



# Release Notes for Cisco Smart CallConnector Server, Advanced Client Version 2.1.010

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## Introduction

Cisco Smart CallConnector Server Version 2.1.010 has updated Configuration Manager administrative utility for configuring the Cisco Smart CallConnector Server and enhancements/updates of its server components. The 2.1.010 release contains the following major new enhancements:

- Updates to Configuration Manager to support Local License Management (for Advanced Clients), feature extensions for VoiceView and IM Server configurations and publishing Advanced Client software updates.
- Support for the Smart CallConnector Advanced Client and Smart CallConnector Operator
- Upgrades to the Smart CallConnector Server components specifically the Presence Server, CallController and Database Servers.
- Support for automation of some configuration tasks by running the Configuration Manager at scheduled times form the Windows Task Scheduler

The Smart CallConnector Server supports UC500 only, models UC540 and UC560.

Note – The terms "router" in this document refers to the UC500.

## **Support for Smart CallConnector Advanced Client**

SCC Server 2.1 is required for the Smart CallConnector Advanced Client. The Smart CallConnector Advanced Client is a Windows application that streamlines the business communications with real-time information on the availability of a user's colleagues and external contacts and offers multiple methods for communicating with them. The solution lets the user know who is available and the best method for connecting with them. With the CallConnector Advanced client, users can:

- Quickly locate contacts and connect to them using voice, instant messaging (IM), text (SMS), or email. View their presence status including availability and location.
- Know who is calling and click to answer or make calls and access the phone features from the PC
- Get alerts for new voice messages and when contacts are available
- View voice messages, click to listen to the important ones first, and reply or call back
- Send instant messages, SMS messages, and emails to colleagues and external contacts
- Use the Smart CallConnector toolbar in Outlook to locate contacts, manage calls, and send instant messages
- Use the highlighter in Internet Explorer Smart CallConnector Toolbar to dial numbers from web pages.

Cisco Smart CallConnector Advanced is a desktop unified communications application that integrates the user's contact data in PC applications with the features of the Cisco Unified Communications platforms.

## Outlook 2010 x64 Support

Release 2.1 includes a new native x64-bit CallConnector Advanced Client application for use with Outlook 2010x64. The x64-bit CallConnector Advanced Client is installed using the "For Outlook x64 Only" Advanced Client installation file. Only the x64-bit toolbars are included in this installation. This means that the CallConnector toolbars are supported only in Internet Explorer x64 and Outlook x64.

## Windows x64 OS with Outlook x32

The Advanced Client version supporting Outlook x32 must be installed when the PC has Outlook x32 installed regardless of whether Windows is x32 or x64-bit OS.

## **License Management**

The CallConnector Server includes eight Advanced Client licenses. For additional Advanced Client seats, customers need to purchase and activate the license (PAKID) on the CallConnector Server. Unlike the Operator and Personal Clients, the Advanced Client licenses are allocated and managed locally on the CallConnector Server from the Configuration Manager License Management folder.

## **Support for Smart CallConnector Operator**

The Smart CallConnector Server supports the Smart CallConnector Operator deployed in the client/server mode. The Configuration Manager administrative tool is used to setup the configuration parameters of the Smart CallConnector Operator console.

Cisco® Smart CallConnector Operator is a Windows application that has been specifically designed for the fast call handling plus contact management and messaging requirements of a small business operator positions. Operators can:

- Handle incoming calls quickly and transfer them to the appropriate and available employees with ease.
- View incoming calls in prioritized call queues at a glance, plus view the status of parked, transferred, and held calls.
- Easily send email, instant or text (SMS) messages to employees that are not available to take calls.
- Quickly search for contacts in the directory and maintain the organization's directory information.
- View and update the availability, location, and telephone status of all employees.

Cisco Smart CallConnector Operator is an operator solution for the Cisco Unified Communication Manager Express (on ISRs). Easy to install, configure, and use, the application offers a fully customizable user interface, allowing operators to resize feature windows and place them anywhere on the screen to meet individual needs. Users can also choose to use a mouse or a customizable keyboard to access features and for deployment flexibility.

