



Research in Motion Limited BlackBerry Mobile Voice System 5.0 with Cisco Unified Communications Manager Release 8.0.2 and 8.0.3



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Introduction

- This application note details the interoperability test results for Cisco Unified Wireless Network (CUWN) 6.x, and Research In Motion® (RIM®) BlackBerry® Mobile Voice System 5.0.
 - Release 8.0.3 was tested with H323, while Release 8.0.2 was tested with SIP.
- All testing was performed with BlackBerry® Enterprise Server 5.0 configured on MCS7800 server running Microsoft Windows Server 2003 which is registered into a Microsoft Exchange 2007 SP1 domain.
- The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified Communications Manager version 8.0.2. The Cisco Unified Communications Manager 8.0.2 was configured on MCS7825.
- BlackBerry® Bold™ 9000, BlackBerry® Bold™ 9700 smartphones with AT&T SIM cards, BlackBerry® Storm™ 9500 smartphone on Verizon, and BlackBerry® Storm™ 9500 smartphone on Sprint were used for this test effort.
- Cisco Wireless LAN Controllers with 6.x(WLC) and Access Points were used for this BlackBerry Wi-Fi test effort.
- WiFi testing included call scenarios with BlackBerry devices roaming within domains (layer 2) and between domains (layer 3)
- This application note uses the Cisco 2811 voice router as MGCP, SIP, or H323 gateway. However, the use of other Cisco voice gateways is also an option because the MGCP, SIP, or H323 application is independent of the Cisco platform. The gateway families listed below can run MGCP, SIP, or H323, but each has different VoIP capacity or capability. Please check the product specifications to ensure that you are obtaining the proper device to support your VoIP deployment, including add-ons such as DSP resources.

[Cisco 2800 series Integrated Services Router](#)

[Cisco 3800 series Integrated Services Router](#)

[Cisco AS5400 series Universal Gateways](#)



Limitations

These are the known limitations, caveats, or integration issues.

- The testing was done using FCS version of 8.0.2 release at the time of when testing started, and version 8.0.3 for H323.
- When performing an unattended (blind) transfer and the transferee is a BlackBerry® Mobile Voice System client, the transferee will not provide ringback (RIM DT 540632)
- When performing a consult transfer where the transferee releases before the transfer is complete, and the transferor is a BlackBerry® Mobile Voice System client, the transferor will enter an incorrect state and become unaware that the transferee call leg has been disconnected (RIM DT 693318)
- A semi-attended (blind) transfer is unavailable when H323 trunks are configured for PSTN access (RIM DT forthcoming).
- BlackBerry MVS client initiated calls, using a cellular network transport, will continue to provide ring back tone and not play the early media, such as inband tones generated by the network or IVR prompts. MVS client initiated calls, using the WiFi transport, supports the use of early media.
- BlackBerry MVS devices can not be controlled by CTI Application
- Call-forward can only configured from the UCM and Cisco IP Phone.
- Barge from BlackBerry Mobile Voice System devices is not support in this release and can only be a participant.
- Call-Park/Retrieve on BlackBerry Mobile Voice System devices can not Call-Park, but can retrieve a Call-Park.
- IDivert on BlackBerry Mobile Voice System devices is not supported.
- Interaction between Single Number Reach (SNR) (also known as Cisco Unified Mobility) and Cisco Unified Mobile Communicator with the BlackBerry® MVS was not tested.

System Components

The following hardware was tested:

- Cisco 2800NM-IPVOICE-M IOS 15.0(1)
- Cisco Unified IP phones 7900 series (CP7961 skinny, CP7975 SIP) Software Requirements
- Cisco 7800 series server running Windows 2003 Server Edition
- BlackBerry® Bold™ 9000, BlackBerry® Bold™ 9700, BlackBerry® Storm™ 9500 smartphones MVS client 2.0.1
- Cisco Unified Wireless LAN Controllers with 6.x (WLC) and APs with 12.4

The following software was tested:

- Cisco Unified Communications Manager: CUCM 8.0.2
- Cisco Unified Communications Manager: CUCM 8.0.3
- Cisco Unified IP phone 7961
- BlackBerry® Mobile Voice System 5.0
- BlackBerry Enterprise Server® 5.0
- COP file for BlackBerry MVS Device type
- BlackBerry Device Operating System 5.0



Features

Feature Supported

This section listed the supported features.

MVS client support features: lists all features supported by MVS client devies.

Features Supported:

- Basic Calls
- PSTN Calls
- Call Forward- Please refer to the Limitation section for more information
- Call Hold/Resume
- Multiple calls per line (call waiting)
- Consult Call Transfer
- Semi-Attended Call Transfer (Blind Call Transfer)-Please refer to the Limitation section for more information.
- Calling and Connected Line ID
- Calling and Connected Name
- Multiple lines per phone
- SIP Registration
- Incoming Call Screening
- Outgoing Call Screening
- Caller-ID Update
- Barge –Please refer to the Limitation section for more information
- Conference- Please refers to the Limitation section for more information
- Call Park/Retrieve- Please refer to the Limitation section for more information
- iDivert (if applicable)-Please refer to the Limitation section for more information
- DTMF services and MWI
- Roaming test (layer 2 and layer 3 WiFi roaming)

BlackBerry MVS Client specific features:

- Voice over Wi-Fi calls
- Move Call to Desk Phone
- Move Call to One-time Number
- Move Call from WiFi to Cellular Radio
- Move Call from Cellular to WiFi Radio



Environments and Configurations

This section contains configuration menus and commands and describes configuration sequences and tasks.

For updated information on BlackBerry Server refer to:

BlackBerry® Server Documentation web portal:
www.blackberry.com/go/serverdocs

BlackBerry® Enterprise Server for Microsoft Exchange:

<http://docs.blackberry.com/en/admin/subcategories/?userType=2&category=BlackBerry+Enterprise+Server+for+Microsoft+Exchange&subCategory=&url=%2Fadmin%2Fsubcategories%2F&versionId=494>

BlackBerry® Mobile Voice System 5.0:

<http://docs.blackberry.com/en/admin/subcategories/?userType=2&category=BlackBerry+MVS>

Server Configurations

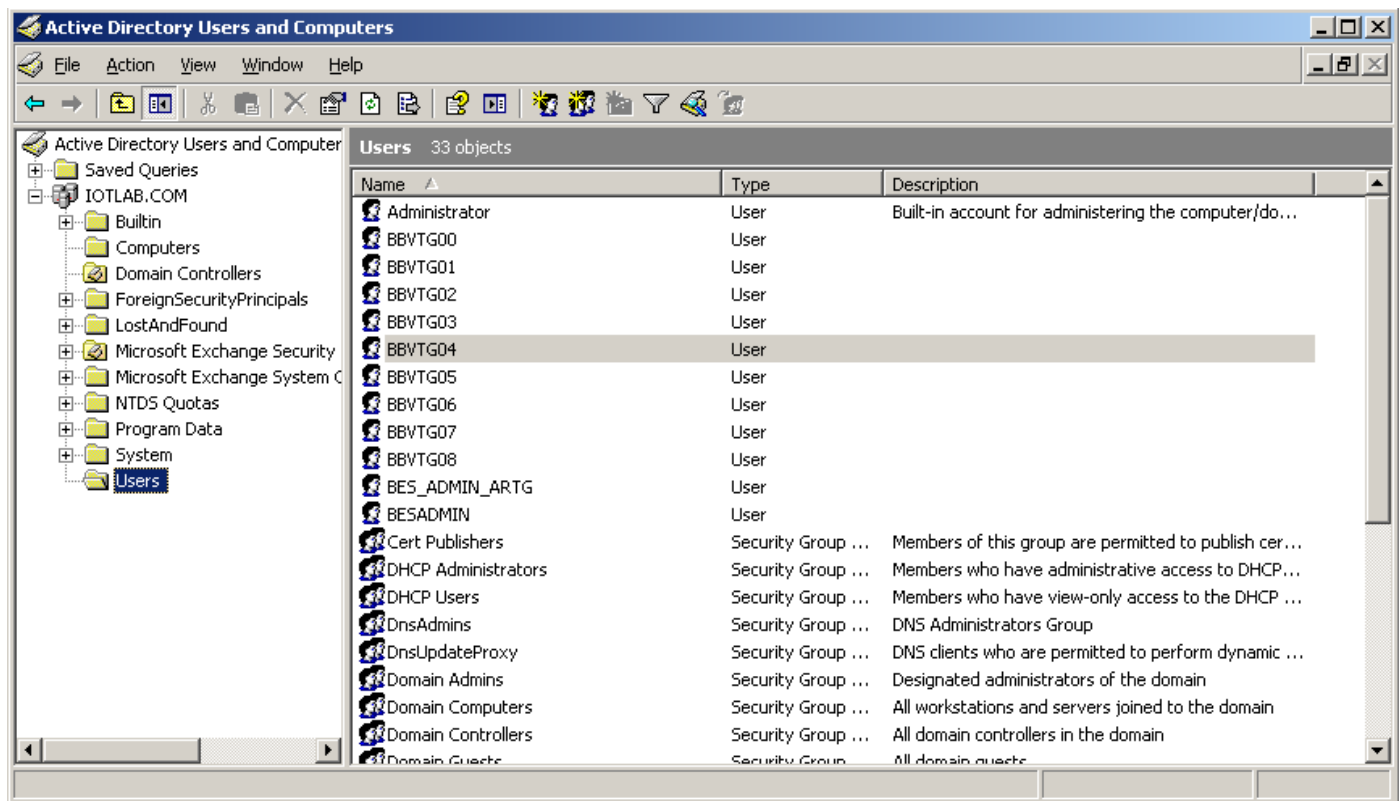
The following snapshot shows the required configurations for each component.

Microsoft Active Directory and Exchange Server

Microsoft Active Directory Server

Create user on the Active Directory Domain and Exchange that will be integrated to RIM®'s BlackBerry® Enterprise Server and BlackBerry® Mobile Voice System.

User List





User Properties

BBVTG00 Properties [?] [X]

Published Certificates	Member Of	Dial-in	Object	Security
Environment	Sessions	Remote control	Terminal Services Profile	COM+
General	Address	Account	Profile	Telephones
Organization				

User logon name:
BBVTG00 @IOTLAB.COM

User logon name (pre-Windows 2000):
IOTLAB\ BBVTG00

Logon Hours... Log On To...

☐ Account is locked out

Account options:

- ☐ User must change password at next logon
- ☐ User cannot change password
- ☒ Password never expires
- ☐ Store password using reversible encryption

Account expires:

☒ Never

☐ End of: Friday, July 23, 2010

OK Cancel Apply



MS Exchange User List

Exchange Management Console

File Action View Help

Microsoft Exchange

- Organization Configuration
- Server Configuration
- Recipient Configuration
 - Mailbox
 - Distribution Group
 - Mail Contact
 - Disconnected Mailbox
- Toolbox

Mailbox - IOTLAB.COM 21 objects

Create Filter

Display Name	Alias	Recipient Type Details	Primary SMTP Address
Administrator	Administrator	User Mailbox	Administrator@iotlab.com
BBVTG00	BBVTG00	User Mailbox	BBVTG00@iotlab.com
BBVTG01	BBVTG01	User Mailbox	BBVTG01@iotlab.com
BBVTG02	BBVTG02	User Mailbox	BBVTG02@iotlab.com
BBVTG03	BBVTG03	User Mailbox	BBVTG03@iotlab.com
BBVTG04	BBVTG04	User Mailbox	BBVTG04@iotlab.com
BBVTG05	BBVTG05	User Mailbox	BBVTG05@iotlab.com
BBVTG06	BBVTG06	User Mailbox	BBVTG06@iotlab.com
BBVTG07	bbvtg07	User Mailbox	bbvtg07@iotlab.com
BBVTG08	bbvtg08	User Mailbox	bbvtg08@iotlab.com
BBVTG09	bbvtg09	User Mailbox	bbvtg09@iotlab.com
BBVTG10	bbvtg10	User Mailbox	bbvtg10@iotlab.com
BBVTG11	bbvtg11	User Mailbox	bbvtg11@iotlab.com
BBVTG12	bbvtg12	User Mailbox	bbvtg12@iotlab.com
BBVTG13	BBVTG13	User Mailbox	BBVTG13@iotlab.com
BBVTG14	BBVTG14	User Mailbox	BBVTG14@iotlab.com
BBVTG15	BBVTG15	User Mailbox	BBVTG15@iotlab.com
BESADMIN	BESADMIN	User Mailbox	BESADMIN@iotlab.com
Jim Cheung	jcheung	User Mailbox	jcheung@iotlab.com
Pato Araujo	paraujo	User Mailbox	paraujo@iotlab.com
shane shane	shane	User Mailbox	shane@iotlab.com

Actions

Mailbox

- Modify the Maximum Num...
- Find...
- New Mailbox...
- Export List...
- View
- Refresh
- Help

Administrator


- Disable
- Remove
- Move Mailbox...
- Enable Unified Messaging...
- Manage Send As Permissi...
- Manage Full Access Permi...
- Properties
- Help



MS Exchange User Properties

BBVTG00 Properties [X]

Account	Member Of	E-Mail Addresses
Mailbox Settings	Mail Flow Settings	Mailbox Features
General	User Information	Address and Phone
Organization		



Organizational unit: iotlab.com/Users
Last logged on by: IOTLAB\BESADMIN
Total items: 23
Size (KB): 23
Exchange server: rim-x2007
Mailbox database: First Storage Group\Mailbox Database
Modified: Saturday, March 27, 2010 9:10:41 AM

Alias:

☐ Hide from Exchange address lists

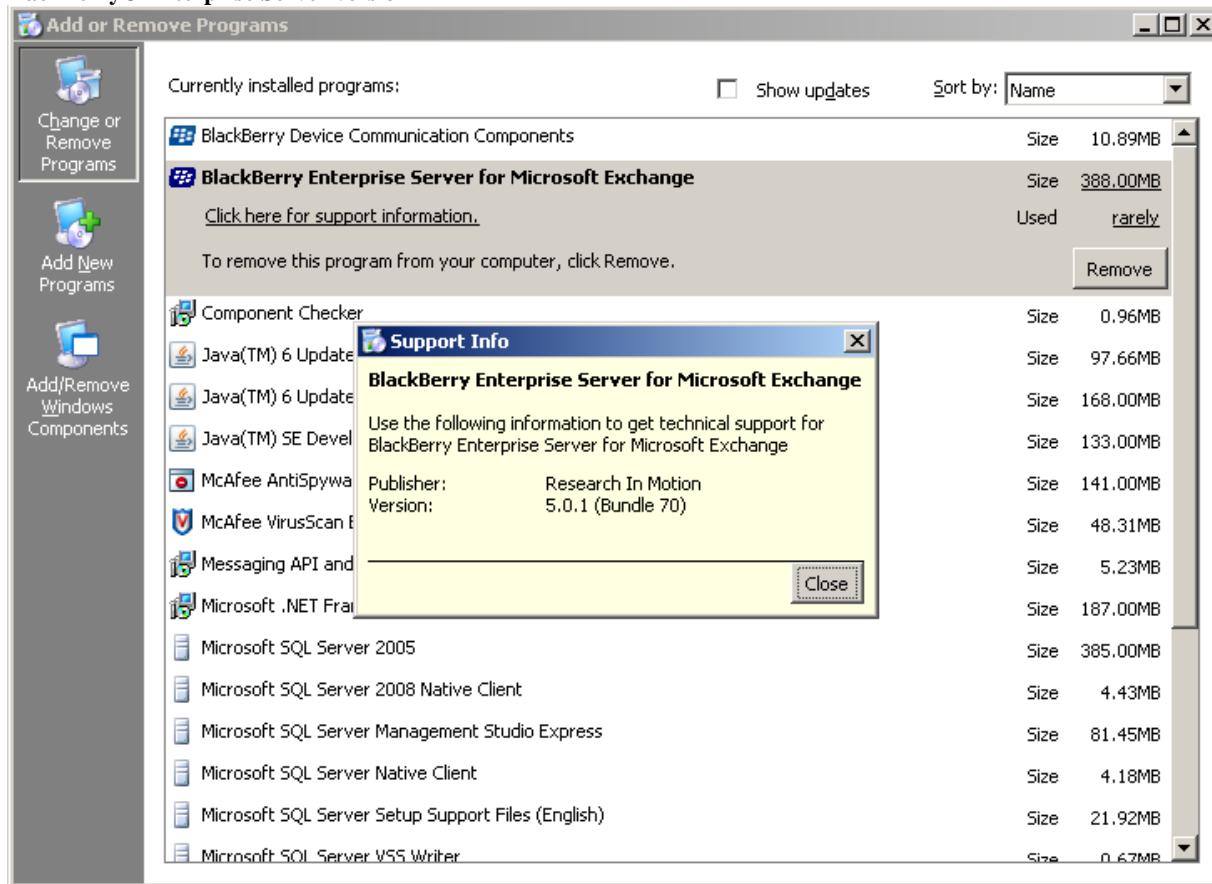
View and modify custom attributes. [Custom Attributes...](#)

OK Cancel Apply Help




BlackBerry Enterprise Server

BlackBerry® Enterprise Server version





BlackBerry Enterprise Server Manager Role for User and Device

**BlackBerry**
BlackBerry® Administration Service

BESADMIN
[Log out](#) | [Home](#) | [Help](#)
Thursday, April 22, 2010

Quick user search
Name:

BlackBerry solution management

- User
 - Create a user
 - Manage users
- Group
 - Create a group
 - Manage groups
- Role
 - Create a role
 - Manage roles
- Software
- Policy
- Administrator user

Devices

- Attached devices
- Deployment jobs
- Wireless activations

Servers and components

- BlackBerry Solution topology
 - BlackBerry Domain
 - Server view
 - BES-IOT
 - BAS

Role > Manage roles > View role (Enterprise Administrator)

Manage roles

You can add more permissions to a role or deny existing permissions, copy a role to create a new one, delete a role, view users associated with a role, and more.


