. At the bottom, there are buttons for 'Undo All Changes' and 'Submit All Changes'.

Section	Field	Value
Internet Connection Settings	Connection Type:	Static IP
	Static IP Settings	
Static IP Settings	Static IP:	10.70.10.50
	Gateway:	10.70.10.1
Static IP Settings	NetMask:	255.255.255.0
	PPPoE Settings	
PPPoE Settings	PPPOE Login Name:	
	PPPOE Login Password:	
PPPoE Settings	PPPOE Service Name:	
	Optional Settings	
Optional Settings	HostName:	
	Domain:	
Optional Settings	Primary DNS:	
	Secondary DNS:	
Optional Settings	DNS Server Order:	Manual
	DNS Query Mode:	Parallel
Optional Settings	Primary NTP Server:	
	Secondary NTP Server:	
MAC Clone Settings	Enable MAC Clone Service:	no
	Cloned MAC Address:	
Remote Management	Enable WAN Web Server:	yes
	WAN Web Server Port:	80
QoS Settings	QOS QDisc:	NONE
	Maximum Uplink Speed:	128 (Kbps)
VLAN Settings	Enable VLAN:	no
	VLAN ID:	1 [0x000-0xFFFF]

Figure 74 Linksys WAN Setup



10. At the top of the screen, select Voice and Line 1 (or Line 2)
11. In the Subscriber Information section, assign a User ID and Password
12. In the Proxy and Registration section, assign a Proxy address
13. Select the Submit All Changes button
14. The ATA will reboot with the new configuration applied

LINKSYS®

A Division of Cisco Systems, Inc. Linksys Phone Adapter Configur

Router	Voice								
Info	System	SIP	Provisioning	Regional	Line 1	Line 2	User 1	User 2	User Login basic

Line Enable:

Streaming Audio Server (SAS)

SAS Enable: SAS DLG Refresh Intvl:

SAS Inbound RTP Sink:

NAT Settings

NAT Mapping Enable: NAT Keep Alive Enable:

NAT Keep Alive Msg: NAT Keep Alive Dest:

Network Settings

SIP ToS/DiffServ Value: SIP CoS Value: [0-7]

RTP ToS/DiffServ Value: RTP CoS Value: [0-7]

Network Jitter Level: Jitter Buffer Adjustment:

SIP Settings

SIP Port: SIP 100REL Enable:

EXT SIP Port: Auth Resync-Reboot:

SIP Proxy-Require: SIP Remote-Party-ID:

SIP GUID: SIP Debug Option:

RTP Log Intvl: Restrict Source IP:

Referor Bye Delay: Refer Target Bye Delay:

Referee Bye Delay: Refer-To Target Contact:

Sticky 183:

Call Feature Settings

Blind Attn-Xfer Enable: MOH Server:

Xfer When Hangup Conf: Conference Bridge URL:

Conference Bridge Ports:

Figure 75 Linksys Line Configuration



Proxy and Registration			
Proxy:	10.70.10.2		
Outbound Proxy:	10.70.10.2		
Use Outbound Proxy:	yes	Use OB Proxy In Dialog:	yes
Register:	yes	Make Call Without Reg:	no
Register Expires:	3600	Ans Call Without Reg:	no
Use DNS SRV:	no	DNS SRV Auto Prefix:	no
Proxy Fallback Intvl:	3600	Proxy Redundancy Method:	Normal
Voice Mail Server:		Mailbox Subscribe Expires:	2147483647
Subscriber Information			
Display Name:	3724	User ID:	3724
Password:	*****	Use Auth ID:	no
Auth ID:	3724		
Mini Certificate:			
SRTP Private Key:			
Supplementary Service Subscription			
Call Waiting Serv:	yes	Block CID Serv:	yes
Block ANC Serv:	yes	Dist Ring Serv:	yes
Cfwd All Serv:	yes	Cfwd Busy Serv:	yes
Cfwd No Ans Serv:	yes	Cfwd Sel Serv:	yes
Cfwd Last Serv:	yes	Block Last Serv:	yes
Accept Last Serv:	yes	DND Serv:	yes
CID Serv:	yes	CWCID Serv:	yes
Call Return Serv:	yes	Call Redial Serv:	yes
Call Back Serv:	yes	Three Way Call Serv:	yes
Three Way Conf Serv:	yes	Attn Transfer Serv:	yes
Unattn Transfer Serv:	yes	MWI Serv:	yes
VMWI Serv:	yes	Speed Dial Serv:	yes
Secure Call Serv:	yes	Referral Serv:	yes
Feature Dial Serv:	yes	Service Announcement Serv:	no
Audio Configuration			
Preferred Codec:	G711u	Silence Supp Enable:	no
Use Pref Codec Only:	no	Silence Threshold:	medium
G729a Enable:	yes	Echo Canc Enable:	yes
G723 Enable:	yes	Echo Canc Adapt Enable:	yes
G726-16 Enable:	yes	Echo Supp Enable:	yes
G726-24 Enable:	yes	FAX CED Detect Enable:	yes
G726-32 Enable:	yes	FAX CNG Detect Enable:	yes
G726-40 Enable:	yes	FAX Passthru Codec:	G711u
DTMF Process INFO:	yes	FAX Codec Symmetric:	yes
DTMF Process AVT:	yes	FAX Passthru Method:	NSE