Release 2.1 includes a new native x64-bit CallConnector Operator application for use with Outlook 2010x64. The x64-bit CallConnector Operator Client is installed using the "For Outlook x64 Only" Advanced Client installation file.

## **CallConnector Configuration Manager**

The CallConnector Configuration Manager is the administrative utility for configuring and setting up the Smart CallConnector Server, the parameters required for the CallConnector clients including the Smart CallConnector Operator. All the configuration is performed from this graphical user interface – some CLI changes to the router configuration may be required to allow access for making configuration changes. Using the Configuration Manager, administrator's can:

- Download the phone configuration information from UC500 and select the phones that will be used by the Smart CallConnector users and operators.
- Setup the parameters for dialing and lookup as required by the router and add number translation rules to properly format numbers if the default rules are not sufficient.

- Setup the Radius parameters required by the Smart CallConnector solution for generating the real-time telephone status.
- Specify the department/groups for the organization and setup the Smart CallConnector Users and Operators. (These can be manually added or imported)
- Import contacts to the Corporate and External directories for the users and operators.
- Define the operator call queues, park and page numbers and setup the speed dial numbers.
- Manage the Smart CallConnector licenses and perform the maintenance functions.
- Publish newer versions of the clients for automatically updating the user client software.
- Administer the Advanced Client licenses locally on the CallConnector Server.

The CallConnector Configuration Manager is designed to make the configuration and maintenance of the Smart CallConnector Server and Operator quick and easy. Navigation guides provide step-by-step instructions for the common administrative tasks.

## **Updated Server Components**

All the Smart CallConnector Server components have been significantly updated with enhancements and bug fixes. These are detailed in the sections below.

## Compatible UC500/CME Versions and Phone Models

Please see datasheet for the latest compatibility information. Version 2.0.0.88 is certified for the following versions of UC500 and IP Phone types

UC500/CME Version	Cisco IOS Release/UC500 Software Pak
8.0	15.0 XA; SW PAK 8.0
8.1	15.1.T2 ; SW PAK 8.1

Cisco Smart CallConnector supports the following UC500/CME IP phones.

IP Phone Types	Supported IP Phone Models
SCCP IP 79xx Phones	UC500/CME IP Phones 794xG, 796xG, or 797xG Series     IP Phone for media handling
SPA Phones	Cisco SPA 5xx and SPA 3xx IP Phone for media handling

#### Note:

- The Cisco IP Phones models have differing call handling capacity. Capacity here
  refers to the number of calls received or made per second. The Smart CallConnector
  Client and Operator's phone must have the capacity to handle the incoming call
  volumes. Call volumes exceeding the phone's capacity is known to cause delays in
  presenting calls, and resetting of the phone or setting the DNs to the Busy/Down state.
- 2. The Smart CallConnector displays telephone status based on DNs. These DNs can be associated with any phone type.

Cisco Smart CallConnector does not support the following UC500/CME IP phones. .

IP Phone Types	IP Phone Models Not Supported
SCCP IP Phones	• UC500/CME IP Phone 7902, 793x, and 7985
SIP IP Phones	SIP phones are not supported.
Analog Phones with Adapters	<ul> <li>Cisco ATA 186, Cisco ATA 188 and Cisco VG200 Series Analog Gateways with SCCP FXS ports are not supported.</li> </ul>

## **Compatibility – Hardware and Windows Operating Systems**

The PC and the Windows operating systems must meet the minimum requirements for the Smart CallConnector products and must be the supported versions. Both 32-bit and 64-bit versions of the PC hardware and Windows Operating systems are supported for the Smart CallConnector Operator and the Smart CallConnector Server in the server mode. (Note: The x64-bit versions of the Smart CallConnector Clients (Advanced, Personal or Operator)must be used for PC with Outlook 2010 64-bit.