Role information	User and device	Topology	BlackBerry Administration Service setup	Organizations	Miscellaneous
------------------	-----------------	----------	-----------------------------------------	---------------	---------------

Privileges

Create a group	Granted				
Delete a group	Granted				
View a group	Granted			All groups	
Edit a group	Granted			All groups	
Create a user	Granted				
Delete a user	Granted				
View a user	Granted			All groups	
Edit a user	Granted			All groups	
View a device	Granted			All groups	
Edit a device	Granted			All groups	
View device activation settings	Granted				
Edit device activation settings	Granted				
Create an IT policy	Granted				
Delete an IT policy	Granted				
View an IT policy	Granted				
Edit an IT policy	Granted				
Import an IT policy	Granted				
Export an IT policy	Granted				
Create a user-defined IT policy template	Granted				
Delete a user-defined IT policy template	Granted				
Resend data to devices	Granted				
Edit a user-defined IT policy template	Granted			All groups	



BlackBerry Enterprise Server Instance Information

**BlackBerry**
BlackBerry® Administration Service

BESADMIN
[Log out](#) | [Home](#) | [Help](#)
Wednesday, June 23, 2010

- BlackBerry Solution topology
 - BlackBerry Domain
 - Server view
 - Component view
 - BlackBerry Administration Service
 - BAS on BES-IOT
 - BlackBerry Enterprise Server
 - BES-IOT on BES-IOT
 - Policy
 - Synchronization
 - Alert
 - Logging
 - Controller
 - Email
 - Attachment
 - MDS Connection Service

Preferences

- My setup
- Manage my profile

Instance informationSupported MDS Connection Service instances

Instance information

Instance name:	BES-IOT	Friendly name:	
Friendly description:		Component category:	BlackBerry Enterprise Server
Component:	BlackBerry Enterprise Server	Installation server:	BES-IOT

Statistical information

Number of users:	22
------------------	----

Instance status

Status:	Running	Availability state:	Primary
---------	---------	---------------------	---------

General

BlackBerry Dispatcher version:	5.0.1.30
--------------------------------	----------

Security information


Encryption algorithm:	3DES and AES
-----------------------	--------------

SRP information

SRP ID:	S44861880	SRP status:	Connected
Authentication key:	ajxg-qsgu-6crd-dmi4-zg34-ighg-fecf-bdrk-23wgg-pkim	Host routing information:	
Default SRP port number	3101		



BlackBerry Enterprise Server Wi-Fi Profile

**BlackBerry**
BlackBerry® Administration Service

BESADMIN
[Log out](#) | [Home](#) | [Help](#)
Thursday, June 24, 2010

Quick user search
Name:

BlackBerry solution management

- User
- Group
- Role
- Software
- Policy
 - Create an IT policy
 - Manage IT policies
 - Create an IT policy rule
 - Manage IT policy rules
 - Wi-Fi configuration
 - Create Wi-Fi profile
 - Manage Wi-Fi profiles
 - Create VPN profile
 - Manage VPN profiles
 - Create VoIP profile
 - Manage VoIP profiles
- Administrator user

Devices

- Attached devices
- Deployment jobs
- Wireless activations

Servers and components

- BlackBerry Solution topology
 - BlackBerry Domain

Policy > Wi-Fi configuration > Manage Wi-Fi profiles

Wi-Fi profiles

You can view and edit the information that the BlackBerry® Enterprise Server uses to configure Wi-Fi® profiles for users. Wi-Fi® profiles permit you to push different Wi-Fi® profiles to BlackBerry devices and associate VoIP and VPN profiles to Wi-Fi® profiles.

Name	Description
cisco-lot	

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Version: 5.0.1.58



BlackBerry Enterprise Server Wi-Fi Profile Configurations (1 of 2)

Wi-Fi profiles

You can view and edit the information that the BlackBerry® Enterprise Server uses to configure Wi-Fi® profiles for users. Wi-Fi® profiles permit you to push different Wi-Fi® profiles to BlackBerry devices and associate VoIP and VPN profiles to Wi-Fi® profiles.

Wi-Fi profile information

Wi-Fi profile settings

Profile settings	Value	Description
Wi-Fi Allow Handheld Changes	Yes	This rule is obsolete as of BlackBerry Enterprise Server version More...
Wi-Fi Link Security	EAP-FAST	Specifies the type of security required for Wi-Fi network access. (Open, WEP, More...
Wi-Fi SSID	rim	Type the network name of the Wi-Fi network and its access points. This rule More...
Wi-Fi Default Key ID		Type the Default WEP Key ID. Note: The WEP Key ID must match the desired WEP More...
Wi-Fi WEP Key 1		Type the password for WEP key 1 using the format xx:xx:xx:xx:xx. Allowable More...
Wi-Fi WEP Key 2		Type the password for WEP key 2 using the format xx:xx:xx:xx:xx. Allowable More...
Wi-Fi WEP Key 3		Type the password for WEP key 3 using the format xx:xx:xx:xx:xx. Allowable More...
Wi-Fi WEP Key 4		Type the password for WEP key 4 using the format xx:xx:xx:xx:xx. Allowable More...
Wi-Fi Preshared Key		Type the pre-shared key. This rule applies only to Java-based BlackBerry More...
Wi-Fi User Name	cisco	Type the user name for EAP-PEAP or EAP-LEAP security access on the BlackBerry More...
Wi-Fi User Password	cisco	Type the user password for EAP-PEAP or EAP-LEAP security access on the More...
Wi-Fi DHCP Configuration	Yes	Specify whether or not Dynamic Host Configuration Protocol (DHCP) is used for More...



Wi-Fi Profile Configurations (2 of 2)

Wi-Fi IP Address		Type the IP address in IP address format (for example, 10.0.0.1) for use if More...
Wi-Fi Subnet Mask		Type the subnet mask in dotted format (for example, 10.0.0.1) for use if More...
Wi-Fi Primary DNS		Type the primary DNS in IP address format (for example, 10.0.0.1) if the DHCP is More...
Wi-Fi Secondary DNS		Type the secondary DNS in dotted format (for example, 10.0.0.1) if the DHCP is More...
Wi-Fi Default Gateway		Type the default gateway in IP address format (for example, 10.0.0.1) if the More...
Wi-Fi Minimal EAP-TLS Certificate Encryption Key Security Level		This rule is obsolete as of BlackBerry Enterprise Server version More...
Wi-Fi Enable Authentication Page		This rule is obsolete as of BlackBerry Enterprise Server version 4.1.4.
		Set to More...
Wi-Fi Hard Token Required		Set to Yes if a hard token (e.g., RSA SecurID) is required as part of the More...
Wi-Fi Token Serial Number		Serial number of the soft token provisioned to the device if a soft token is More...
Wi-Fi Profile Visibility	Full visibility	Specify whether the user may view the settings of this Wi-Fi profile.
Wi-Fi Profile Editability	Full editability	Full More... Specify whether the user may edit the settings of this Wi-Fi profile.
Wi-Fi Allow Password Save	Yes	Full More... Specify whether users can save Wi-Fi passwords on the BlackBerry device.
Wi-Fi Roaming Threshold	Auto	Set More... The roaming threshold determines how often the Wi-Fi radio shall scan for More...
Wi-Fi Server Subject		Type the substring used to match the "Subject" field of the server's More...
Wi-Fi Server SAN		Type the substring used to match the "SubjectAltName" (SAN) field of the More...
Wi-Fi Inner Authentication Mode	EAP-MSCHAPV2	Specify the authentication mode for tunneled EAP security. One of: None, More...
RESERVED for Wi-Fi Protected Access Credential Key		RESERVED FOR FUTURE USE
Wi-Fi Domain Suffix		This rule applies only to Java-based BlackBerry More... Type the internal domain name suffix using the FQDN format, for use if the DHCP More...
Wi-Fi Allow AP to AP Handover	Yes	Set to Yes to enable Wi-Fi handovers between access points for this profile. More...
Wi-Fi Band Type	802.11 a/b/g	Specify the band type or types, which access point of a particular SSID are More...
Wi-Fi EAP-FAST Provisioning method	Both	Specify the type of provisioning method used for EAP-FAST PAC More...
Wi-Fi Disable Server Certificate Validation	Yes	This setting is applicable to Wi-Fi security types which require CA certificate More...
Wi-Fi BlackBerry Infrastructure Wi-Fi Access Mode	Access does not require VPN	Specify whether BlackBerry device can use BlackBerry Infrastructure over a More...
Associated Certificate Authority Configuration		A CA configuration is a set of credentials that is used to contact your More...


Wi-Fi associations	Value	Description
Associated VPN Profile	None Defined	Contains the name of the associated VPN Profile. This is a hidden More...
Associated VoIP Profile	None Defined	Contains the name of the associated VoIP Profile. This is a hidden More...

- [Edit profile](#)
- [View Wi-Fi profiles list](#)




BlackBerry Enterprise Server Manage User

BlackBerry® Enterprise Server User List

**BlackBerry**
BlackBerry® Administration Service

BESADMIN
[Log out](#) | [Home](#) | [Help](#)
Thursday, June 24, 2010

Quick user search
Name: 

Showing 1 - 23 of 23
Sorting: Display name

BlackBerry solution management

- User
 - Create a user
 - Manage users
- Group
- Role
- Software
- Policy
- Administrator user

Devices

- Attached devices
- Deployment jobs
- Wireless activations

Servers and components


- BlackBerry Solution topology

Preferences

- My setup


Display name	PIN	IT policy	Device model	Last contact date	
Administrator		Default			More...
BBVTG00	30DCD4E4	Default	9550	6/22/10 4:19:02 AM	More...
BBVTG01	30DC1EF7	Default	8530	6/24/10 1:10:34 PM	More...
BBVTG02	212DBF36	Default	9700	6/1/10 8:43:26 AM	More...
BBVTG03	20D1A458	Default	9000	6/15/10 8:33:04 AM	More...
BBVTG04	2128B2E2	Default	9700	6/1/10 9:25:38 AM	More...
BBVTG05	30DCD2C1	Default	9550	6/21/10 9:53:07 PM	More...
BBVTG06		Default		4/12/10 10:46:03 AM	More...
BBVTG07		Default		4/12/10 11:07:50 AM	More...
BBVTG08		Default			More...
BBVTG09		Default			More...
BBVTG10	20D1A4A1	Default	9000	6/24/10 1:25:31 PM	More...
BBVTG11	212DC1F7	Default	9700	6/20/10 4:34:10 PM	More...
BBVTG12	30DCB8E9	Default	9550	6/16/10 6:53:37 PM	More...
BBVTG13	20D1AA39	Default	9000	6/24/10 1:58:28 PM	More...
BBVTG14	30DC1E61	Default	8530	6/24/10 1:51:28 PM	More...
BBVTG15	30DC3316	Default	8530	6/24/10 2:01:28 PM	More...
BESADMIN					More...
BESADMIN		Default			More...

Showing 1 - 23 of 23
Sorting: Display name


 [Manage multiple users](#)



BlackBerry® Enterprise Server Manage Users (1 of 2)

**BlackBerry**
BlackBerry® Administration Service

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Thursday, June 24, 2010

Quick user search
Name: 

BlackBerry solution management

- User
 - Create a user
 - Manage users
- Group
- Role
- Software
- Policy
- Administrator user
 - Manage users
- Group
- Role
- Software
- Policy
- Administrator user

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- Wireless activations

Servers and components

- BlackBerry Solution topology

Preferences

- My setup

User > Manage users > View user (BBVTG00)

Manage users

You must search for a user to manage. You can update user information, add or change the groups and roles that a user is assigned to, and delete users.

User Information	Groups	Roles	Wi-Fi profiles	VPN profiles	VoIP profiles	Software tokens
Component information	Access control rules	Software configuration	Policies			

User information

Display name:	BBVTG00	User ID:	21
---------------	---------	----------	----


Authentication type	User name	Password
Active Directory	The entered data retrieved a user identification from the Active Directory system. The authentication will use the associated Active Directory credentials.	

Associated device properties


PIN	30DCD4E4	Device model	9550
Home Carrier	Verizon Wireless	Current Carrier	
Phone number	4082028926	Software version	5.0.0.607 (Platform 4.2.0.275)
Associated BlackBerry Enterprise Server	BES-IOT		
Device IT policy	Default	Device IT policy time	4/5/10 6:23:49 PM
Queued IT policy status	Applied successfully		
Last contact date	6/22/10 4:19:02 AM	Last message sent	6/22/10 4:19:02 AM
Result of last transaction to the device	Delivered to device		



BlackBerry Enterprise Server Manage Users (2 of 2)

**BlackBerry**
BlackBerry® Administration Service

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Thursday, June 24, 2010

Quick user search
Name: 

BlackBerry solution management

- User
 - Create a user
 - Manage users
- Group
- Role
- Software
- Policy
- Administrator user
 - Manage users
- Group
- Role
- Software
- Policy
- Administrator user
 - Manage users
- Group
- Role
- Software
- Policy
- Administrator user
 - Manage users
- Group
- Role
- Software
- Policy
- Administrator user

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User Information	Groups	Roles	Wi-Fi profiles	VPN profiles	VoIP profiles	Software tokens
Component information	Access control rules	Software configuration	Policies			

BlackBerry Enterprise Server information




Associated BlackBerry Enterprise Server:	BES-IOT	Association date:	3/29/10 1:42:31 PM
External services turned on:	Yes		
Generate keys automatically:	Yes	Maximum key generation attempts:	0

Statistics



Forwarded messages:	4	Sent messages:	0
Pending data packets:	0	Filtered messages:	0
Expired messages:	0		

Mail information


User state:	Running	Email address:	BBVTG00@iotlab.com
Wireless message reconciliation:	Enabled	Wireless calendar:	Enabled
User name:	BBVTG00	Messaging server:	/o=Cisco-RIM/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Configuration/cn=Servers/cn=RIM-X2007/cn=Microsoft Private MDB
Mailbox:	/o=Cisco-RIM/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=BBVTG00		
Turn on static mailbox agent:	No	Mailbox agent ID:	1

 [Edit user](#)
 [Back to search](#)
 [Back to previous search results](#)

Statistics

-  [Export statistics for device](#)
-  [Clear statistics for device](#)

Organizer data synchronization

-  [Clear backed up data for organizer data synchronization](#)

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Version: 5.0.1.58



BlackBerry Mobile Voice System

BlackBerry® Mobile Voice System Version

The screenshot shows the Windows 'Add or Remove Programs' window. The 'BlackBerry Mobile Voice System' is listed as the first item. A 'Support Info' dialog box is open, displaying the following information:

BlackBerry Mobile Voice System

Use the following information to get technical support for BlackBerry Mobile Voice System.

Publisher: Research In Motion
Version: 5.0.0 (Bundle 52)


The background window shows the following list of installed programs:

Program Name	Size	Used
BlackBerry Mobile Voice System	29.42MB	rarely
Java(TM) 6 Update 16	97.66MB	
Java(TM) 6 Update 16	171.00MB	
LiveUpdate	1.37MB	
McAfee AntiSpyware	141.00MB	
McAfee VirusScan Engine	48.31MB	
Microsoft .NET Framework 3.5	187.00MB	
Microsoft SQL Server 2005	82.70MB	
MSXML 6.0 Parser	1.31MB	
PL-2303 USB-to-Serial	2.37MB	
Real-Time Monitoring Tool 8.5	98.05MB	
Snagit 9.1.3	59.45MB	
Symantec Procomm Plus	31.41MB	
VNC Free Edition 4.1.3	1.56MB	
WinPcap 4.0.1	0.19MB	
Wireshark 0.99.6a	69.35MB	



BlackBerry Mobile Voice System Configurations

BlackBerry® Mobile Voice System Telephony Connector to the UCM

**BlackBerry**
BlackBerry® Mobile Voice System

User: sysadmin [About](#) | [Change Password](#) | [Log Off](#)

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CDR Viewer

Edit Telephony Connector - UCM8_0

Display Name

UCM8_0

*

Type

Cisco Unified Communications Manager 7.0/7.1

*

IP Address

172.20.89.253

*

Host Name

172.20.89.253

*

Line Port

5060

*

Trunk Port

6060

*



Registration Timeout

1200

*

PBX Initiated Calling

Caller Identification Number *

Number	Action
	
14085551212	

Phone Number Translation


Location

Save

Cancel



BlackBerry® Mobile Voice System Session Manager for the UCM

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BlackBerry® Mobile Voice System

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Edit Session Manager - mvs-iot

Enable High Availability ☐

Instance Name *

SIP IP Address *

Line Port *

Trunk Port *

DID/DDI number for BlackBerry smartphone-initiated calling:
[UCM8_0](#)

BlackBerry Enterprise Servers *

Associated	Instance Name	Secure Connection Password
<input checked="" type="checkbox"/>	BES-IOT	BlackBerry MVS will use the default secure connection pas <input type="checkbox"/> Change the secure connection password that the Blac


Save Cancel

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BlackBerry Mobile Voice System User Configuration

BlackBerry® Mobile Voice System User List

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Manage BlackBerry MVS Users

Use this page to manage BlackBerry MVS Users that are already configured to use the BlackBerry MVS. Search for existing BlackBerry MVS Users by specifying the search criteria below.

Search Criteria

User Name	<input type="text"/>	Telephony Connector	<input type="text" value="-Search All-"/>
Extension	<input type="text"/>	Voice Mail Connector	<input type="text" value="-Search All-"/>
BlackBerry Enterprise Server	<input type="text" value="-Search All-"/>	Class of Service	<input type="text" value="-Search All-"/>

Search Results
(No selected users)

<input type="checkbox"/>	User Name ^	Extension	Class of Service	MVS Service
<input type="checkbox"/>	BBVTG00	4000	ANI	Enabled
<input type="checkbox"/>	BBVTG01	4001	ANI	Enabled
<input type="checkbox"/>	BBVTG02	4002	ANI	Enabled
<input type="checkbox"/>	BBVTG03	4003	ANI	Enabled
<input type="checkbox"/>	BBVTG04	4004	ANI	Enabled
<input type="checkbox"/>	BBVTG05	4005	ANI	Enabled
<input type="checkbox"/>	BBVTG06	4006	ANI	Enabled
<input type="checkbox"/>	BBVTG07	4007	ANI	Enabled
<input type="checkbox"/>	BBVTG09	4009	ANI	Enabled
<input type="checkbox"/>	BBVTG10	4010	ANI	Enabled

1 2 >>

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BlackBerry® Mobile Voice System User Information

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Edit User - BBVTG00

General

Template Settings

Class of Service

General Attributes

MVS Service

Enabled

Extension

4000

*

Direct Dial Number

Mobile Phone Number

14082028926

Desk Phone Number

4000

*

Telephony Connector

Telephony Connector

UCM8_0

*

User Authorization ID

4000

Password

Voice Mail Connector

Voice Mail Connector


None

Save

Cancel



BlackBerry® Mobile Voice System User Template Information

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Services Reporting

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Edit User - BBVTG00

General

Template Settings

Class of Service

BlackBerry MVS Line Configuration

BlackBerry MVS Line Label: Work *

Default line for outgoing calls: BlackBerry MVS Line

When the BlackBerry MVS Line is unavailable use the Mobile Line: Ask

Default network for Work calls: Mobile

When Mobile is unavailable, use Wi-Fi: Yes

Voice Mail Access Number:

MWI Notifications: Enabled

Caller Restrictions

Caller Restriction: All Callers Except Blocked

☒ Allow calls from unknown numbers

Blocked Callers (max limit = 20)

Number	Name	Action

Allowed Callers (max limit = 20)

Number	Name	Action

Call Scheduling (in office time zone)

Office Time Zone: (GMT-08:00) Pacific Time (US & Canada)

Day of Week	Allow Calls	Start of Day (HHMM)	End of Day (HHMM)
Weekly	Always		
Sunday	Always		
Monday	Always		
Tuesday	Always		
Wednesday	Always		
Thursday	Always		
Friday	Always		
Saturday	Always		


Save

Cancel

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BlackBerry® Mobile Voice System Mobile Template