Figure 76 Linksys Line Configuration (Cont.)

Audio Configuration			
Preferred Codec:	G711u	Silence Supp Enable:	no
Use Pref Codec Only:	no	Silence Threshold:	medium
G729a Enable:	yes	Echo Canc Enable:	yes
G723 Enable:	yes	Echo Canc Adapt Enable:	yes
G726-16 Enable:	yes	Echo Supp Enable:	yes
G726-24 Enable:	yes	FAX CED Detect Enable:	yes
G726-32 Enable:	yes	FAX CNG Detect Enable:	yes
G726-40 Enable:	yes	FAX Passthru Codec:	G711u
DTMF Process INFO:	yes	FAX Codec Symmetric:	yes
DTMF Process AVT:	yes	FAX Passthru Method:	NSE
DTMF Tx Method:	Auto	FAX Process NSE:	yes
Hook Flash Tx Method:	None	FAX Disable ECAN:	no
Release Unused Codec:	yes	FAX Enable T38:	yes
FAX T38 Redundancy:	1	FAX Tone Detect Mode:	caller or callee
Dial Plan			
Dial Plan:	(*xx [3469]11 0 00 [2-9]xxxxxx 1xxx[2-9]xxxxxxS0 xxxxxxxxxxxxx.)		
Enable IP Dialing:	no	Emergency Number:	
FXS Port Polarity Configuration			
Idle Polarity:	Forward	Caller Conn Polarity:	Forward
Callee Conn Polarity:	Forward		

Figure 77 Linksys Line Configuration (Cont.)

When the Linksys configuration is complete, it must register with CUCM. The steps for registering the ATA with CUCM are detailed below.



A device must be added. The ATA is added as a phone.

1. Navigate to Device > Phone > Add New
2. From the Phone Type drop-down menu, select Third Party SIP Device (Advanced)
3. Select Next
4. Populate the MAC Address field with the mac address of the ATA
5. Assign a Device Pool: Default
6. From the Phone Button Template drop-down menu, select Third-party SIP Device (Advanced)
7. From the Common Phone Profile drop-down menu, select Standard Common Phone Profile
8. In the Protocol Specific Information section, choose Third-party SIP Device Advanced-Standard SIP Non-Secure Profile in the Device Security Profile drop-down menu
9. Choose a SIP Profile: Cox SIP Profile
9. All other settings are default values
10. Select Save
11. Click on the Apply Config button and select OK
12. The screen will be updated with Association Information on the upper left side
13. On the left side of the Phone Configuration screen (Figure 78) under Modify Button Items, click on Line 1
14. Assign a directory number (Figure 80)
15. Select save

Cisco Unified CM Administration Navigation Cisco Unified CM
 For Cisco Unified Communications Solutions administrator | Search Documentation