Cisco CallConnector	Windows Operating System
Smart CallConnector Advanced Client, Smart CallConnector Operator and Smart Personal Client	<ul> <li>Microsoft Windows XP Professional (SP 2 or later)</li> <li>Windows Vista</li> <li>Windows 7</li> <li>Both x32-bit and x64-bit Windows supported</li> </ul>
Smart CallConnector Server	<ul> <li>Microsoft Windows XP Professional (SP 2 or later)</li> <li>Windows Vista</li> <li>Windows 7</li> <li>Windows Server 2003 or 2008 (recommended)</li> <li>Windows Small Business Server</li> <li>Windows 2008 Web Server</li> <li>Both x32-bit and x64-bit Windows Servers are supported</li> </ul>

The Smart CallConnector Server can also be installed on the following virtual machine environments.

Virtual Machine	Computer System - Hardware
VMWare	<ul> <li>Multi-core processor with Intel® Virtualization Technology (2.66 GHz or faster)</li> <li>Minimum 4GB for sites up to 25 users</li> <li>Minimum 8GB for sites up to 75 users</li> </ul>
Microsoft Hyper-V	<ul> <li>Multi-core processor with Intel® Virtualization Technology (2.66 GHz or faster)</li> <li>Minimum 4GB for sites up to 25 users</li> <li>Minimum 8GB for sites up to 75 users</li> </ul>
Microsoft Virtual PC	<ul> <li>Multi-core processor with Intel® Virtualization Technology (2.66 GHz or faster)</li> <li>Minimum 4GB for sites up to 25 users</li> <li>Minimum 8GB for sites up to 75 users</li> </ul>

The Smart CallConnector	Server require	s the following	minimum	hardware	configuration:
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Parameter	Description	
Disk Space	<ul> <li>Smaller Sites (up to 25 users) 2 GB free hard drive</li> <li>Sites with 25 to 75 users 4 GB free hard drive</li> <li>Sites with greater than 75 users 8GB free hard drive</li> </ul>	
Hardware (Processor)	Smaller Sites (up to 25 users) Multi-core (2.66 GHz or faster)	
	Sites with 25 to 75 users 2.66 GHz or faster Quad-Core     Larger sites with greater than 75 users: Dedicated quad-core 3-GHz or faster processor	
Memory	Smaller Sites (up to 25 users) 4 GB system memory     Sites with 25 to 75 users 8 GB system memory	

Please see Smart CallConnector Server datasheet for the latest information.

## **Smart CallConnector Server License and Deployment Options**

The following licenses are required for

- Single UC500 with less than 8 advanced clients:
   The SCC Server is installed on the Server Machine and up to eight advanced clients installed on the user's PCs (One SW-SCC-SERVER)
- Single UC500 with more than 8 clients:
   The SCC Server is installed on the Server Machine; Additional User Licenses are added from the Server License Management page; Advanced clients installed on each of the user's PCs (One SW-SCC-SERVER + (# of Users -8)/8 L-SW-SCC-8ADVANCED)
- Single UC500 with both Advanced Clients and Operators:
   The SCC Server is installed on the Server Machine; User Licenses are added from the License Management page and the advanced clients installed on each of the user's PCs; Operator clients installed on Operator's PC (One SW-SCC-SERVER + (# of Users -8)/8 L-SW-SCC-8ADVANCED + L-SW-SCC-OPERATOR\* number of operator positions)
- Multiple UC500: As above, with additional routers added to the Server configuration.

The following table displays the software and support licenses required for Smart CallConnector Server and Operators. You will need Cisco SB Support service SKUs for UC500. Table below indicates the Smart CallConnector Server SKUs for the different UC500 product configurations,

Required Product	Software SKU	Quantity	SMARTNet Support	Quantity
Smart CallConnector Server	L-SW-SCC-SERVER	1	CON-SBS-SVC4	1
One CallConnector Operator	L-SW-SCC-OPERATOR	1	CON-SBS-SVC3	1
Two CallConnector Operator	L-SW-SCC-OPERATOR	2	CON-SBS-SVC3	2

The following table displays the SKU quantities and support licenses required for different numbers of Advanced Client users. You will need Small Business Support Service SKUs for UC500. Table below indicates the Smart CallConnector Server SKUs for the different UC500 product configurations,