**BlackBerry**

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BlackBerry® Mobile Voice System

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Services Reporting

[CDR Viewer](#)

Edit Template - all-mobile

Template Name *

BlackBerry MVS Line Configuration

BlackBerry MVS Line Label *Default line for outgoing calls: When the BlackBerry MVS Line is unavailable use the Mobile Line: Default network for Work calls: When Mobile is unavailable, use Wi-Fi: Voice Mail Access Number MWI Notifications

Caller Restrictions

Caller Restriction ☒ Allow calls from unknown numbers

Blocked Callers (max limit = 20)

Number	Name	Action
<input type="text"/>	<input type="text"/>	<input type="button" value="+"/>

Allowed Callers (max limit = 20)

Number	Name	Action
<input type="text"/>	<input type="text"/>	<input type="button" value="+"/>


Call Scheduling (in office time zone)

Office Time Zone

Day of Week	Allow Calls	Start of Day (HHMM)	End of Day (HHMM)
Weekly	<input type="text" value="Always"/>	<input type="text"/>	<input type="text"/>
Sunday	<input type="text" value="Always"/>		
Monday	<input type="text" value="Always"/>		
Tuesday	<input type="text" value="Always"/>		
Wednesday	<input type="text" value="Always"/>		
Thursday	<input type="text" value="Always"/>		
Friday	<input type="text" value="Always"/>		
Saturday	<input type="text" value="Always"/>		



BlackBerry® Mobile Voice System Wi-Fi Templates

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BlackBerry® Mobile Voice System

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Services Reporting

CDR Viewer

Edit Template - all-wifi

Template Name *

BlackBerry MVS Line Configuration

BlackBerry MVS Line Label *

Default line for outgoing calls:

When the BlackBerry MVS Line is unavailable use the Mobile Line:

Default network for Work calls:

When Wi-Fi is unavailable, use Mobile:

Voice Mail Access Number

MWI Notifications

Caller Restrictions

Caller Restriction

☒ Allow calls from unknown numbers

Blocked Callers (max limit = 20)

Number	Name	Action
<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

Allowed Callers (max limit = 20)

Number	Name	Action
<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

Call Scheduling (in office time zone)

Office Time Zone

Day of Week	Allow Calls	Start of Day (HHMM)	End of Day (HHMM)
Weekly	<input type="text" value="Always"/>	<input type="text"/>	<input type="text"/>
Sunday	<input type="text" value="Always"/>		
Monday	<input type="text" value="Always"/>		
Tuesday	<input type="text" value="Always"/>		
Wednesday	<input type="text" value="Always"/>		
Thursday	<input type="text" value="Always"/>		
Friday	<input type="text" value="Always"/>		
Saturday	<input type="text" value="Always"/>		

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BlackBerry® Mobile Voice System Class of Service

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Services Reporting
CDR Viewer

Edit Class of Service - ANI
Class of Service Name *

BlackBerry MVS Call Features

- ☒ User can transfer a call
- ☒ User can move a call to the desk phone number
- ☒ User can move a call to the mobile phone number
- ☒ User can move a call to a one time number
- ☒ User can manually move a call from Voice over Wi-Fi to Voice over Mobile
- ☒ User can manually move a call from Voice over Mobile to Voice over Wi-Fi
- ☒ User can have a schedule for incoming calls
- ☒ Device can set the mobile phone number

Call Direction

Incoming Calls	<input checked="" type="radio"/> PBX → BlackBerry Smartphone
	<input type="radio"/> BlackBerry Smartphone → PBX
Outgoing Calls	<input checked="" type="radio"/> PBX → BlackBerry Smartphone
	<input type="radio"/> BlackBerry Smartphone → PBX

Wi-Fi Profile Control
Allow Voice over Wi-Fi calling on these pushed Wi-Fi profiles

- ☒ cisco-iot
- ☒ Allow Voice over Wi-Fi calling on user created Wi-Fi profiles

Device Settings
RTP Local Port *
Preferred Order of Device Codecs

g711_u-law

g711_A-law

g729

g729b

↑ ↓

User Edit Control

- ☒ User may change the mobile phone number
- ☒ User may change the call move to desk phone number
- ☒ User may change the BlackBerry MVS line label
- ☒ User may change the default line for outgoing calls
- ☒ User may change the Voice Mail access number
- ☒ User may change caller restrictions
- ☒ User may change the default network for BlackBerry MVS calls

Scheduling Control
[Select All](#) - [Select None](#)

- ☒ User may set Monday scheduling
- ☒ User may set Tuesday scheduling
- ☒ User may set Wednesday scheduling
- ☒ User may set Thursday scheduling
- ☒ User may set Friday scheduling
- ☒ User may set Saturday scheduling
- ☒ User may set Sunday scheduling

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WLC WLANs

CISCO Save Configuration | Ping | Logout | Refresh

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs Entries 1 - 1 of 1

WLANs

- WLANs
- Advanced

Current Filter: None [\[Change Filter\]](#) [\[Clear Filter\]](#) Create New Go

<input type="checkbox"/>	WLAN ID	Type	Profile Name	WLAN SSID	Admin Status	Security Policies
<input type="checkbox"/>	1	WLAN	rim	rim	Enabled	[WPA + WPA2][Auth(802.1X + C

WLC WLANs General

CISCO Save Configuration | Ping | Logout | Refresh

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs

- WLANs
- Advanced

WLANs > Edit < Back Apply

General **Security** QoS Advanced

Profile Name rim

Type WLAN

SSID rim

Status ☒ Enabled

Security Policies [WPA + WPA2][Auth(802.1X + CCKM)]
(Modifications done under security tab will appear after applying the changes.)

Radio Policy All

Interface management

Broadcast SSID ☒ Enabled

WLC WLANs Security layer 2

CISCO Save Configuration | Ping | Logout | Refresh

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs

- WLANs
- Advanced

WLANs > Edit < Back Apply

General **Security** QoS Advanced

Layer 2 **Layer 3** **AAA Servers**

Layer 2 Security ☒ WPA+WPA2 ☐ MAC Filtering

WPA+WPA2 Parameters

WPA Policy ☒

WPA Encryption ☒ AES ☒ TKIP

WPA2 Policy ☒

WPA2 Encryption ☒ AES ☒ TKIP

Auth Key Mgmt 802.1X+CCKM



WLC WLANs Security AAA

WLC WLANs Security AAA Configuration Interface

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs > Edit

General Security **QoS** Advanced

Layer 2 **Layer 3** **AAA Servers**

Radius Servers

Authentication Servers		Accounting Servers	
<input checked="" type="checkbox"/> Enabled		<input checked="" type="checkbox"/> Enabled	
Server 1	IP:172.20.89.124, Port:1812	Server 1	None
Server 2	None	Server 2	None
Server 3	None	Server 3	None

LDAP Servers

Server 1	None
Server 2	None
Server 3	None

Local EAP Authentication

Local EAP Authentication ☐ Enabled

Authentication priority order for web-auth user

Not Used | Order Used For Authentication

LOCAL RADIUS LDAP

Up Down

WLC WLANs Security Advanced

WLC WLANs Security Advanced Configuration Interface

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs > Edit

General Security **QoS** **Advanced**

Allow AAA Override ☐ Enabled

Coverage Hole Detection ☒ Enabled

Enable Session Timeout ☒ 1800
Session Timeout (secs)

Aironet IE ☒ Enabled

Diagnostic Channel ☐ Enabled

IPv6 Enable ☐

Override Interface ACL ☐ None

P2P Blocking Action ☐ Disabled

Client Exclusion ☐ Enabled

Media Session Snooping ☒

Off Channel Scanning Defer

Scan Defer Priority	0	1	2	3	4	5	6	7
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Scan Defer Time(msecs) 100

HREAP

DHCP

DHCP Server ☒ Override

DHCP Server IP Addr 172.20.89.200

DHCP Addr. Assignment ☐ Required

Management Frame Protection (MFP)

Infrastructure MFP Protection ☒ (Global MFP Disabled)

MFP Client Protection ☐ Optional

DTIM Period (in beacon intervals)

802.11a/n (1 - 255)	2
802.11b/g/n (1 - 255)	2

NAC

State ☐ Enabled

Load Balancing and Band Select



WLC Controller Detail

MONITORWLANSCONTROLLERWIRELESSSECURITYMANAGEMENTCOMMANDSHelpFEEDBACK

Save Configuration | Ping | Logout | Refresh

Controller

General

Inventory

Interfaces

Multicast

Network Routes

Internal DHCP Server

Mobility Management

Ports

NTP

CDP

Advanced

General

Name

RIM-4400

802.3x Flow Control Mode

Disabled

LAG Mode on next reboot

Disabled

(LAG Mode is currently disabled).

Broadcast Forwarding

Disabled

AP Multicast Mode

Unicast

AP Fallback

Enabled

Apple Talk Bridging

Disabled

Fast SSID change

Disabled

Default Mobility Domain Name

rrm

RF Group Name

rrm

User Idle Timeout (seconds)

300

ARP Timeout (seconds)

300

Web Radius Authentication

PAP

802.3 Bridging

Disabled

Operating Environment

Commercial (0 to 40 C)

Internal Temp Alarm Limits

0 to 65 C

1. H-REAP supports 'unicast' mode only.

Apply

WLC Controller Inventory

MONITORWLANSCONTROLLERWIRELESSSECURITYMANAGEMENTCOMMANDSHelpFEEDBACK

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Inventory

Model No.

AIR-WLC4404-100-K9

Burned-in MAC Address

00:27:0D:DE:B6:00

Maximum number of APs supported

100

Gig Ethernet/Fiber Card

Absent

Crypto Accelerator 1

Absent

Crypto Accelerator 2

Absent

Power Supply 1

Absent,Not Operational

Power Supply 2

Present,Operational

FIPS Prerequisite Mode

Disable

UDI :

Product Identifier Description

AIR-WLC4404-100-K9

Version Identifier Description

V04

Serial Number

FOC1345F06A

Entity Name

Chassis

Entity Description

4400 Series WLAN Controller:100 APs



WLC Controller Interfaces

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Network Routes

Internal DHCP Server

- DHCP Scope
- DHCP Allocated Leases

Mobility Management

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Interfaces

New...

Interface Name	VLAN Identifier	IP Address	Interface Type	Dynamic AP Management
ap-manager	89	172.20.89.201	Static	Enabled
management	89	172.20.89.200	Static	Not Supported
service-port	N/A	0.0.0.0	Static	Not Supported
virtual	N/A	1.1.1.1	Static	Not Supported

Save Configuration

Ping

Logout

Refresh

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WLC Controller Interfaces AP-Manager

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- DHCP Allocated Leases

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CDP

Advanced

Interfaces > Edit

< Back

Apply

General Information

Interface Nameap-manager

MAC Address00:27:0d:de:b6:03

Physical Information

Port Number1

Backup Port0

Active Port1

Enable Dynamic AP Management☒

Interface Address

VLAN Identifier89

IP Address172.20.89.201

Netmask255.255.255.0

Gateway172.20.89.1

DHCP Information

Primary DHCP Server172.20.89.200

Secondary DHCP Server

Access Control List

ACL Namenone

Save Configuration

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WLC Controller Interfaces Manager

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DHCP Scope

DHCP Allocated Leases

Mobility Management

Ports

DHCP Scope

DHCP Allocated Leases

Mobility Management

Ports

NTP

CDP

Advanced

Interfaces > Edit

< BackApply

General Information

Interface Namemanagement

MAC Address00:27:0d:de:b6:00

Configuration

Quarantine☐

Quarantine Vlan Id0

Interface Address

VLAN Identifier89

IP Address172.20.89.200

Netmask255.255.255.0

Gateway172.20.89.1

Physical Information

Port Number1

Backup Port0

Active Port1

DHCP Information

Primary DHCP Server172.20.89.200

Secondary DHCP Server0.0.0.0

Access Control List

ACL Namenone

Wireless AP

CISCO

MONITORWLANSCONTROLLERWIRELESSSECURITYMANAGEMENTCOMMANDSHelpFEEDBACK

Wireless

Access Points

All APs

Radios

802.11a/n

802.11b/g/n

Global Configuration

Advanced

Mesh

HREAP Groups

802.11a/n

802.11b/g/n

Country

Timers

QoS

All APs

Entries 1 - 1 of 1

Current FilterNone[Change Filter][Clear Filter]

Number of APs1

AP Name	AP MAC	AP Up Time	Admin Status	Operational Status	Port	AP Mode	C T
AP-4400-1250	00:1b:d5:13:39:ca	69 d, 04 h 29 m 40 s	Enabled	REG	1	Local	m



Wireless AP Detail

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Wireless Call Admission Control

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All APs

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802.11a/n

802.11b/g/n

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HREAP Groups

802.11a/n

Network

RRM

RF Grouping

TPC

DCA

Coverage

General

Client Roaming

Voice

Video

EDCA Parameters

DFS (802.11h)

High Throughput (802.11n)

802.11b/g/n

Country

Timers

QoS

Profiles

Roles

802.11a > Voice Parameters

Apply

Call Admission Control (CAC)

Admission Control (ACM)

☒

Enabled

Load-based CAC

☒

Enabled

Max RF Bandwidth (5-85)(%)

Reserved Roaming Bandwidth (%)

Expedited bandwidth

☐

Traffic Stream Metrics

Metrics Collection

☒

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Wireless Data Rates

CISCO

MONITORWLANsCONTROLLERWIRELESSSECURITYMANAGEMENTCOMMANDSHELPFEEDBACK

Wireless

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All APs

▼ Radios

802.11a/n

802.11b/g/n

Global Configuration

► Advanced

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▼ 802.11a/n

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▼ RRM

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DFS (802.11h)

High Throughput (802.11n)

► 802.11b/g/n

Country

Timers

▼ QoS

Profiles

Roles

802.11n (5 GHz) High Throughput

Apply

General

11n Mode☒ Enabled

MCS (Data Rate ¹) Settings

0 (7 Mbps)	<input checked="" type="checkbox"/> Supported
1 (14 Mbps)	<input checked="" type="checkbox"/> Supported
2 (21 Mbps)	<input checked="" type="checkbox"/> Supported
3 (29 Mbps)	<input checked="" type="checkbox"/> Supported
4 (43 Mbps)	<input checked="" type="checkbox"/> Supported
5 (58 Mbps)	<input checked="" type="checkbox"/> Supported
6 (65 Mbps)	<input checked="" type="checkbox"/> Supported
7 (72 Mbps)	<input checked="" type="checkbox"/> Supported
8 (14 Mbps)	<input checked="" type="checkbox"/> Supported
9 (29 Mbps)	<input checked="" type="checkbox"/> Supported
10 (43 Mbps)	<input checked="" type="checkbox"/> Supported
11 (58 Mbps)	<input checked="" type="checkbox"/> Supported
12 (87 Mbps)	<input checked="" type="checkbox"/> Supported
13 (116 Mbps)	<input checked="" type="checkbox"/> Supported
14 (130 Mbps)	<input checked="" type="checkbox"/> Supported
15 (144 Mbps)	<input checked="" type="checkbox"/> Supported

1 DataRates are calculated for 20 MHz Channel width

2 WMM and open or AES security should be enabled to support higher 11n rates



Wireless AP Radios

MONITORWLANsCONTROLLERWIRELESSSECURITYMANAGEMENTCOMMANDSHelpFEEDBACK

Monitor

Summary

Access Points

Radios

802.11a/n

802.11b/g/n

Statistics

CDP

Rogues

Clients

Multicast

802.11b/g/n Radios

Entries 1 - 1 of 1

Current Filter: None

[\[Change Filter\]](#) [\[Clear Filter\]](#)

AP Name	Radio Slot#	Base Radio MAC	Operational Status	Load Profile	Noise Profile	Interference Profile	Cli
AP-4400-1250	0	00:17:df:a7:3d:30	UP	Passed	Passed	Passed	Pi

Wireless AP Radios 802.11b/g/n (1 of 2)



Radio > Statistics

Text View

▼ Access Points

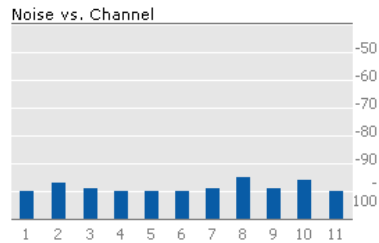
802.11a/n
802.11b/g/n

Multicast

Statistics:	<input checked="" type="checkbox"/> Profile Information	<input checked="" type="checkbox"/> R x Neighbors	<input checked="" type="checkbox"/> 802.11 MAC Counters	<input checked="" type="checkbox"/> Band Select Statistics
AP Name	AP-4400-1250			
Base Radio MAC	00:17:df:a7:3d:30			
AP IP Address	172.20.89.224			
Radio Type	802.11b/g/n			
Operational Status	UP			
Monitor Only Mode	Local			
Channel Number	1			
Slot #	0			

Cumulative Number of calls	0
Cumulative Time of calls	0 h 0 m 0 s

Noise Profile Passed **Interference Profile** Passed **Load Profile** Passed **Coverage Profile** Passed





Wireless AP Radios 802.11b/g/n Call Admission Control

CISCO

[MONITOR](#) [WLANs](#) [CONTROLLER](#) [WIRELESS](#) [SECURITY](#) [MANAGEMENT](#) [COMMANDS](#) [HELP](#) [FEEDBACK](#)

Save Configuration | Ping | Logout | Refresh

Apply

Wireless

▼ Access Points

All APs

▼ Radios

802.11a/n

802.11b/g/n

Global Configuration

► Advanced

Mesh

HREAP Groups

► 802.11a/n

▼ 802.11b/g/n

Network

▼ RRM

RF Grouping

TPC

DCA

Coverage

General

Client Roaming

Voice

Video

EDCA Parameters

High Throughput (802.11n)

Country

Timers

► QoS

802.11b > Voice Parameters

Call Admission Control (CAC)

Admission Control (ACM)

☒

Enabled

Load-based CAC

☒

Enabled

Max RF Bandwidth (5-85)(%)

Reserved Roaming Bandwidth (%)