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administrat

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

Save Delete Copy Reset Apply Config Add New

Status
 Status: Ready

Association Information

Modify Button Items

- 1 Line [1] - 3724 (no partition)
- 2 [Line \[2\] - Add a new DN](#)
- 3 [Line \[3\] - Add a new DN](#)
- 4 [Line \[4\] - Add a new DN](#)
- 5 [Line \[5\] - Add a new DN](#)
- 6 [Line \[6\] - Add a new DN](#)
- 7 [Line \[7\] - Add a new DN](#)
- 8 [Line \[8\] - Add a new DN](#)

Phone Type

Product Type: Third-party SIP Device (Advanced)
Device Protocol: SIP

Device Information

Registration Registered with Cisco Unified Communications Manager
 IP Address 10.70.10.50
 Active Load ID Unknown
 Device is Active
 ⚠ Device is not trusted
 MAC Address* 000E0829E13D
 Description SEP000E0829E13D
 Device Pool* Default
 Common Device Configuration < None >
 Phone Button Template* Third-party SIP Device (Advanced)
 Common Phone Profile* Standard Common Phone Profile
 Calling Search Space < None >
 AAR Calling Search Space < None >
 Media Resource Group List < None >
 Location* Hub_None
 AAR Group < None >
 Device Mobility Mode* Default
[Device Mobility Settings](#)
 Owner User ID < None >
 Use Trusted Relay Point* Default
 Always Use Prime Line* Default
 Always Use Prime Line for Voice Message* Default
 Calling Party Transformation CSS < None >

Figure 78 Phone Configuration

Cisco Unified CM Administration For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Admini

administrator | Search Documentation | Ab

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾

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

Save Delete Copy Reset Apply Config Add New

Geolocation < None >

- Use Device Pool Calling Party Transformation CSS
- Retry Video Call as Audio
- Ignore Presentation Indicators (internal calls only)
- Logged Into Hunt Group
- Remote Device

Protocol Specific Information

Presence Group* Standard Presence group

MTP Preferred Originating Codec* 711ulaw

Device Security Profile* Third-party SIP Device Advanced - Standard SIP N

Rerouting Calling Search Space < None >

SUBSCRIBE Calling Search Space < None >

SIP Profile* Standard SIP Profile

Digest User 3724

- Media Termination Point Required
- Unattended Port
- Require DTMF Reception
- Allow Presentation Sharing using BFCP

MLPP Information

MLPP Domain < None >

Save Delete Copy Reset Apply Config Add New

Figure 79 Phone Configuration (Cont.)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾

Directory Number Configuration

Save Delete Copy Reset Apply Config Add New

Status
 Status: Ready

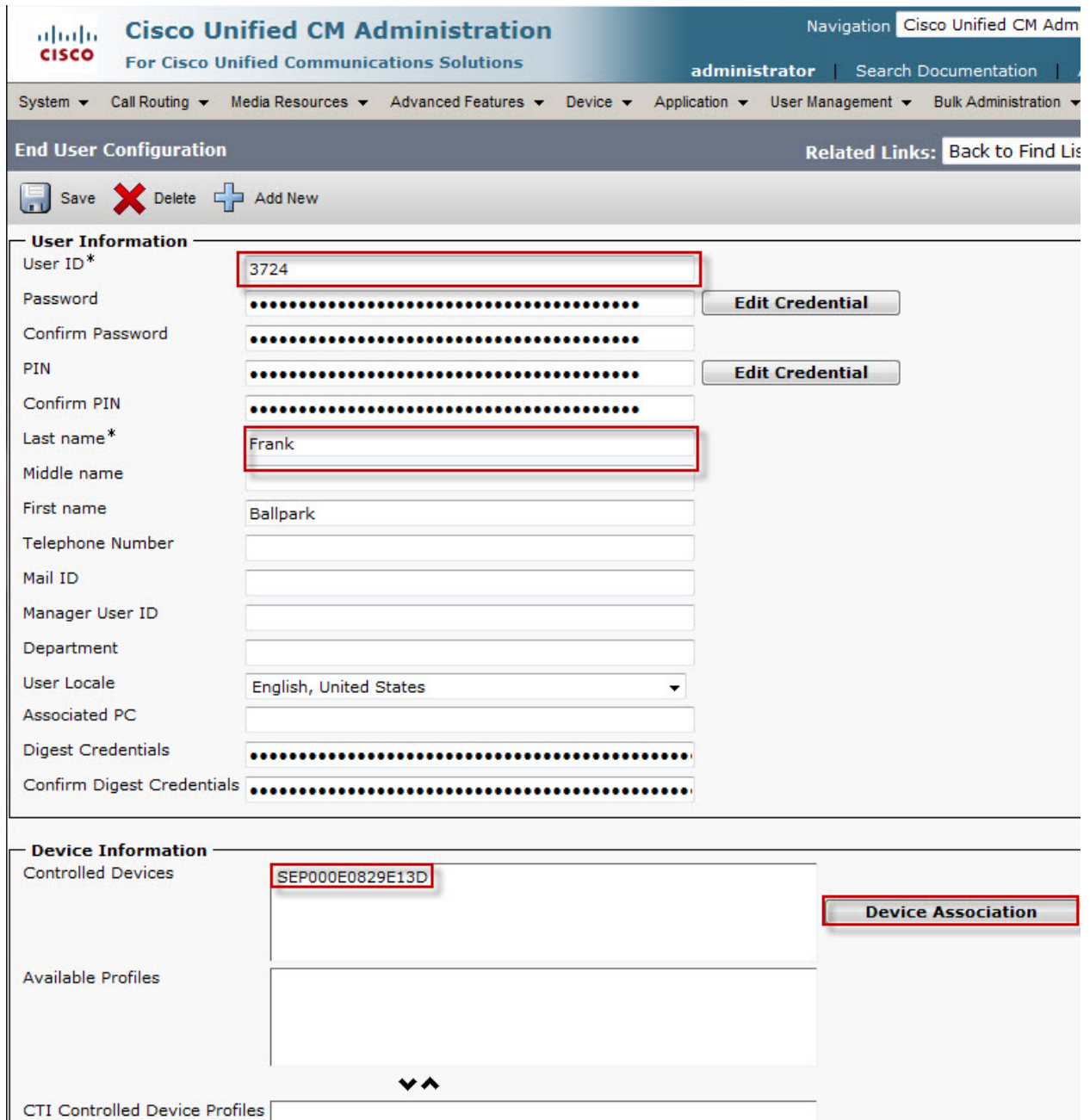
Directory Number Information

Directory Number*	<input type="text" value="3724"/>
Route Partition	< None >
Description	<input type="text" value="Fax"/>
Alerting Name	<input type="text"/>
ASCII Alerting Name	<input type="text"/>
Associated Devices	SEP000E0829E13D
	▼ ^
Dissociate Devices	<input type="text"/>

Figure 80 Directory Number

An End User must be created

1. Navigate to User Management > End User > Add New
2. Assign a User ID and Last Name. All other values are default settings
3. In the Device Information section, click Device Association. The device name should appear
4. Select Save



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Adm
administrator | Search Documentation |

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾

End User Configuration Related Links: Back to Find Lis

Save Delete Add New

User Information

User ID* 3724

Password Edit Credential

Confirm Password

PIN Edit Credential

Confirm PIN

Last name* Frank

Middle name

First name Ballpark

Telephone Number

Mail ID

Manager User ID

Department

User Locale English, United States ▾

Associated PC

Digest Credentials

Confirm Digest Credentials


Device Information

Controlled Devices SEP000E0829E13D Device Association

Available Profiles

CTI Controlled Device Profiles


Figure 81 End User Configuration


Cisco Unified CM Administration
 For Cisco Unified Communications Solutions

administ

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾

End User Configuration

 Save

Extension Mobility

Available Profiles

▼ ▲

Controlled Profiles

Default Profile -- Not Selected -- ▼

Presence Group* Standard Presence group ▼

SUBSCRIBE Calling Search Space < None > ▼

Allow Control of Device from CTI

Enable Extension Mobility Cross Cluster

Directory Number Associations

Primary Extension < None > ▼

Mobility Information

Enable Mobility

Primary User Device < None > ▼

Enable Mobile Voice Access

Maximum Wait Time for Desk Pickup* 10000

Remote Destination Limit* 4

Remote Destination Profiles

Figure 81 End User Configuration