Expedited bandwidth

☐

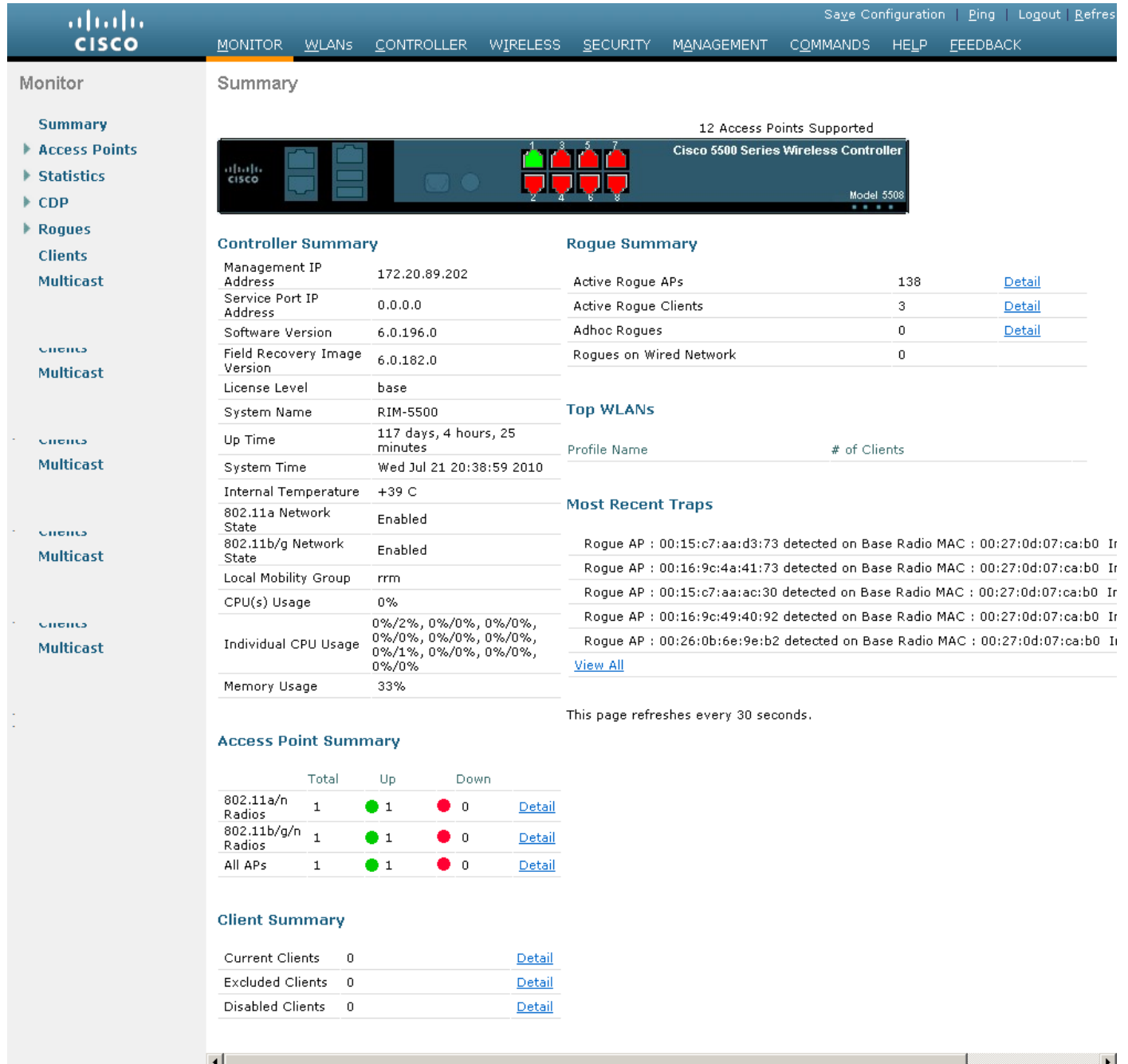
Traffic Stream Metrics

Metrics Collection

☒

Wireless LAN Controller 2

WLC Controller Summary





WLC WLANs

CISCO Save Configuration | Ping | Logout | Refresh

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs Entries 1 - 1 of 1

WLANs

- WLANs
- Advanced

Current Filter: None [\[Change Filter\]](#) [\[Clear Filter\]](#) Create New Go

<input type="checkbox"/>	WLAN ID	Type	Profile Name	WLAN SSID	Admin Status	Security Policies
<input type="checkbox"/>	1	WLAN	rim	rim	Enabled	[WPA + WPA2][Auth(802.1X + C

WLC WLANs General

CISCO Save Configuration | Ping | Logout | Refresh

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs

- WLANs
- Advanced

WLANs > Edit < Back Apply

General **Security** QoS Advanced

Profile Name rim

Type WLAN

SSID rim

Status ☒ Enabled

Security Policies [WPA + WPA2][Auth(802.1X + CCKM)]
(Modifications done under security tab will appear after applying the changes.)

Radio Policy All

Interface management

Broadcast SSID ☒ Enabled

WLC WLANs Security layer 2

CISCO Save Configuration | Ping | Logout | Refresh

MONITOR **WLANs** CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs

- WLANs
- Advanced

WLANs > Edit < Back Apply

General **Security** QoS Advanced

Layer 2 **Layer 3** **AAA Servers**

Layer 2 Security ☒ WPA+WPA2 ☐ MAC Filtering

WPA+WPA2 Parameters

WPA Policy ☒

WPA Encryption ☒ AES ☒ TKIP

WPA2 Policy ☒

WPA2 Encryption ☒ AES ☒ TKIP

Auth Key Mgmt 802.1X+CCKM



WLC WLANs Security AAA

WLANs > Edit

Save Configuration | Ping | Logout | Refresh

MONITOR WLANs CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs

- WLANs
- Advanced

General Security QoS Advanced

Layer 2 Layer 3 AAA Servers

Radius Servers

Authentication Servers		Accounting Servers	
<input checked="" type="checkbox"/> Enabled		<input checked="" type="checkbox"/> Enabled	
Server 1	IP:172.20.89.124, Port:1812	None	None
Server 2	None	None	None
Server 3	None	None	None

LDAP Servers

Server 1	None
Server 2	None
Server 3	None

Local EAP Authentication

Local EAP Authentication ☐ Enabled

Authentication priority order for web-auth user

Not Used > Order Used For Authentication

LOCAL RADIUS LDAP

Up Down

WLC WLANs Security Advance

WLANs > Edit

Save Configuration | Ping | Logout | Refresh

MONITOR WLANs CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP FEEDBACK

WLANs

- WLANs
- Advanced

General Security QoS Advanced

Allow AAA Override ☐ Enabled

Coverage Hole Detection ☒ Enabled

Enable Session Timeout ☒ 1800

Session Timeout (secs)

Aironet IE ☒ Enabled

Diagnostic Channel ☐ Enabled

IPv6 Enable ☐

Override Interface ACL ☐ None

P2P Blocking Action ☐ Disabled

Client Exclusion ☐ Enabled

Media Session Snooping ☒

Off Channel Scanning Defer

Scan Defer Priority	0	1	2	3	4	5	6	7
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Scan Defer Time(msecs) 100

DHCP

DHCP Server ☒ Override

DHCP Server IP Addr 172.20.89.202

DHCP Addr. Assignment ☐ Required

Management Frame Protection (MFP)

Infrastructure MFP Protection ☒ (Global MFP Disabled)

MFP Client Protection ☐ Optional

DTIM Period (in beacon intervals)

802.11a/n (1 - 255)	2
802.11b/g/n (1 - 255)	2

NAC

State ☐ Enabled

HREAP

Load Balancing and Band Select



WLC Controller Detail

WLC Controller Inventory

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WLC Controller Interfaces

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[Save Configuration](#) | [Ping](#) | [Logout](#) | [Refresh](#)

[New...](#)

Controller

General

Inventory

Interfaces

Multicast

Network Routes

▶ Internal DHCP Server

▶ Mobility Management

Ports

NTP

▶ CDP

▶ Advanced

Interfaces

Interface Name	VLAN Identifier	IP Address	Interface Type	Dynamic AP Management
management	89	172.20.89.202	Static	Enabled
service-port	N/A	0.0.0.0	Static	Not Supported
virtual	N/A	1.1.1.1	Static	Not Supported



WLC Controller Interfaces Manager

CISCO

MONITOR

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Interfaces

Multicast

Network Routes

Internal DHCP Server

Mobility Management

Ports

Mobility Management

Ports

Mobility Management

Ports

Mobility Management

Ports

NTP

CDP

Advanced

Save Configuration | Ping | Logout | Refresh

Interfaces > Edit

< Back

Apply

General Information

Interface Namemanagement

MAC Address00:27:0d:45:8a:60

Configuration

Quarantine☐

Quarantine Vlan Id0

NAT Address

Enable NAT Address☐

Interface Address

VLAN Identifier89

IP Address172.20.89.202

Netmask255.255.255.0

Gateway172.20.89.1

Physical Information

Port Number1

Backup Port0

Active Port1

Enable Dynamic AP Management☒

DHCP Information

Primary DHCP Server172.20.89.202

Secondary DHCP Server0.0.0.0

Access Control List

ACL Namenone

Note: Changing the Interface parameters causes the WLANs to be temporarily disabled and thus may result in loss of connectivity for some clients.



WLC Wireless AP

MONITOR

WLANs

CONTROLLER

WIRELESS

SECURITY

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FEEDBACK

Save Configuration | Ping | Logout | Refresh

Wireless

Access Points

All APs

Radios

802.11a/n

802.11b/g/n

Global Configuration

Advanced

Mesh

HREAP Groups

802.11a/n

802.11b/g/n

All APs

Entries 1 - 1 of 1

Current FilterNone[Change Filter][Clear Filter]

Number of APs1

AP Name	AP MAC	AP Up Time	Admin Status	Operational Status	Port	AP Mode	C
AP-5500	00:22:bd:1b:35:46	69 d, 11 h 04 m 41 s	Enabled	REG	1	Local	m

WLC Wireless AP Detail

MONITOR

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Access Points

All APs

Radios

802.11a/n

802.11b/g/n

Global Configuration

Advanced

Mesh

HREAP Groups

802.11a/n

802.11b/g/n

Mesh

HREAP Groups

802.11a/n

802.11b/g/n

Mesh

HREAP Groups

802.11a/n

802.11b/g/n

Mesh

HREAP Groups

802.11a/n

802.11b/g/n

Mesh

HREAP Groups

Country

Timers

QoS

All APs > Details for AP-5500

< Back | Apply

General

Credentials

Interfaces

High Availability

Inventory

Advanced

General

AP NameAP-5500

Locationdefault location

AP MAC Address00:22:bd:1b:35:46

Base Radio MAC00:27:0d:07:ca:b0

StatusEnable

AP Modelocal

Operational StatusREG

Port Number1

Versions

Software Version6.0.196.0

Boot Version12.4.18.0

IOS Version12.4(21a)JHA

Mini IOS Version3.0.51.0

IP Config

IP Address172.20.89.210

Static IP☐

Time Statistics

UP Time69 d, 11 h 06 m 35 s

Controller Associated Time69 d, 11 h 05 m 44 s

Controller Association Latency0 d, 00 h 00 m 50 s

Hardware Reset

Perform a hardware reset on this AP

Reset AP Now

Set to Factory Defaults

Clear configuration on this AP and reset it to factory defaults

Clear All Config

Clear Config Except Static IP



Wireless Call Admission Control

CISCO

Save Configuration | Ping | Logout | Refresh

MONITORWLANsCONTROLLERWIRELESSSECURITYMANAGEMENTCOMMANDSHelpFEEDBACK

Wireless

▼ Access Points

All APs

▼ Radios

802.11a/n

802.11b/g/n

Global Configuration

► Advanced

Mesh

HREAP Groups

▼ 802.11a/n

Network

▼ RRM

RF Grouping

TPC

DCA

Coverage

General

Client Roaming

Voice

Video

EDCA Parameters

DFS (802.11h)

High Throughput (802.11n)

► 802.11b/g/n

Country

Timers

► QoS

802.11a > Voice Parameters

Apply

Call Admission Control (CAC)

Admission Control (ACM)

☒

Enabled

Load-based CAC

☒

Enabled

Max RF Bandwidth (5-85)(%)

Reserved Roaming Bandwidth (%)

Expedited bandwidth

☐

Traffic Stream Metrics

Metrics Collection

☒



Wireless Data Rates

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RF Grouping

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Client Roaming

Voice

Video

EDCA Parameters

DFS (802.11h)

High Throughput (802.11n)

► 802.11b/g/n

Country

Timers

► QoS

802.11n (5 GHz) High Throughput

Apply

General

11n Mode ☒ Enabled

MCS (Data Rate ¹) Settings

0 (7 Mbps)	<input checked="" type="checkbox"/> Supported
1 (14 Mbps)	<input checked="" type="checkbox"/> Supported
2 (21 Mbps)	<input checked="" type="checkbox"/> Supported
3 (29 Mbps)	<input checked="" type="checkbox"/> Supported
4 (43 Mbps)	<input checked="" type="checkbox"/> Supported
5 (58 Mbps)	<input checked="" type="checkbox"/> Supported
6 (65 Mbps)	<input checked="" type="checkbox"/> Supported
7 (72 Mbps)	<input checked="" type="checkbox"/> Supported
8 (14 Mbps)	<input checked="" type="checkbox"/> Supported
9 (29 Mbps)	<input checked="" type="checkbox"/> Supported
10 (43 Mbps)	<input checked="" type="checkbox"/> Supported
11 (58 Mbps)	<input checked="" type="checkbox"/> Supported
12 (87 Mbps)	<input checked="" type="checkbox"/> Supported
13 (116 Mbps)	<input checked="" type="checkbox"/> Supported
14 (130 Mbps)	<input checked="" type="checkbox"/> Supported
15 (144 Mbps)	<input checked="" type="checkbox"/> Supported

1 DataRates are calculated for 20 MHz Channel width

2 WMM and open or AES security should be enabled to support higher 11n rates



WLC Wireless AP Radios

MONITOR

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CONTROLLER

WIRELESS

SECURITY

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FEEDBACK

Monitor

Summary

Access Points

Radios

Statistics

CDP

Rogues

Clients

Multicast

802.11b/g/n Radios

Entries 1 - 1 of 1

Current Filter: None

[\[Change Filter\]](#) [\[Clear Filter\]](#)

AP Name	Radio Slot#	Base Radio MAC	Operational Status	Load Profile	Noise Profile	Interference Profile	Coverage Profile
AP-5500	0	00:27:0d:07:ca:b0	UP	Passed	Passed	Passed	Passed

WLC Wireless AP Radios 802.11b/g/n (1 of 2)

MONITOR

WLANs

CONTROLLER

WIRELESS

SECURITY

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Monitor

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Statistics

CDP

Rogues

Clients

Multicast

Radio > Statistics

< Back

Text View

Click the Refresh button to obtain the latest statistics

Statistics:

☒ Profile Information

☒ Rx Neighbors

☒ 802.11 MAC Counters

☒ Band Select Statistics

AP Name

AP-5500

Base Radio MAC

00:27:0d:07:ca:b0

AP IP Address

172.20.89.210

Radio Type

802.11b/g/n

Operational Status

UP

Monitor Only Mode

Local

Channel Number

1

Slot #

0

VoIP Stats

Cumulative Number of calls

0

Cumulative Time of calls

0 h 0 m 0 s

Profile Information

Noise Profile

Passed

Interference Profile

Passed

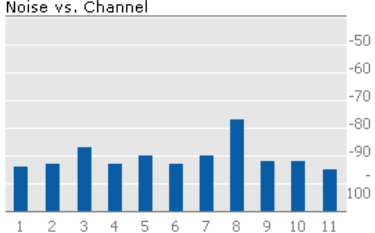
Load Profile

Passed

Coverage Profile

Passed


Noise vs. Channel





Configuring the Cisco Unified Communications Manager

Cisco Unified Communications Manager Version



Cisco Unified CM Administration

For Cisco Unified Communications Solutions


Navigation Cisco Unified CM Administration Go

administrator | [Search Documentation](#) | [About](#) | [Logout](#)

System ▼ | [Call Routing](#) ▼ | [Media Resources](#) ▼ | [Advanced Features](#) ▼ | [Device](#) ▼ | [Application](#) ▼ | [User Management](#) ▼ | [Help](#) ▼

Cisco Unified CM Administration

System version: 8.0.2.30000-1



Last Successful Logon: Jul 14, 2010 11:52:48 AM

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COP File and Installation

Make sure the BlackBerry Mobile Voice System COP file has been installed into UCM before configuring your BlackBerry devices.

Follow the link to download the COP file

<https://www.blackberry.com/Downloads/entry.do?code=62F91CE9B820A491EE78C108636DB089>

Cisco Unified OS Administration

Cisco Unified Operating System Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified OS Administration Go

Cisco Unified Operating System Administration

Username: Administrator
Password: *****
Login Reset

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Software Upgrades->Install/Upgrade

Select the COP file on the next window and click continue...

The screenshot shows the Cisco Unified Operating System Administration web interface. The top navigation bar includes the Cisco logo, the title "Cisco Unified Operating System Administration", and a navigation dropdown menu set to "Cisco Unified OS Administration". Below this is a secondary bar with "administrator" and links for "Search Documentation", "About", and "Logout". A main menu bar contains "Show", "Settings", "Security", "Software Upgrades", "Services", and "Help". The "Software Upgrades" section is active, displaying the "Software Installation/Upgrade" page. At the top of this page are "Cancel" and "Next" buttons. Below is a "Status" section showing "Status: Ready". The "Software Location" section contains the following fields: "Source" (Remote Filesystem), "Directory" (/auto/ipcbu-builds2-published/<COP file>), "Server" (10.192.168.1), "User Name" (drseus), "User Password" (masked with dots), and "Transfer Protocol" (SFTP). At the bottom of the form are "Cancel" and "Next" buttons.



Media Termination Point Configurations

Media Resources -> Media Termination Point

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 ▾ Help ▾

Find and List Media Termination Points

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

Status
 2 records found

Media Termination Point (1 - 2 of 2) **Rows per Page** 50 ▾

Find Media Termination Point where Name ▾ begins with ▾

<input type="checkbox"/>	Name ▲	Description	Device Pool	Status	IP Address	Copy
	MTP_2	MTP_CM-RIM	Default	Registered with CM-RIM	172.20.89.254	Not Allowed
	MTP_3	MTP_CM-RIM-SUB1	Default	Unknown	Unknown	Not Allowed

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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Media Termination Point Configuration **Related Links:**

Save Reset Apply Config

Status
 Status: Ready

Media Termination Point Information

Registration

Registered with Cisco Unified Communications Manager CM-RIM

IP Address

172.20.89.254

Media Termination Point Type *

Cisco Media Termination Point Software

Host Server *

CM-RIM

Media Termination Point Name *

Description

Device Pool *

☐ Trusted Relay Point

*- indicates required item.



Conference Bridge Configurations

Media Resources -> Conference Bridge

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration Go

administrator | Search Documentation | About | Logout

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

Find and List Conference Bridges

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

Status
 2 records found

Conference Bridges (1 - 2 of 2) Rows per Page 50 ▾

Find Conference Bridges where Name ▾ begins with ▾ Find Clear Filter + -

<input type="checkbox"/>	Conference Bridge Name [▲]	Description	Device Pool	Status	IP Address	Copy
<input type="checkbox"/>	CFB_2	CFB_CM-RIM	Default	Registered with CM-RIM	172.20.89.254	
<input type="checkbox"/>	CFB_3	CFB_CM-RIM-SUB1	Default	Unknown	Unknown	

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

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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

Conference Bridge Configuration Related Links: Back To Find/List

Save Reset Apply Config

Status
 Status: Ready

Conference Bridge Information
Conference Bridge : CFB_2 (CFB_CM-RIM)
Registration Registered with Cisco Unified Communications Manager CM-RIM
IP Address 172.20.89.254

Software Conference Bridge Info

Conference Bridge Type*
Host Server

Cisco Conference Bridge Software
CM-RIM

Device is not trusted

Conference Bridge Name*
Description

CFB_2
CFB_CM-RIM

Device Pool*
Common Device Configuration

Default
< None >

Location*
Use Trusted Relay Point*

Hub_None
Default

Save Reset Apply Config


*- indicates required item.



Resource Group Configurations

UCM Annunciator for Blackberry Devices

Media Resources -> Resource Group

**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 Help

Media Resource Group Configuration Related Links: Back To Find/List

Save Delete Copy Add New

Media Resource Group Information

Name * MRG-MVS

Description

Devices for this Group

Available Media Resources **

ANN_2
ANN_3


Selected Media Resources *

CFB_2 (CFB)
CFB_3 (CFB)
MOH_2 (MOH)
MOH_3 (MOH)
MTP_2 (MTP)

☐ Use Multi-cast for MOH Audio (If at least one multi-cast MOH resource is available)

Save Delete Copy Add New

UCM Annunciator for IP Phones

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

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

Media Resource Group Configuration Related Links: Back To Find/List

Save Delete Copy Add New

Status

Status: Ready

Media Resource Group Status

Media Resource Group: MRG (used by 24 devices)

Media Resource Group Information

Name * MRG

Description

Devices for this Group

Available Media Resources **

Selected Media Resources *

ANN_2 (ANN)
ANN_3 (ANN)
CFB_2 (CFB)
CFB_3 (CFB)
MOH_2 (MOH)

☐ Use Multi-cast for MOH Audio (If at least one multi-cast MOH resource is available)


Save Delete Copy Add New



UCM User

User Config (1 of 2)

User Management->End User







Cisco Unified CM Administration



For Cisco Unified Communications Solutions






System ▼ Call Routing ▼ Media Resources ▼ Advanced Features ▼ Device ▼ Application ▼ User Management ▼ Help ▼

End User Configuration

 Save  Delete  Add New

Status
 Status: Ready

User Information
User ID*
Password 
Confirm Password
PIN 
Confirm PIN
Last name*
Middle name
First name
Telephone Number
Mail ID
Manager User ID
Department
User Locale
Associated PC
Digest Credentials
Confirm Digest Credentials

Device Information
Controlled Devices 
Available Profiles
CTI Controlled Device Profiles  
 



User Config (2 of 2)

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

[View Details](#)

CAPF Information

Associated CAPF Profiles

[View Details](#)

Permissions Information

Groups

Roles

[View Details](#)

[View Details](#)

[Add to User Group](#)

[Remove from User Group](#)

[Save](#)


[Delete](#)

[Add New](#)



MGCP Gateway Configurations

Device -> Gateway



Cisco Unified CM Administration

For Cisco Unified Communications Solutions


Navigation Cisco Unified CM Administration

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




Find and List Gateway

Add New

Status
 3 records found

Gateways (1 - 3 of 3) Rows per Page 50 ▾

Find Gateways where

<input type="checkbox"/>	Device Name	Description	Device Pool	Calling Search Space	Device Type	Status	IP Address
<input type="checkbox"/>	 172.27.28.50	h323 gateway	SUB1 DevicePool		H.323 Gateway	Unknown	172.27.28.50
<input type="checkbox"/>	 3845E1	3845E1 BRI2			Cisco 3845	See Endpoints	
<input type="checkbox"/>	 c2811 MGCP	MGCP GW ISDN-PRI			Cisco 2811	See Endpoints	



MGCP Gateway Detail Configurations (1 of 3)

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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Gateway Configuration Related Links: Back To Find/List

Save Delete Reset Apply Config Add New

Status
Status: Ready

Gateway Details
Product: Cisco 2811
Gateway: c2811_MGCP
Protocol: MGCP
Device is not trusted
Domain Name*: c2811_MGCP
Description: MGCP GW ISDN-PRI
Cisco Unified Communications Manager Group*: SUB1_MVS

Configured Slots, VICs and Endpoints
Module in Slot 0: NM-4VWIC-MBRD
Subunit 0: VWIC-1MFT-T1 0/0/ 0 T1PRI
Subunit 1: VIC2-2FXS 0/1/ 0 POTS 0/1/ 1
Subunit 2: < None >
Subunit 3: < None >
Module in Slot 1: NM-HDV
Subunit 0: VWIC-2MFT-T1 1/0/ 0 1/0/ 1 T1PRI

Product Specific Configuration Layout
Global ISDN Switch Type: 4ESS
Switchback Timing*: Graceful
Switchback uptime-delay (min): 10
Switchback schedule (hh:mm): 12:00
Type Of DTMF Relay*: Out of Band
Modem Passthrough*: Enable
Cisco Fax Relay*: Disable
T38 Fax Relay*: Disable
RTP Package Capability*: Enable
MT Package Capability*: Disable
RES Package Capability*: Disable
PRE Package Capability*: Enable
SST Package Capability*: Enable
RTP Unreachable OnOff*: Enable
RTP Unreachable timeout (ms)*: 1000
RTCP Report Interval (secs)*: 0
Simple SDP*: Enable

Save Delete Reset Apply Config Add New

*- indicates required item.

DTMF Relay must be set to "Out of Band" for better interoperability; otherwise, user will hear DTMF tones during call setup.



MGCP Gateway Detail Configurations (2 of 3)

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Gateway Configuration Related Links: Back to MGCP Configuration

Save Delete Reset Apply Config Add New

Status
Status: Ready

Device Information
Product Cisco MGCP T1 Port
Gateway c2811_MGCP
Device Protocol Digital Access PRI
Registration Unknown
IP Address Unknown
 Device is not trusted
End-Point Name * S1/SU0/DS1-1@c2811_MGCP
Description S1/SU0/DS1-1@c2811_MGCP
Device Pool * SUB1_DevicePool
Common Device Configuration < None >
Call Classification * Use System Default
NetworkLocale < None >
Packet Capture Mode * None
Packet Capture Duration 0
Media Resource Group List MRGL
Location * Hub_None
AAR Group < None >
Load Information
Use Trusted Relay Point * Default
Route Class Signaling Enabled * Off
☐ Transmit UTF-8 for Calling Party Name
☐ V150 (subset)
☒ PSTN Access

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

Interface Information
PRI Protocol Type * PRI 4ESS
QSIG Variant * No Changes
ASN.1 ROSE OID Encoding * No Changes
Protocol Side * User
Channel Selection Order * Bottom Up
Channel IE Type * Use Number when 18
PCM Type * µ-law
Delay for first restart (1/8 sec ticks) * 32
Delay between restarts (1/8 sec ticks) * 4
☒ Inhibit restarts at PRI initialization
☐ Enable status poll
☐ Unattended Port
☐ Enable G.Clear



MGCP Gateway Detail information (3 of 3)

Call Routing Information - Inbound Calls
Significant Digits*
Calling Search Space
AAR Calling Search Space
Prefix DN

Call Routing Information - Outbound Calls
Calling Party Presentation*
Calling Party Selection*
Called party IE number type unknown*
Calling party IE number type unknown*
Called Numbering Plan*
Calling Numbering Plan*
Number of digits to strip*
Caller ID DN
SMDI Base Port*
Called Party Transformation CSS
☒ Use Device Pool Called Party Transformation CSS
Calling Party Transformation CSS
☒ Use Device Pool Calling Party Transformation CSS

PRI Protocol Type Specific Information
☒ Display IE Delivery
☒ Redirecting Number IE Delivery - Outbound
☒ Redirecting Number IE Delivery - Inbound
☐ Send Extra Leading Character in Display IE***
☐ Setup non-ISDN Progress Indicator IE Enable****
☐ MCDN Channel Number Extension Bit Set to Zero**
☐ Send Calling Name In Facility IE
☐ Interface Identifier Present**
Interface Identifier Value**
Connected Line ID Presentation (QSIG Inbound Call)*

UUIE Configuration
☐ Passing Precedence Level Through UUIE
Security Access Level*

Intercompany Media Engine (IME)
E.164 Transformation Profile

Incoming Calling Party Settings

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

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
National Number	<input type="text" value="Default"/>	<input type="text" value="0"/>	<input type="text" value=" < None >"/>	<input checked="" type="checkbox"/>
International Number	<input type="text" value="Default"/>	<input type="text" value="0"/>	<input type="text" value=" < None >"/>	<input checked="" type="checkbox"/>
Unknown Number	<input type="text" value="Default"/>	<input type="text" value="0"/>	<input type="text" value=" < None >"/>	<input checked="" type="checkbox"/>
Subscriber Number	<input type="text" value="Default"/>	<input type="text" value="0"/>	<input type="text" value=" < None >"/>	<input checked="" type="checkbox"/>

Product Specific Configuration Layout


?

Line Coding*
Framing*
Clock*
Input Gain (-6..14 db)*
Output Attenuation (-6..14 db)*
Echo Cancellation Enable*
Echo Cancellation Coverage (ms)*

Geolocation Configuration
Geolocation
Geolocation Filter



CUCM SIP Trunk Detail Configuration (1 of 3)

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Trunk Configuration

Related Links: Back To Find/List

 Save  Delete  Reset  Apply Config  Add New

Status

 Status: Ready

Device Information

Product:	SIP Trunk
Device Protocol:	SIP
Trunk Service Type	None(Default)
Device Name*	<input type="text" value="SUB1_TO_TC1"/>
Description	<input type="text"/>
Device Pool*	<input type="text" value="SUB1_DevicePool"/>
Common Device Configuration	<input type="text" value=" < None >"/>
Call Classification*	<input type="text" value=" Use System Default"/>
Media Resource Group List	<input type="text" value=" MRGL"/>
Location*	<input type="text" value=" Hub_None"/>
AAR Group	<input type="text" value=" < None >"/>
Packet Capture Mode*	<input type="text" value=" None"/>
Packet Capture Duration	<input type="text" value=" 0"/>
<input type="checkbox"/> Media Termination Point Required	
<input checked="" type="checkbox"/> Retry Video Call as Audio	
<input type="checkbox"/> Transmit UTF-8 for Calling Party Name	
<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 end to end security. Failure to do so will expose keys and other information.	
Route Class Signaling Enabled*	<input type="text" value=" Default"/>
Use Trusted Relay Point*	<input type="text" value=" Default"/>
<input checked="" type="checkbox"/> PSTN Access	



CUCM SIP Trunk Detail Configuration (2 of 3)

Intercompany Media Engine (IME)				
E.164 Transformation Profile < None >				
Multilevel Precedence and Preemption (MLPP) Information				
MLPP Domain < None >				
Call Routing Information				
<input checked="" type="checkbox"/> Remote-Party-Id				
<input checked="" type="checkbox"/> Asserted-Identity				
Asserted-Type* Default				
SIP Privacy* Default				
Inbound Calls				
Significant Digits* All				
Connected Line ID Presentation* Default				
Connected Name Presentation* Default				
Calling Search Space < None >				
AAR Calling Search Space < None >				
Prefix DN 				
<input type="checkbox"/> 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 (DevicePool/Service Parameter). Otherwise, the value configured is used as the prefix unless the field is empty in which case there is no prefix assigned.				
<div>Clear Prefix Settings Default Prefix Settings</div>				
Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
Incoming Number	Default	0	< None >	<input checked="" type="checkbox"/>
Connected Party Settings				
Connected Party Transformation CSS < None >				
<input checked="" type="checkbox"/> Use Device Pool Connected Party Transformation CSS				
Outbound Calls				
Called Party Transformation CSS < None >				
<input checked="" type="checkbox"/> Use Device Pool Called Party Transformation CSS				
Calling Party Transformation CSS < None >				
<input checked="" type="checkbox"/> Use Device Pool Calling Party Transformation CSS				
Calling Party Selection* Originator				
Calling Line ID Presentation* Default				
Calling Name Presentation* Default				
Caller ID DN 14085551212				
Caller Name 				
<input checked="" type="checkbox"/> Redirecting Diversion Header Delivery - Outbound				



CUCM SIP Trunk Detail Configuration (3 of 3)

— SIP Information —

Destination Address	<input type="text" value="172.20.89.251"/>
Destination Address IPv6	<input type="text"/>
<input type="checkbox"/> Destination Address is an SRV	
Destination Port*	<input type="text" value="6060"/>
MTP Preferred Originating Codec*	<input type="text" value="711ulaw"/>
Presence Group*	<input type="text" value="Standard Presence group"/>
SIP Trunk Security Profile*	<input type="text" value="MVS SIP Security Profile"/>
Rerouting Calling Search Space	<input "="" type="text" value=" < None > "/>
Out-Of-Dialog Refer Calling Search Space	<input "="" type="text" value=" < None > "/>
SUBSCRIBE Calling Search Space	<input "="" type="text" value=" < None > "/>
SIP Profile*	<input type="text" value="Standard SIP Profile"/>
DTMF Signaling Method*	<input type="text" value="OOB and RFC 2833"/>

— Geolocation Configuration —

Geolocation	<input "="" type="text" value=" < None > "/>
Geolocation Filter	<input "="" type="text" value=" < None > "/>
<input type="checkbox"/> Send Geolocation Information	

— —



*- indicates required item.




** - Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.



Call Route Pattern

Call Routing -> Route/Hunt-> Route Pattern





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Find and List Route Patterns







 Add New  Select All  Clear All  Delete Selected

Status

 6 records found

Route Patterns *(1 - 6 of 6)* Rows per Page 50 ▾

Find Route Patterns where Pattern ▾ begins with ▾ Find Clear Filter  

<input type="checkbox"/>	Pattern ▲	Description	Partition	Route Filter	Associated Device	Copy
<input type="checkbox"/>	14083253799	DNIS number for BB initiated call to MVS Server			SUB1-TO-TC1	
<input type="checkbox"/>	1408XXXXXXXX	PBX Initiated Outbound Call			SUB1-PSTN-SIP	
<input type="checkbox"/>	1650XXXXXXXX	PBX Initiated Outbound Call			SUB1-PSTN-SIP	
<input type="checkbox"/>	1972XXXXXXXX	PBX Initiated Outbound Call			SUB1-PSTN-SIP	
<input type="checkbox"/>	408XXXXXXXX	PBX Initiated Outbound Call			SUB1-PSTN-SIP	
<input type="checkbox"/>	9.@	PBX Initiated Outbound Call			SUB1-PSTN-SIP	

Add New Select All Clear All Delete Selected



Call Routing -> Route/Hunt-> Route Pattern Detail

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Route Pattern Configuration Related Links: Back To Find/List

Save Delete Copy Add New

Status
Status: Ready

Pattern Definition
Route Pattern* 1408XXXXXXX
Route Partition < None >
Description PBX Initiated Outbound Call
Numbering Plan -- Not Selected --
Route Filter < None >
MLPP Precedence* Default
Resource Priority Namespace Network Domain < None >
Route Class* Default
Gateway/Route List* SUB1-PSTN-SIP (Edit)
Route Option
☒ Route this pattern
☐ Block this pattern No Error
Call Classification* OffNet
☐ Allow Device Override ☐ Provide Outside Dial Tone ☐ Allow Overlap Sending ☐ Urgent Priority
☐ Require Forced Authorization Code
Authorization Level* 0
☐ Require Client Matter Code

Calling Party Transformations
☒ Use Calling Party's External Phone Number Mask
Calling Party Transform Mask
Prefix Digits (Outgoing Calls)
Calling Line ID Presentation* Default
Calling Name Presentation* Default
Calling Party Number Type* Cisco CallManager
Calling Party Numbering Plan* Cisco CallManager

Connected Party Transformations
Connected Line ID Presentation* Default
Connected Name Presentation* Default

Called Party Transformations
Discard Digits < None >
Called Party Transform Mask
Prefix Digits (Outgoing Calls)
Called Party Number Type* Cisco CallManager
Called Party Numbering Plan* Cisco CallManager

ISDN Network-Specific Facilities Information Element
Network Service Protocol -- Not Selected --
Carrier Identification Code
Network Service Service Parameter Name Service Parameter Value
-- Not Selected -- < Not Exist >

Save Delete Copy Add New



Cisco IP Phones and BlackBerry Devices

Device -> Phone

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Find and List Phones Related Links: [Actively Logged In Device Report](#) Go

+ Add New ⌘ Select All ⌘ Clear All ✖ Delete Selected ↺ Reset Selected ✏ Apply Config to Selected

Status
 24 records found

Phone (1 - 24 of 24) Rows per Page 50 ▾

Find Phone where Device Name ▾ begins with ▾ Find Clear Filter + -
Select item or enter search text ▾

<input type="checkbox"/>		Device Name(Line) ▲	Description	Device Pool	Device Protocol	Status	IP Address	Copy	Super Copy
<input type="checkbox"/>		4000	BBVTG00 - 4000	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.251		
<input type="checkbox"/>		4001	BBVTG01 - 4001	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.251		
<input type="checkbox"/>		4002	BBVTG02 - 4002	SUB1 DevicePool	SIP	Unknown	Unknown		
<input type="checkbox"/>		4003	BBVTG03 - 4003	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.251		
<input type="checkbox"/>		4004	BBVTG04 - 4004	SUB1 DevicePool	SIP	Unknown	Unknown		
<input type="checkbox"/>		4005	BBVTG05 - 4005	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.251		
<input type="checkbox"/>		4010	BBVTG10	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.251		
<input type="checkbox"/>		SEP001C58F98BE6	Auto 4017	Default	SCCP	Unknown	Unknown		
<input type="checkbox"/>		SEP001D705F8FFF	Auto 4012	SUB1 DevicePool	SCCP	Registered with CM-RIM-SUB1	172.20.89.106		
<input type="checkbox"/>		SEP001D705F9058	4001	SUB1 DevicePool	SCCP	Registered with CM-RIM-SUB1	172.20.89.105		
<input type="checkbox"/>		SEP001E4A5F12E1	Auto 4016	Default	SCCP	Unknown	Unknown		
<input type="checkbox"/>		SEP0023339CA027	4011	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.103		
<input type="checkbox"/>		SEP0023339CA110	Auto 4002	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.102		
<input type="checkbox"/>		SEP0026CB3BB540	4003	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.108		
<input type="checkbox"/>		SEP0026CB3BB84C	4000	SUB1 DevicePool	SCCP	Registered with CM-RIM-SUB1	172.20.89.101		
<input type="checkbox"/>		SEP0026CB3BB90F	Auto 4013	SUB1 DevicePool	SIP	Registered with CM-RIM-SUB1	172.20.89.107		
<input type="checkbox"/>		SEP0026CB3BBD07	Auto 4010	SUB1 DevicePool	SCCP	Registered with CM-RIM-SUB1	172.20.89.104		



BlackBerry MVS Client

BlackBerry® MVS Client Configurations (1 of 2)

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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. 775 Line [1] - 4000 (no partition)
775
----- Unassigned Associated Items -----
2. 775 Line [2] - Add a new DN
775

Phone Type
Product Type: BlackBerry MVS Client
Device Protocol: SIP

Device Information
Registration: Unknown
IP Address: Unknown
Device is Active
Device is not trusted
Device Name: 4000
Description: BBVTG00 - 4000
Device Pool: SUB1_DevicePool
Common Device Configuration: < None >
Phone Button Template: Standard BlackBerry MVS Client Button Template
Common Phone Profile: Standard Common Phone Profile
Calling Search Space: < None >
AAR Calling Search Space: < None >
Media Resource Group List: MRGL-MVS
User Hold MOH Audio Source: 1-SampleAudioSource
Network Hold MOH Audio Source: 1-SampleAudioSource
Location: Hub_None
AAR Group: < None >
User Locale: < None >
Network Locale: < None >
Privacy: Default
Device Mobility Mode: Default
Owner User ID: 4000
Join Across Lines: Default
Use Trusted Relay Point: Default
BLF Audible Alert Setting (Phone Idle): Default
BLF Audible Alert Setting (Phone Busy): Default
Always Use Prime Line: Default
Always Use Prime Line for Voice Message: Default
Calling Party Transformation CSS: < None >
Geolocation: < None >

The "device name" value must equal the DN configured on UCM. In order to register a device, the DN value on CUCM must match with DN value on MVS Server

This is User ID for CUCM User.



BlackBerry MVS Client Configurations (2 of 2)

☒ 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

Packet Capture Mode*
None

Packet Capture Duration
0

Presence Group*
Standard Presence group

MTP Preferred Originating Codec*
711ulaw

Device Security Profile*
BlackBerry MVS Client - Standard SIP Non-Secure Profile

Rerouting Calling Search Space
< None >

SUBSCRIBE Calling Search Space
< None >

SIP Profile*
Standard SIP Profile

Digest User
< None >

☐ Media Termination Point Required

☐ Unattended Port

☐ Require DTMF Reception

MLPP Information

MLPP Domain
< None >

MLPP Indication*
Off

Do Not Disturb

☐ Do Not Disturb

DND Option*
Ringer Off

DND Incoming Call Alert
< None >

Save

Delete

Copy

Reset

Apply Config

Add New

i

* - Indicates required item.

i

** - Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.

i

*** Note: Security Profile Contains Addition CAPF Settings.

i

**** Note: A new Softkey template without supplementary service Softkeys must be used for a protected phone.

i

***** Note: A custom Softkey template without supplementary service Softkeys must be used for a Hot line Device.



Directory Number Configuration (1 of 2)

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Directory Number Configuration Related Links: Configure Device (4000)

Save Delete Reset Apply Config Add New

Status
Status: Ready

Directory Number Information
Directory Number * 4000
Route Partition < None >
Description
Alerting Name SUB1 00[Alert]
ASCII Alerting Name SUB1 00[Alert]
☒ Allow Control of Device from CTI
Associated Devices SEP0026CB3BB84C 4000
Edit Device
Edit Line Appearance
Dissociate Devices

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

AAR Settings
AAR ☐ or AAR Destination Mask < None > AAR Group < None >
☒ Retain this destination in the call forwarding history

Call Forward and Call Pickup Settings

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default
Forward All	<input type="checkbox"/> or	<input type="text"/>	< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Busy External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward on CTI Failure	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered External	<input type="checkbox"/> or	<input type="text"/>	< None >
No Answer Ring Duration (seconds)	45		
Call Pickup Group		< None >	



Directory Number Configuration (2 of 2)

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

MLPP Alternate Party Settings	
Target (Destination)	<input type="text"/>
MLPP Calling Search Space	< None >
MLPP No Answer Ring Duration (seconds)	<input type="text"/>

Line Settings for All Devices	
Hold Reversion Ring Duration (seconds)	<input type="text"/> Setting the Hold Reversion Ring Duration to zero will disable the feature
Hold Reversion Notification Interval (seconds)	<input type="text"/> Setting the Hold Reversion Notification Interval to zero will disable the feature
Party Entrance Tone *	Default

Line 1 on Device 4000			
	Value		Update Shared Device Settings
Display (Internal Caller ID)	88 00	Display text for a line appearance is intended for displaying text such as a name instead of a directory number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.	<input type="checkbox"/>
ASCII Display (Internal Caller ID)	88 00		<input type="checkbox"/>
External Phone Number Mask	4083253780		<input type="checkbox"/>
Monitoring Calling Search Space	< None >		

Propagate Selected

Multiple Call/Call Waiting Settings on Device 4000	
Note: The range to select the Max Number of calls is: 1-10	
Maximum Number of Calls *	4
Busy Trigger *	3 (Less than or equal to Max. Calls)

Forwarded Call Information Display on Device 4000	
<input checked="" type="checkbox"/> Caller Name	
<input checked="" type="checkbox"/> Caller Number	
<input checked="" type="checkbox"/> Redirected Number	
<input checked="" type="checkbox"/> Dialed Number	

Users Associated with Line	
Associate End Users	

Save Delete Reset Apply Config Add New

* - indicates required item.

** - Changes to Line or Directory Number settings require restart.

The busy trigger value must set to 3 or greater for MVS devices. If this value is not set, some scenarios of move call or call transfer will fail.



Cisco IP Phone 7961 SCCP Configuration (2 of 3)

Protocol Specific Information	
Packet Capture Mode *	None
Packet Capture Duration	0
Presence Group *	Standard Presence group
Device Security Profile *	Cisco 7961 - Standard SCCP Non-Secure Profile
SUBSCRIBE Calling Search Space	< None >
<input type="checkbox"/> Unattended Port	
<input type="checkbox"/> Require DTMF Reception	
<input type="checkbox"/> RFC2833 Disabled	

Certification Authority Proxy Function (CAPF) Information	
Certificate Operation *	No Pending Operation
Authentication Mode *	By Null String
Authentication String	
<input type="button" value="Generate String"/>	
Key Size (Bits) *	1024
Operation Completes By	2010 7 29 12 (YYYY:MM:DD:HH)
Certificate Operation Status: None	
Note: Security Profile Contains Addition CAPF Settings.	

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

External Data Locations Information (Leave blank to use default)	
Information	
Directory	
Messages	
Services	
Authentication Server	
Proxy Server	
Idle	
Idle Timer (seconds)	
Secure Authentication URL	
Secure Directory URL	
Secure Idle URL	
Secure Information URL	
Secure Messages URL	
Secure Services URL	

Extension Information	
<input type="checkbox"/> Enable Extension Mobility	
Log Out Profile	-- Use Current Device Settings --
Log in Time	< None >
Log out Time	< None >



Cisco IP Phone 7961 SCCP Configuration (3 of 3)

MLPP Information	
MLPP Domain	< None >
MLPP Indication *	Default
MLPP Preemption *	Default

Do Not Disturb	
<input type="checkbox"/> Do Not Disturb	
DND Option *	Ringer Off
DND Incoming Call Alert	< None >

Secure Shell Information	
Secure Shell User	
Secure Shell Password	

Product Specific Configuration Layout	
<div>Disable Speakerphone</div> <div>Disable Speakerphone and Headset</div> <div>Forwarding Delay *</div> <div>PC Port *</div> <div>Settings Access *</div> <div>Gratuitous ARP *</div> <div>PC Voice VLAN Access *</div> <div>Video Capabilities *</div> <div>Auto Line Select *</div> <div>Web Access *</div> <div>Span to PC Port *</div> <div>Logging Display *</div> <div>Load Server</div> <div>Recording Tone *</div> <div>Recording Tone Local Volume *</div> <div>Recording Tone Remote Volume *</div> <div>Recording Tone Duration</div> <div>RTCP *</div> <div>"more" Soft Key Timer</div> <div>Auto Call Select *</div> <div>Log Server</div> <div>Advertise G.722 Codec *</div> <div>Wideband Headset UI Control *</div> <div>Wideband Handset UI Control *</div> <div>Wideband Headset *</div> <div>Wideband Handset *</div> <div>Peer Firmware Sharing *</div> <div>Cisco Discovery Protocol (CDP): Switch Port *</div> <div>Cisco Discovery Protocol (CDP): PC Port *</div> <div>Link Layer Discovery Protocol - Media Endpoint Discover (LLDP-MED): Switch Port *</div> <div>Link Layer Discovery Protocol (LLDP): PC Port *</div> <div>LLDP Asset ID</div> <div>LLDP Power Priority *</div> <div>Display Refresh Rate *</div> <div>IPv6 Load Server</div> <div>IPv6 Log Server</div> <div>802.1x Authentication *</div> <div>Detect Unified CM Connection Failure *</div> <div>Minimum Ring Volume *</div> <div>Headset Sidetone Level *</div> <div>HTTPS Server *</div> <div>Enbloc Dialing *</div>	

Save Delete Copy Reset Apply Config Add New

i *. indicates required item.

i **. Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.

i *** Note: Security Profile Contains Addition CAPF Settings.

i **** Note: A new Softkey template without supplementary service Softkeys must be used for a protected phone.

i ***** Note: A custom Softkey template without supplementary service Softkeys must be used for a Hot line Device.



Phone Button Key Template

Phone Button Key Template (1 of 4)

Device -> Device Settings-> Phone Button Template

The screenshot shows the 'Softkey Template Configuration' page in Cisco Unified CM Administration. The page has a navigation bar at the top with 'Cisco Unified CM Administration' and a 'Go' button. Below the navigation bar is a menu bar with 'System', 'Call Routing', 'Media Resources', 'Advanced Features', 'Device', 'Application', 'User Management', and 'Help'. The main content area is titled 'Softkey Template Configuration' and includes a 'Related Links' section with 'Configure Softkey Layout' and a 'Go' button. Below this is a toolbar with icons for 'Save', 'Delete', 'Copy', 'Add New', 'Reset', and 'Apply Config'. The 'Status' section shows 'Status: Ready'. The 'Softkey Template Information' section includes fields for 'Name' (RIM Test Feature), 'Description' (RIM Test Softkey Template for CM Combined F.), and 'Applications' (Cisco.CallManager). There are 'Add Application' and 'Remove Application' buttons. A checkbox for 'Default Softkey Template' is also present. At the bottom, there are buttons for 'Save', 'Delete', 'Copy', 'Add New', 'Reset', and 'Apply Config'. A note indicates that an asterisk (*) denotes a required item.

The screenshot shows the 'Softkey Layout Configuration' page in Cisco Unified CM Administration. The page has a navigation bar at the top with 'Cisco Unified CM Administration' and a 'Go' button. Below the navigation bar is a menu bar with 'System', 'Call Routing', 'Media Resources', 'Advanced Features', 'Device', 'Application', 'User Management', and 'Help'. The main content area is titled 'Softkey Layout Configuration' and includes a 'Related Links' section with 'Softkey Template Configuration' and a 'Go' button. Below this is a toolbar with icons for 'Save', 'Reset', and 'Apply Config'. The 'Softkey Layout Configuration' section includes a 'Softkey Template: RIM Test Feature' and a 'Select a call state to configure' dropdown menu set to 'On Hook'. Below this is a list of 'Unselected Softkeys' and a list of 'Selected Softkeys (ordered by position)**'. The 'Unselected Softkeys' list includes: Call Back (CallBack), Conference List (ConfList), Direct Transfer (DirTrfr), Group Pick Up (GPickUp), HLog (HLog), Immediate Divert (iDivert), Join (Join), Meet Me (MeetMe), Mobility (Mobility), Other Pickup (oPickup), Pick Up (PickUp), Quality Report Tool (QRT), Remove Last Conference Party (RmLstC), Select (Select), Toggle Do Not Disturb (DND), and Undefined (Undefined). The 'Selected Softkeys' list includes: Redial (Redial), **NewCall (NewCall), and Forward All (CfwdAll). At the bottom, there are buttons for 'Save', 'Reset', and 'Apply Config'.



Phone Button Key Template (2 of 4)

Device -> Device Settings-> Phone Button Template

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration Go

administrator | [Search Documentation](#) | [About](#) | [Logout](#)

System ▾ | [Call Routing](#) ▾ | [Media Resources](#) ▾ | [Advanced Features](#) ▾ | [Device](#) ▾ | [Application](#) ▾ | [User Management](#) ▾ | [Help](#) ▾

Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save Reset Apply Config

Status
 Status: Ready

Notes
Use this window to specify the Softkeys and their relative order for any phone models that support downloadable Softkey templates. This window lists all the Softkeys in the system even though not all phones support all Softkeys. For information about the supported Softkeys for a particular phone, refer to the administration guide for the phone. If you choose a Softkey that is not supported by the phone, the Softkey will not display on the phone even if you configured it in this list.

Softkey Layout Configuration
Softkey Template: RIM Test Feature
Select a call state to configure Connected

Unselected Softkeys
HLog (HLog)
Quality Report Tool (QRT)
Record (Record)
Toggle Do Not Disturb (DND)
Undefined (Undefined)

>

<

Selected Softkeys (ordered by position)**
Hold (Hold)
End Call (EndCall)
Transfer (Trnsfer)
Park (Park)
Conference (Confrn)
Conference List (ConfList)
Select (Select)
Join (Join)
Direct Transfer (DirTrfr)
Toggle Malicious Call Trace (MCID)
Remove Last Conference Party (RmLstC)
Video Mode Command (VidMode)
Immediate Divert (iDiver)
Mobility (Mobility)

<

>

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save Reset Apply Config

Status
 Status: Ready

Notes
Use this window to specify the Softkeys and their relative order for any phone models that support downloadable Softkey templates. This window lists all the Softkeys in the system even though not all phones support all Softkeys. For information about the supported Softkeys for a particular phone, refer to the administration guide for the phone. If you choose a Softkey that is not supported by the phone, the Softkey will not display on the phone even if you configured it in this list.

Softkey Layout Configuration
Softkey Template: RIM Test Feature
Select a call state to configure On Hold

Unselected Softkeys
Immediate Divert (iDiver)
Toggle Do Not Disturb (DND)
Undefined (Undefined)

>

<

Selected Softkeys (ordered by position)**
**Resume (Resume)
NewCall (NewCall)
Direct Transfer (DirTrfr)
Select (Select)
Join (Join)

<

>

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Phone Button Key Template (3 of 4)

Device -> Device Settings-> Phone Button Template


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

Softkey Template Configuration Related Links: [Softkey Template Configuration](#)


Status
 Status: Ready

Notes
Use this window to specify the Softkeys and their relative order for any phone models that support downloadable Softkey templates. This window lists all the Softkeys in the system even though not all phones support all Softkeys. For information about the supported Softkeys for a particular phone, refer to the administration guide for the phone. If you choose a Softkey that is not supported by the phone, the Softkey will not display on the phone even if you configured it in this list.

Softkey Layout Configuration
Softkey Template: RIM Test Feature
Select a call state to configure:

Unselected Softkeys
Undefined (Undefined)

Selected Softkeys (ordered by position)**
Answer (Answer)
Immediate Divert (Divert)
Toggle Do Not Disturb (DND)


**Cisco Unified CM Administration**
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System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Help ▾

Softkey Template Configuration Related Links: [Softkey Template Configuration](#)

Status
 Status: Ready

Notes
Use this window to specify the Softkeys and their relative order for any phone models that support downloadable Softkey templates. This window lists all the Softkeys in the system even though not all phones support all Softkeys. For information about the supported Softkeys for a particular phone, refer to the administration guide for the phone. If you choose a Softkey that is not supported by the phone, the Softkey will not display on the phone even if you configured it in this list.

Softkey Layout Configuration
Softkey Template: RIM Test Feature
Select a call state to configure:

Unselected Softkeys
Abbreviated Dial (AbbrDial)
Cancel Call Waiting (CW Off)
HLog (HLog)
Other Pickup (oPickup)
Toggle Do Not Disturb (DND)
Undefined (Undefined)

Selected Softkeys (ordered by position)**
Redial (Redial)
End Call (EndCall)
Forward All (CfwdAll)
Pick Up (PickUp)
Group Pick Up (gPickUp)
Meet Me (MeetMe)



Phone Button Key Template (4 of 4)

Device -> Device Settings-> Phone Button Template

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration Go

administrator Search Documentation About Logout

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

Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save Reset Apply Config

Status
 Status: Ready

Notes
Use this window to specify the Softkeys and their relative order for any phone models that support downloadable Softkey templates. This window lists all the Softkeys in the system even though not all phones support all Softkeys. For information about the supported Softkeys for a particular phone, refer to the administration guide for the phone. If you choose a Softkey that is not supported by the phone, the Softkey will not display on the phone even if you configured it in this list.

Softkey Layout Configuration
Softkey Template: RIM Test Feature
Select a call state to configure: Connected Transfer

Unselected Softkeys
Call Back (CallBack)
Quality Report Tool (QRT)
Toggle Do Not Disturb (DND)
Undefined (Undefined)

> <

Selected Softkeys (ordered by position)**
Undefined (Undefined)
End Call (EndCall)
**Transfer (Transfer)

< >

Save Reset Apply Config

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Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save Reset Apply Config

Status
 Status: Ready

Notes
Use this window to specify the Softkeys and their relative order for any phone models that support downloadable Softkey templates. This window lists all the Softkeys in the system even though not all phones support all Softkeys. For information about the supported Softkeys for a particular phone, refer to the administration guide for the phone. If you choose a Softkey that is not supported by the phone, the Softkey will not display on the phone even if you configured it in this list.

Softkey Layout Configuration
Softkey Template: RIM Test Feature
Select a call state to configure: Remote In Use

Unselected Softkeys
Conference Barge (cBarge)
Undefined (Undefined)

> <

Selected Softkeys (ordered by position)**
Barge (Barge)
NewCall (NewCall)

< >

Save Reset Apply Config



Calling line name and number restriction configuration

Call Routing->Translation Pattern

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

Translation Pattern Configuration Related Links: Back To Find/List

Save Delets Copy Add New

Status
 Status: Ready

Pattern Definition
Translation Pattern 150XX
Partition < None >
Description
Numbering Plan < None >
Route Filter < None >
MLPP Precedence* Default
Resource Priority Namespace Network Domain < None >
Route Class* Default
Calling Search Space < None >
External Call Control Profile < None >
Route Option
☒ Route this pattern
☐ Block this pattern No Error
☒ Provide Outside Dial Tone
☒ Urgent Priority
☐ Route Next Hop By Calling Party Number

Calling Party Transformations
☐ Use Calling Party's External Phone Number Mask
Calling Party Transform Mask
Prefix Digits (Outgoing Calls)
Calling Line ID Presentation* Restricted
Calling Name Presentation* Default
Calling Party Number Type* Cisco CallManager
Calling Party Numbering Plan* Cisco CallManager

Connected Party Transformations
Connected Line ID Presentation* Default
Connected Name Presentation* Default

Called Party Transformations
Discard Digits < None >
Called Party Transform Mask 40XX
Prefix Digits (Outgoing Calls)
Called Party Number Type* Cisco CallManager
Called Party Numbering Plan* Cisco CallManager

Save Delete Copy Add New

* - indicates required item.



Cisco Voice Gateway Configuration

Gateway Version

Cisco IOS Software, 2800 Software (C2800NM-IPVOICE-M), Version 15.0(1)M2, RELEASE SOFTWARE (fc2)
Technical Support: <http://www.cisco.com/techsupport>
Copyright © 1986-2010 by Cisco Systems, Inc.
Compiled Wed 10-Mar-10 22:59 by prod_rel_team

ROM: System Bootstrap, Version 12.4(1r) [hqluong 1r], RELEASE SOFTWARE (fc1)

c2811_MGCP uptime is 5 days, 12 hours, 19 minutes
System returned to ROM by power-on
System image file is "flash:c2800nm-ipvoice-mz.150-1.M2.bin"
Last reload type: Normal Reload

Cisco 2811 (revision 53.50) with 247808K/14336K bytes of memory.
Processor board ID FHK0946F0MZ
2 FastEthernet interfaces
48 Serial interfaces
3 Channelized T1/PRI ports
2 Voice FXS interfaces
DRAM configuration is 64 bits wide with parity enabled.
239K bytes of non-volatile configuration memory.
62592K bytes of ATA CompactFlash (Read/Write)

Device#	PID	SN
*0	CISCO2811	FHK0946F0MZ

Configuration register is 0x2

Gateway Configurations

```
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname c2811_MGCP
!
boot-start-marker
boot-end-marker
!
logging message-counter syslog
enable secret 5 $1$G.N2$g/Nbhv3IsTFL6DahIL4aQ0
!
no aaa new-model
network-clock-participate slot 1
network-clock-participate wic 0
network-clock-select 1 T1 1/0/1
!
voice-card 0
!
voice-card 1
dspfarm
```




```
!  
ip source-route  
!  
!  
ip cef  
!  
!  
ip host cm-rim-sub1 172.25.67.202  
ip name-server 172.20.89.253  
no ipv6 cef  
multilink bundle-name authenticated  
!  
!  
!  
isdn switch-type primary-4ess  
!  
!  
username 86isco privilege 15 secret 5 $1$KgEv$25ls/LbFvOR4joo0xKVvh1  
archive  
  log config  
  hidekeys  
!  
!  
controller T1 0/0/0  
  pri-group timeslots 1-24 service mgcp  
!  
controller T1 1/0/0  
!  
controller T1 1/0/1  
  pri-group timeslots 1-24 service mgcp  
!  
!  
interface Tunnel0  
  ip address 192.168.1.1 255.255.255.0  
  tunnel source FastEthernet0/0  
  tunnel destination 172.24.112.14  
!  
interface FastEthernet0/0  
  ip address 172.27.28.50 255.255.255.224  
  duplex auto  
  speed auto  
!  
interface FastEthernet0/1  
  no ip address  
  shutdown  
  duplex auto  
  speed auto  
!  
interface Serial0/0/0:23  
  no ip address  
  encapsulation hdlc  
  isdn switch-type primary-ni  
  isdn incoming-voice voice  
  isdn bind-l3 ccm-manager  
  no cdp enable  
!  
interface Serial1/0/1:23  
  no ip address  
  encapsulation hdlc
```




```
isdn switch-type primary-4ess
isdn incoming-voice voice
isdn bind-l3 ccm-manager
no cdp enable
!
ip forward-protocol nd
ip route 0.0.0.0 0.0.0.0 172.27.28.33
ip route 172.20.89.0 255.255.255.0 Tunnel0
!
!
no ip http server
!
!
control-plane
!
!
voice-port 0/0/0:23
echo-cancel coverage 64
!
voice-port 0/1/0
ring cadence pattern01
!
voice-port 0/1/1
!
voice-port 1/0/1:23
!
ccm-manager mgcp
no ccm-manager fax protocol 87isco
ccm-manager music-on-hold
ccm-manager config server cm-rim-sub1
ccm-manager config
!
mgcp
mgcp call-agent CM-RIM-SUB1 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voip mode nse
mgcp package-capability rtp-package
mgcp package-capability sst-package
mgcp package-capability pre-package
no mgcp package-capability res-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 ecm
mgcp fax t38 inhibit
!
mgcp profile default
!
!
!
dial-peer voice 999011 pots
service mgcpapp
port 0/1/1
!
dial-peer voice 100 pots
service mgcpapp
port 0/0/0:23
!
dial-peer voice 999010 pots
```

DTMF Relay must be set to “Out of Band” for better interoperability; otherwise, user will hear DTMF tones during call setup.



```
service mgcpapp
port 0/1/0
!
!
line con 0
line aux 0
line vty 0 4
password 88isco
login
!
scheduler allocate 20000 1000
end
```

Gateway Chassis Info

Slot 0:

C2811 Motherboard with 2FE and integrated VPN Port adapter, 2 ports

Port adapter is analyzed

Port adapter insertion time 5d12h ago

EEPROM contents at hardware discovery:

PCB Serial Number : FOC09412RJX

Hardware Revision : 1.0

Top Assy. Part Number : 800-21849-03

Board Revision : A0

Deviation Number : 0

Fab Version : 03

RMA Test History : 00

RMA Number : 0-0-0-0

RMA History : 00

Processor type : 87

Hardware date code : 20051019

Chassis Serial Number : FHK0946F0MZ

Chassis MAC Address : 0015.63c3.4f60

MAC Address block size : 24

CLEI Code : CNMJ7N0BRB

Product (FRU) Number : CISCO2811

Part Number : 73-10258-03

Version Identifier : V02

EEPROM format version 4

EEPROM contents (hex):

0x00: 04 FF C1 8B 46 4F 43 30 39 34 31 32 52 4A 58 40

0x10: 03 E7 41 01 00 C0 46 03 20 00 55 59 03 42 41 30

0x20: 88 00 00 00 00 02 03 03 00 81 00 00 00 00 04 00

0x30: 09 87 83 01 31 F4 4B C2 8B 46 48 4B 30 39 34 36

0x40: 46 30 4D 5A C3 06 00 15 63 C3 4F 60 43 00 18 C6

0x50: 8A 43 4E 4D 4A 37 4E 30 42 52 42 CB 8F 43 49 53

0x60: 43 4F 32 38 31 31 20 20 20 20 20 82 49 28 12

0x70: 03 89 56 30 32 20 D9 02 40 C1 FF FF FF FF FF FF

PVDM Slot 0:

48-channel (G.711) Voice/Fax PVDMII DSP SIMM PVDM daughter card

Hardware Revision : 2.0

Part Number : 73-8848-02

Board Revision : 02

Deviation Number : 0-0

Fab Version : 02

PCB Serial Number : FOC08030CCP

RMA Test History : 00

RMA Number : 0-0-0-0



RMA History : 00
Processor type : 00
Product (FRU) Number : PVDMM2-T1-DSP-TRIO
Version Identifier : NA
CLEI Code : TDB
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF 40 03 ED 41 02 00 82 49 22 90 02 42 30 32
0x10: 80 00 00 00 00 02 02 C1 8B 46 4F 43 30 38 30 33
0x20: 30 43 43 50 03 00 81 00 00 00 00 04 00 09 00 CB
0x30: 91 50 56 44 4D 32 2D 54 31 2D 44 53 50 2D 54 52
0x40: 49 4F 89 4E 41 00 E6 C6 8A 54 44 42 00 00 00 00
0x50: 00 00 00 D9 02 40 C1 FF FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

WIC Slot 0:
T1 (1 port) Multi-Flex Trunk WAN daughter card
Hardware revision 1.0 Board revision B0
Serial number 28253554 Part number 800-03568-03
FRU Part Number VWIC-1MFT-T1=
Test history 0x0 RMA number 00-00-00
Connector type PCI
EEPROM format version 1
EEPROM contents (hex):
0x20: 01 20 01 00 01 AF 1D 72 50 0D F0 03 00 00 00 00
0x30: 58 00 00 00 02 07 15 00 FF FF FF FF FF FF FF FF

WIC Slot 1:
2nd generation – FXS Voice daughter card (2 port)
Hardware Revision : 3.1
Top Assy. Part Number : 800-21341-01
Board Revision : E0
Deviation Number : 0-0
Fab Version : 01
PCB Serial Number : FOC083928Q2
RMA Test History : 00
RMA Number : 0-0-0-0
RMA History : 00
Version Identifier : V
Product (FRU) Number : VIC2-2FXS=
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF 40 00 47 41 03 01 C0 46 03 20 00 53 5D 01
0x10: 42 45 30 80 00 00 00 00 02 01 C1 8B 46 4F 43 30
0x20: 38 33 39 32 38 51 32 03 00 81 00 00 00 00 04 00
0x30: 89 56 00 00 00 FF FF FF FF FF FF FF FF FF FF
0x40: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x50: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

Slot 1:
High Density Voice Port adapter
Port adapter is analyzed
Port adapter insertion time 5d12h ago
EEPROM contents at hardware discovery:
Hardware Revision : 1.1
Top Assy. Part Number : 800-03567-01



Board Revision : H0
Deviation Number : 0-0
Fab Version : 02
PCB Serial Number : JAE0820HALA
RMA Test History : 00
RMA Number : 0-0-0-0
RMA History : 00
Product (FRU) Number : NM-HDV=
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF 40 00 CC 41 01 01 C0 46 03 20 00 0D EF 01
0x10: 42 48 30 80 00 00 00 02 02 C1 8B 4A 41 45 30
0x20: 38 32 30 48 41 4C 41 03 00 81 00 00 00 00 04 00
0x30: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x40: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x50: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

HDV SIMMs: Product (FRU) Number: PVDm-12=
SIMM slot 0: PVDm-12 SIMM present.
SIMM slot 1: PVDm-12 SIMM present.
SIMM slot 2: PVDm-12 SIMM present.
SIMM slot 3: PVDm-12 SIMM present.
SIMM slot 4: PVDm-12 SIMM present.

WIC Slot 0:
T1 (2 Port) Multi-Flex Trunk (Drop&Insert) WAN Daughter Card
Hardware revision 1.0 Board revision D0
Serial number 32051319 Part number 800-04614-03
FRU Part Number VWIC-2MFT-T1-DI=
Test history 0x0 RMA number 00-00-00
Connector type PCI
EEPROM format version 1
EEPROM contents (hex):
0x20: 01 24 01 00 01 E9 10 77 50 12 06 03 00 00 00 00
0x30: 68 00 00 00 04 04 22 00 FF FF FF FF FF FF FF FF

HDV firmware: Compiled Fri 19-Nov-04 14:23 by michen
HDV memory size 524280 heap free 167869



Configuring the Cisco Unified Communications Manager - H323 and SIP trunking configurations

This section is a supplement to the previous Environments and Configurations section. This section contains configuration menus and commands and describes configuration sequences and tasks. This section contains screenshots of the content that would be different for configuring on H323 and SIP. The previous section on MGCP will not be duplicated below.

Cisco Unified Communications Manager Version

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

System

Cisco Unified CM Administration
System version: 8.0.3.20000-2

Licensing Warnings:
System is operating on Demo licenses. Please upload relevant license files.
Please visit the License Report Page for more details.

VMware Installation: 1 vCPU Intel(R) Xeon(R) CPU E5420 @ 2.50GHz, disk 1: 80Gbytes, 2056Mbytes RAM

Last Successful Logon: Oct 27, 2010 10:25:31 AM

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This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at our [Export Compliance Product Report](#) web site.

For information about Cisco Unified Communications Manager please visit our [Unified Communications System Documentation](#) web site.

For Cisco Technical Support please visit our [Technical Support](#) web site.

Done

Internet 100%



H.323 Gateway

Device -> Gateway

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation **Cisco Unified CM Administration** [Go](#)

System [Call Routing](#) [Media Resources](#) [Advanced Features](#) [Device](#) [Application](#) [User Management](#) [Bulk Administration](#) [Help](#)

Find and List Gateway

Status
 2 records found

Gateways (1 - 2 of 2) Rows per Page 50

Find Gateways where [Name](#) [begins with](#) [Hide](#) [endpoints](#) [Find](#) [Clear Filter](#) [+](#) [-](#)
[Select item or enter search text](#)

<input type="checkbox"/>	Device Name ^	Description	Device Pool	Calling Search Space	Device Type	Status	IP Address
<input type="checkbox"/>	10.192.128.227	10.192.128.227	Default	CSS_IOT_SIP_MVS_CALLS	H.323 Gateway	Unknown	10.192.128.227
<input type="checkbox"/>	Cisco_GW	Cisco_GW 10.192.130.230			Cisco 3845	See Endpoints	Unknown

Done

Internet 100%



H.323 Gateway Detail Configurations (1 of 3)

Cisco Unified CM Administration
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System Call Routing Media Resources Advanced Features Device Application User Management Bulk Administration Help

Related Links: Back To Find/List Go

Status

Status: Ready

Device Information

ProductH.323 Gateway

Device ProtocolH.225

RegistrationUnknown

IP Address10.192.128.227

Device is not trusted

Device Name*10.192.128.227

Description10.192.128.227

Device Pool*Default

Common Device Configuration< None >

Call Classification*Use System Default

Media Resource Group ListMRGL_CM8

Packet Capture Mode*None

Packet Capture Duration0

Location*Hub_None

AAR Group< None >

Tunneled Protocol*None

QSIG Variant*No Changes

ASN.1 ROSE OID Encoding*No Changes

Use Trusted Relay Point*Default

Signaling Port*1720

☐ Media Termination Point Required

☒ Retry Video Call As Audio

☒ Wait for Far End H.245 Terminal Capability Set

☐ Path Replacement Support

☐ Transmit UTF-8 for Calling Party Name

☐ SRTP Allowed - When this flag is checked, IPsec needs to be configured in the network to provide end to end security. Failure to do so will expose keys and other information.

☐ H.235 Pass Through Allowed

☒ PSTN Access

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain< None >

MLPP IndicationNot available on this device

MLPP PreemptionNot available on this device

Call Routing Information - Inbound Calls

Significant Digits*All

DoneInternet100%



H.323 Gateway Detail Configurations (2 of 3)

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Call Routing Information - Inbound Calls

Significant Digits* All
Calling Search Space CSS_IOT_SIP_MVS_CALLS
AAR Calling Search Space < None >
Prefix DN
☐ Redirecting Number IE Delivery - Inbound
☐ Enable Inbound FastStart

Call Routing Information - Outbound Calls

Calling Party Selection* Originator
Calling Party Presentation* Default
Called party IE number type unknown* Cisco CallManager
Calling party IE number type unknown* Cisco CallManager
Called Numbering Plan* Cisco CallManager
Calling Numbering Plan* Cisco CallManager
Caller ID DN
☐ Display IE Delivery
☐ Redirecting Number IE Delivery - Outbound
☐ Enable Outbound FastStart
Codec For Outbound FastStart G711 u-law 64K
Called Party Transformation CSS < None >
☒ Use Device Pool Called Party Transformation CSS
Calling Party Transformation CSS < None >
☒ Use Device Pool Calling Party Transformation CSS

Geolocation Configuration

Geolocation -- Not Selected --
Geolocation Filter < None >

Intercompany Media Engine (IME)

E.164 Transformation Profile < None >

Incoming Calling Party Settings

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

Clear Prefix Settings

Default Prefix Settings

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
National Number	Default	0	< None >	<input checked="" type="checkbox"/>
International Number	Default	0	< None >	<input checked="" type="checkbox"/>



H.323 Gateway Detail information (3 of 3)

Cisco Unified CM Administration
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System Call Routing Media Resources Advanced Features Device Application User Management Bulk Administration Help

Related Links: Back To Find/List Go

☐ Enable Outbound FastStart

Codec For Outbound FastStart G711 u-law 64K

Called Party Transformation CSS < None >

☒ Use Device Pool Called Party Transformation CSS

Calling Party Transformation CSS < None >

☒ Use Device Pool Calling Party Transformation CSS

Geolocation Configuration

Geolocation -- Not Selected --

Geolocation Filter < None >

Intercompany Media Engine (IME)

E.164 Transformation Profile < None >

Incoming Calling Party Settings

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

Clear Prefix Settings

Default Prefix Settings

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
National Number	Default	0	< None >	<input checked="" type="checkbox"/>
International Number	Default	0	< None >	<input checked="" type="checkbox"/>
Unknown Number	Default	0	< None >	<input checked="" type="checkbox"/>
Subscriber Number	Default	0	< None >	<input checked="" type="checkbox"/>

Incoming Called Party Settings

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

Clear Prefix Settings

Default Prefix Settings

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
National Number	Default	0	< None >	<input checked="" type="checkbox"/>
International Number	Default	0	< None >	<input checked="" type="checkbox"/>
Unknown Number	Default	0	< None >	<input checked="" type="checkbox"/>
Subscriber Number	Default	0	< None >	<input checked="" type="checkbox"/>

*- indicates required item.

**-. Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.

Done Internet 100%



CUCM SIP Trunk to Gateway Detail Configuration (1 of 2)

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

Trunk Configuration Related Links: Back To Find/List Go

Status
Status: Ready

Device Information

Product	SIP Trunk
Device Protocol	SIP
Trunk Service Type	None(Default)
Device Name*	SIP_TO_GW_128_227
Description	STP trunk to 128 227 for IOT testing
Device Pool*	Default
Common Device Configuration	< None >
Call Classification*	Use System Default
Media Resource Group List	MRGL CMB
Location*	Hub None
AAR Group	< None >
Packet Capture Mode*	None
Packet Capture Duration	0

☐ Media Termination Point Required
☒ Retry Video Call as Audio
☐ Transmit UTF-8 for Calling Party Name
☐ Unattended Port
☐ SRTP Allowed - When this flag is checked, Encrypted TLS needs to be configured in the network to provide end to end security. Failure to do so will expose keys and other information.
Route Class Signaling Enabled* Default
Use Trusted Relay Point* Default
☐ PSTN Access

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*	All
Connected Line ID Presentation*	Default
Connected Name Presentation*	Default
Calling Search Space	CSS_IOT_SIP_MVS_CALLS
AAR Calling Search Space	< None >
Prefix DN	

☐ Redirecting Diversion Header Delivery - Inbound

Done

Internet

86%

CUCM SIP Trunk to Gateway Detail Configuration (2 of 2)



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

Trunk Configuration Related Links: Back To Find/List Go

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 (DevicePool/Service Parameter). Otherwise, the value configured is used as the prefix unless the field is empty in which case there is no prefix assigned.

Number Type	Prefix	Strip Digits	Calling Search Space	Use Device Pool CSS
Incoming Number	<input type="text" value="Default"/>	<input type="text" value="0"/>	<input type="text" value="< None >"/>	<input checked="" type="checkbox"/>

Connected Party Settings
Connected Party Transformation CSS:
☒ Use Device Pool Connected Party Transformation CSS

Outbound Calls
Called Party Transformation CSS:
☒ Use Device Pool Called Party Transformation CSS
Calling Party Transformation CSS:
☒ Use Device Pool Calling Party Transformation CSS
Calling Party Selection*:
Calling Line ID Presentation*:
Calling Name Presentation*:
Caller ID DN:
Caller Name:
☐ Redirecting Diversion Header Delivery - Outbound

SIP Information
Destination Address:
Destination Address IPv6:
☐ Destination Address is an SRV
Destination Port*:
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*:

Geolocation Configuration
Geolocation:
Geolocation Filter:
☐ Send Geolocation Information

Done Internet 86%

Call Route Pattern



Call Routing -> Route/Hunt-> Route Pattern

Cisco Unified CM Administration
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Cisco Unified CM Administration

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

Find and List Route Patterns

Status
4 records found

Route Patterns(1 - 4 of 4) Rows per Page 50 ▾

Find Route Patterns where Pattern ▾ begins with ▾ Find Clear Filter

	Pattern ▲	Description	Partition	Route Filter	Associated Device	Copy
<input type="checkbox"/>	1XXXXXXXXXX	Long Distance Dialing 1+10	PT LD Dialing		RL PSTN LD CALLS	
<input type="checkbox"/>	1XXXXXXXXXX	Long Distance Dialing 1+10	PT TAHOE CALLS		RL PSTN LD CALLS	
<input type="checkbox"/>	1XXXXXXXXXX	Long Distance Dialing 1+10	PT TOT H323 LOCAL LD CALLS		RL H323 TO 128 227	
<input type="checkbox"/>	1XXXXXXXXXX	Long Distance Dialing 1+10	PT TOT SIP LOCAL LD CALLS		RL SIP GW 128 227	



SIP Route Pattern Details

Call Routing -> Route/Hunt-> Route Pattern Detail

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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

Route Pattern Configuration

Related Links: Back To Find/List

Pattern Definition

Route Pattern * 1XXXXXXXXXX

Route Partition PT_IOT_SIP_LOCAL_LD_CALLS

Description Long Distance Dialing 1- 10

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence* Default

Resource Priority Namespace Network Domain < None >

Route Class* Default

Gateway/Route List * RL_SIP_GW_128_227 (Edit)

Route Option
☒ Route this pattern
☐ Block this pattern No Error

Call Classification * Q931

☐ Allow Device Override ☒ Hide Outside Dial Tone Allow ☐ Inband Sending Urgent Pri

☐ Require Forced Authorization Code

Authorization Level * 0

☐ Require Client Matter Code

Calling Party Transformations

☒ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation * Default

Calling Name Presentation * Default

Calling Party Number Type * Cisco CallManager

Calling Party Numbering Plan * Cisco CallManager

Connected Party Transformations

Connected Line ID Presentation * Default

Connected Name Presentation * Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Number Type * Cisco CallManager

Called Party Numbering Plan * Cisco CallManager

ISDN Network-Specific Facilities Information Element

Network Service Protocol -- Not Selected --

Carrier Identification Code

Network Service -- Not Selected --

Service Parameter Name < Not Exist >

Service Parameter Value

SIP Route List



Cisco

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

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

Related Links: Back To Find/List Go

Status

Status: Ready

Route List Information

☒ Device is trusted

Name* RL_SIP_GW_128_227

Description RL_SIP_GW_128_227

Cisco Unified Communications Manager Group* CCM8

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

Route List Member Information

Selected Groups** RG_SIP_GW_128_227

Add Route Group

Removed Groups***

Route List Details

RG_SIP_GW_128_227

*

- indicates required item.

**

Ordered by highest priority

Will be removed from Route List when you click Save

Done Internet 100%

H.323 Route Pattern Details

Call Routing -> Route/Hunt-> Route Pattern Detail



Cisco Unified CM Administration
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration Go

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

Route Pattern Configuration Related Links: Back To Find/List Go

Pattern Definition

Route Pattern * 1XXXXXXX

Route Partition PT_MVS_PSTN_CALLS

Description Long Distance Dialing 1+ 10

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence* Default

Resource Priority Namespace Network Domain < None >

Route Class* Default

Gateway/Route List * RL_H323_TO_128_227 (Edit)

Route Option
☒ Route this pattern
☐ Block this pattern No Error

Call Classification* OffNet

☐ Allow Device Override P ☒ Hide Outside Dial Tone Allow ☐ Interlap Sending Urgent Prio ☐

☐ Require Forced Authorization Code

Authorization Level * 0

☐ Require Client Matter Code

Calling Party Transformations

☒ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation * Default

Calling Name Presentation * Default

Calling Party Number Type * Cisco CallManager

Calling Party Numbering Plan * Cisco CallManager

Connected Party Transformations

Connected Line ID Presentation * Default

Connected Name Presentation * Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Number Type * Cisco CallManager

Called Party Numbering Plan * Cisco CallManager

ISDN Network-Specific Facilities Information Element

Network Service Protocol -- Not Selected --

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
-- Not Selected --	< Not Edit >	

H.323 Route List



Cisco

Cisco Unified CM Administration

For Cisco Unified Communications Solutions

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penka Search Documentation

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

Route List Configuration Related Links: Back To Find/List Go

Status

Status: Ready

Route List Information

☒ Device is trusted

Name *RL_H323_TO_128_227

DescriptionRL_H323_TO_128_227

Cisco Unified Communications Manager Group *CCMB

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

Route List Member Information

Selected Groups **

RL_TO_H323_128_227

▼▲

Add Route Group

Removed Groups ***

Route List Details

RL TO H323_128_227

*

Indicates required item.

**

Ordered by highest priority

Will be removed from Route List when you click Save

DoneInternet90%



Cisco Voice IOS Gateway Configuration

5.0 SIP - IOS Gateway Configurations

```
version 15.0
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Cisco_2811_GW
!
boot-start-marker
boot-end-marker
!
logging buffered 51200 warnings
enable secret 5 $1$dLRq$JPysM6Xks82mXRj6xJvxL/
!
no aaa new-model
!
!
!
no network-clock-participate slot 1
network-clock-participate wic 2
network-clock-select 1 T1 0/2/0
!
dot11 syslog
ip source-route
!
!
ip cef
!
!
no ipv6 cef
!
multilink bundle-name authenticated
!
!
!
!
isdn switch-type primary-ni
!
!
voice call send-alert
voice rtp send-recv
!
voice service voip
allow-connections h323 to h323
allow-connections h323 to sip
allow-connections sip to h323
allow-connections sip to sip
h323
ip circuit max-calls 64
ip circuit default only
modem passthrough nse codec g711ulaw
sip
!
voice class codec 1
codec preference 1 g711ulaw
!
```




```
voice class h323 1
  h225 timeout tcp establish 3
  telephony-service ccm-compatible
  ccm-compatible
!
!
!
voice translation-rule 1
  rule 1 /849/ /49/
!
!
voice translation-profile Profile1
  translate called 1
!
!
voice-card 0
  dspfarm
  dsp services dspfarm
!
voice-card 1
!
!
!
!
!
license udi pid CISCO2811 sn FTX1124A18N
archive
  log config
  hidekeys
username cisco privilege 15 secret 5 $1$lirB$WgDFb9CtxJ1zd2qrofWRV1
!
redundancy
!
!
controller T1 0/2/0
  pri-group timeslots 1-24
  description PSTN PRI DIDs 650-264-5xxx incoming and outgoing
!
controller T1 0/2/1
  pri-group timeslots 1-24
!
!
!
!
!
!
!
!
interface FastEthernet0/0
  description $ETH-LAN$$ETH-SW-LAUNCH$$INTF-INFO-FE 0/0$
  ip address 10.192.128.227 255.255.255.0
  duplex full
  speed 100
  no mop enabled
!
!
interface FastEthernet0/1
  no ip address
```




```
shutdown
duplex auto
speed auto
!
!
interface FastEthernet0/1/0
shutdown
!
!
interface FastEthernet0/1/1
shutdown
!
!
interface FastEthernet0/1/2
shutdown
!
!
interface FastEthernet0/1/3
shutdown
!
!
interface FastEthernet0/1/4
shutdown
!
!
interface FastEthernet0/1/5
shutdown
!
!
interface FastEthernet0/1/6
shutdown
!
!
interface FastEthernet0/1/7
shutdown
!
!
interface FastEthernet0/1/8
shutdown
!
!
interface Serial0/2/0:23
no ip address
encapsulation hdlc
isdn switch-type primary-ni
isdn protocol-emulate network
isdn incoming-voice voice
no cdp enable
!
!
interface Serial0/2/1:23
no ip address
encapsulation hdlc
isdn switch-type primary-ni
isdn incoming-voice voice
no cdp enable
!
!
interface Vlan1
```




```
no ip address
shutdown
!
!
no ip forward-protocol nd
ip http server
ip http access-class 23
ip http authentication local
no ip http secure-server
ip http timeout-policy idle 60 life 86400 requests 10000
!
!
ip route 0.0.0.0 0.0.0.0 10.192.128.1
!
no cdp run

!
!
!
!
!
!
control-plane
!
!
!
voice-port 0/2/0:23
!
voice-port 0/2/1:23
!
voice-port 0/3/0
!
voice-port 0/3/1
!
voice-port 0/3/2
!
voice-port 0/3/3
!
voice-port 1/0/0
!
voice-port 1/0/1
!
ccm-manager redundant-host 10.192.128.221
ccm-manager mgcp
no ccm-manager fax protocol cisco
ccm-manager music-on-hold
ccm-manager config server 10.192.128.221
ccm-manager config
!
sccp local FastEthernet0/0
sccp ccm 10.192.128.222 identifier 1 version 5.0.1
sccp ip precedence 3
sccp
!
sccp ccm group 992
associate ccm 1 priority 1
associate profile 1 register HWMTPLAB
!
dspfarm profile 1 mtp
```




```
description MTP DSP resources
codec g711ulaw
maximum sessions hardware 1
maximum sessions software 500
associate application SCCP
!
!
dial-peer voice 600 pots
description Dial Peer for Local Calls to PSTN
destination-pattern 650[2-9].....
incoming called-number .
port 0/2/1:23
forward-digits all
!
dial-peer voice 602 pots
description Dial Peer for National Long Distance
destination-pattern 1[2-9].....
direct-inward-dial
port 0/2/1:23
prefix 1
!
dial-peer voice 700 pots
incoming called-number 4...
direct-inward-dial
!
dial-peer voice 2001 voip
description Calls to GW 130 230 fro IOT
destination-pattern 484.
session protocol sipv2
session target ipv4:10.192.131.227
session transport udp
voice-class codec 1
dtmf-relay sip-kpml sip-notify
no vad
!
dial-peer voice 1 voip
session protocol sipv2
session target sip-server
incoming called-number .%
voice-class codec 1
dtmf-relay sip-kpml
!
!
gateway
timer receive-rtp 1200
!
sip-ua
sip-server ipv4:10.192.128.227
!
!
banner login
```

Cisco Router and Security Device Manager (SDM) is installed on this device.
This feature requires the one-time use of the username "cisco"
with the password "cisco". The default username and password have a privilege level of 15.

Please change these publicly known initial credentials using SDM or the IOS CLI.

Here are the Cisco IOS commands.



```
username <myuser> privilege 15 secret 0 <mypassword>
no username cisco
```

Replace <myuser> and <mypassword> with the username and password you want to use

For more information about SDM please follow the instructions in the QUICK START

GUIDE for your router or go to <http://www.cisco.com/go/sdm>

```
-----
^C
!
line con 0
 login local
line aux 0
line vty 0 4
 exec-timeout 0 0
 logout-warning 0
 login local
!
scheduler allocate 20000 1000
end
```




6.0 H323 – IOS Gateway Configuration

```
!  
version 15.0  
service timestamps debug datetime msec  
service timestamps log datetime msec  
no service password-encryption  
!  
hostname Cisco_2811_GW  
!  
boot-start-marker  
boot-end-marker  
!  
logging buffered 51200 warnings  
enable secret 5 $1$dLRq$JPysM6Xks82mXRj6xJvxL/  
enable password switch4u  
!  
no aaa new-model  
!  
!  
no network-clock-participate slot 1  
network-clock-participate wic 2  
network-clock-select 1 T1 0/2/0  
!  
dot11 syslog  
ip source-route  
!  
!  
ip cef  
!  
no ipv6 cef  
!  
multilink bundle-name authenticated  
!  
!  
!  
isdn switch-type primary-ni  
!  
!  
voice call send-alert  
voice rtp send-recv  
!  
voice service voip  
allow-connections h323 to h323  
allow-connections h323 to sip  
allow-connections sip to h323  
allow-connections sip to sip  
h323  
ip circuit max-calls 64  
ip circuit default only  
modem passthrough nse codec g711ulaw  
sip  
!  
voice class codec 1  
codec preference 1 g711ulaw  
!
```




```
voice class h323 1
  h225 timeout tcp establish 3
  telephony-service ccm-compatible
  ccm-compatible
!
!
!
voice translation-rule 1
  rule 1 /849/ /49/
!
!
voice translation-profile Profile1
  translate called 1
!
!
voice-card 0
  dspfarm
  dsp services dspfarm
!
voice-card 1
!
!
!
!
!
license udi pid CISCO2811 sn FTX1124A18N
archive
  log config
  hidekeys
username cisco privilege 15 secret 5 $1$lirB$WgDFb9CtxJ1zd2qrofWRV1
!
redundancy
!
!
controller T1 0/2/0
  pri-group timeslots 1-24
  description PSTN PRI DIDs 650-264-5xxx incoming and outgoing
!
controller T1 0/2/1
  pri-group timeslots 1-24
!
!
!
!
!
!
!
!
interface FastEthernet0/0
  description $ETH-LAN$$ETH-SW-LAUNCH$$INTF-INFO-FE 0/0$
  ip address 10.192.128.227 255.255.255.0
  duplex full
  speed 100
  no mop enabled
  h323-gateway voip interface
  h323-gateway voip bind srcaddr 10.192.128.227
!
!
```





```
interface FastEthernet0/1
no ip address
shutdown
duplex auto
speed auto
!
!
interface FastEthernet0/1/0
shutdown
!
!
interface FastEthernet0/1/1
shutdown
!
!
interface FastEthernet0/1/2
shutdown
!
!
interface FastEthernet0/1/3
shutdown
!
!
interface FastEthernet0/1/4
shutdown
!
!
interface FastEthernet0/1/5
shutdown
!
!
interface FastEthernet0/1/6
shutdown
!
!
interface FastEthernet0/1/7
shutdown
!
!
interface FastEthernet0/1/8
shutdown
!
!
interface Serial0/2/0:23
no ip address
encapsulation hdlc
isdn switch-type primary-ni
isdn protocol-emulate network
isdn incoming-voice voice
no cdp enable
!
!
interface Serial0/2/1:23
no ip address
encapsulation hdlc
isdn switch-type primary-ni
isdn incoming-voice voice
no cdp enable
!
```




```
!  
interface Vlan1  
  no ip address  
  shutdown  
!  
!  
no ip forward-protocol nd  
ip http server  
ip http access-class 23  
ip http authentication local  
no ip http secure-server  
ip http timeout-policy idle 60 life 86400 requests 10000  
!  
!  
ip route 0.0.0.0 0.0.0.0 10.192.128.1  
!  
no cdp run  
  
!  
!  
!  
!  
!  
!  
control-plane  
!  
!  
!  
voice-port 0/2/0:23  
!  
voice-port 0/2/1:23  
!  
voice-port 0/3/0  
!  
voice-port 0/3/1  
!  
voice-port 0/3/2  
!  
voice-port 0/3/3  
!  
voice-port 1/0/0  
!  
voice-port 1/0/1  
!  
ccm-manager redundant-host 10.192.128.221  
ccm-manager mgcp  
no ccm-manager fax protocol cisco  
ccm-manager music-on-hold  
ccm-manager config server 10.192.128.221  
ccm-manager config  
!  
sccp local FastEthernet0/0  
sccp ccm 10.192.128.222 identifier 1 version 5.0.1  
sccp ip precedence 3  
sccp  
!  
sccp ccm group 992  
  associate ccm 1 priority 1  
  associate profile 1 register HWMTPLAB
```




```
!  
dspfarm profile 1 mtp  
description MTP DSP resources  
codec g711ulaw  
maximum sessions hardware 1  
maximum sessions software 500  
associate application SCCP  
!  
dial-peer voice 600 pots  
description Dial Peer for Local Calls to PSTN  
destination-pattern 650[2-9].....  
incoming called-number .  
port 0/2/1:23  
forward-digits all  
!  
dial-peer voice 602 pots  
description Dial Peer for National Long Distance  
destination-pattern 1[2-9].....  
direct-inward-dial  
port 0/2/1:23  
prefix 1  
!  
dial-peer voice 700 pots  
incoming called-number 4...  
direct-inward-dial  
!  
dial-peer voice 2011 voip  
destination-pattern 484.  
session target ipv4:10.192.131.227  
voice-class codec 1  
dtmf-relay h245-alphanumeric  
!  
dial-peer voice 2 voip  
incoming called-number .%  
voice-class codec 1  
dtmf-relay h245-alphanumeric  
!  
!  
gateway  
timer receive-rtcp 1200  
!  
sip-ua  
sip-server ipv4:10.192.128.227  
!  
!  
banner login ^CC
```



DTMF Relay must be set to "Out of Band" for better interoperability; otherwise, user will hear DTMF tones during call setup.

Cisco Router and Security Device Manager (SDM) is installed on this device.
This feature requires the one-time use of the username "cisco"
with the password "cisco". The default username and password have a privilege level of 15.

Please change these publicly known initial credentials using SDM or the IOS CLI.

Here are the Cisco IOS commands.

```
username <myuser> privilege 15 secret 0 <mypassword>  
no username cisco
```




Replace <myuser> and <mypassword> with the username and password you want to use

.

For more information about SDM please follow the instructions in the QUICK START

GUIDE for your router or go to <http://www.cisco.com/go/sdm>

```
-----
^C
!
line con 0
 login local
line aux 0
line vty 0 4
 exec-timeout 0 0
 logout-warning 0
 login local
!
scheduler allocate 20000 1000
end
```




Acronyms

Acronym	Definition
Pass	The test case passed with no exceptions
Fail	The test case failed – details of the failure are noted in the Comments column
Conditional Pass	Test case pass for feature tested but fail with certain DUT or exhibit abnormal behavior.
N/A	The test case is not applicable to the product under test. Justification must be provided in the Comments column.
N/S	Not supported. While the feature tested by this test case generally would be considered a standard feature for this product category, this specific product (or this specific release) does not support the feature.
N/T	Not tested. The feature is supported by the product under test, but external factors (lab configuration, e.g.) prevented execution of the test. Justification must be provided in the Comments column.
Blocked	Other test case failures prevented the execution of this test. Reference to the corresponding failed test case must be provided in the Comments column.
MVS	BlackBerry® Mobile Voice System
BES	BlackBerry® Enterprise Server
DUT	Device under Test
RIM	Research In Motion®
CSP	Cisco Skinny Phone
CSIPP	CSIPP – Cisco SIP Phone
WLAN	Wireless LAN
WLC	Wireless LAN Controller
Wi-Fi	Wireless Fidelity (IEEE 802.11)
MGCP	Media Gateway Control Protocol
SIP	Session Initiation Protocol



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