Number of Users	Software SKU	Quantity	Pro-Service SKU for UC500	Quantity
Up to 8 Users	Not Required	0	Not Required	0
9-16 Users	L-SW-SCC-8ADVANCED	1	CON-SBS-SVC3	1
17-24 Users	L-SW-SCC-8ADVANCED	2	CON-SBS-SVC3	2
25-32 Users	L-SW-SCC-8ADVANCED	3	CON-SBS-SVC3	3
33-40 Users	L-SW-SCC-8ADVANCED	4	CON-SBS-SVC3	4
41-48 Users	L-SW-SCC-8ADVANCED	5	CON-SBS-SVC3	5
49-56 Users	L-SW-SCC-8ADVANCED	6	CON-SBS-SVC3	6
57-64 Users	L-SW-SCC-8ADVANCED	7	CON-SBS-SVC3	7
65-72 Users	L-SW-SCC-8ADVANCED	8	CON-SBS-SVC3	8
73-80 Users	L-SW-SCC-8ADVANCED	9	CON-SBS-SVC3	9
81-88 Users	L-SW-SCC-8ADVANCED	10	CON-SBS-SVC3	10
89-96 Users	L-SW-SCC-8ADVANCED	11	CON-SBS-SVC3	11
97-104 Users	L-SW-SCC-8ADVANCED	12	CON-SBS-SVC3	12

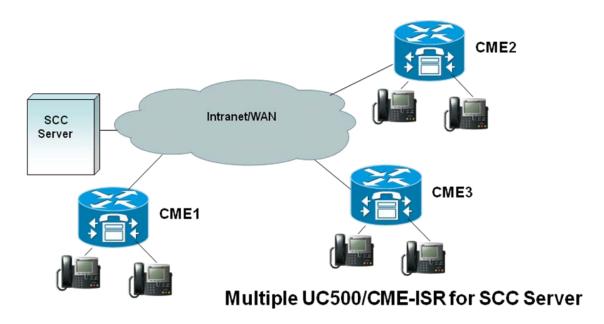
Please see Cisco Smart CallConnector Server datasheet for the latest information.

## **Multi-Site Deployments**

The CallConnector Server can be configured to support multiple sites or branch offices. This allows CallConnector clients to be deployed across the branch offices. Configuration rules include:

- One Smart CallConnector Server can support Multiple UC500 (Max 5 UC500s)
- CallConnector User can be configured to access a phone on any router (Overall User Max 250)
- Presence (Availability, Location and Telephone) status is displayed across all the locations
- Requires provisioning of each router and corresponding Smart CallConnector Server configuration

Note: Please see Open Caveats related to telephone status on multiple router configurations.



## **Smart CallConnector Server Installation**

The Smart CallConnector Server, version 2.1 installation program has been significantly revamped. Enhancements include:

- This installation uses the Windows 4.5 Installer. If this is version is not found on the PC, then it will be installed. (Reboot is required).
- The Smart CallConnector Operator (Standalone) and the Smart CallConnector Server require Microsoft .NET 2.0 or greater environment. If this is not found on the PC, then it is downloaded and installed. This requires Internet access and a PC reboot.
- Localization of the installation GUI is not supported. Selection of display language other than English will show incorrect field labels.

## Information Required for Installation

The following information is required for the Smart CallConnector Server installation.

- Admin or Power User Account on Server PC: The installation must be run under a Windows account with local administrative rights to allow the service application to be added and registry changes to be made.
- Internet Access to the Software Download Site: Installation files can be downloaded from the Cisco software download site. Note you will require a CCO Account that has a support agreement associated with it.
- IP Connectivity to the UC500: The Server PC needs to connect to the UC500 providing the telephone service. You will need the IP address of both the UC500/CME and Cisco Unity Express.
- Executive-Level Telnet Account: After the installation, the CallConnector configuration program connects to the UC500 to download the phone configuration information and if necessary make changes. It uses the Telnet and HTTP access to the UC500/CME-ISR.
- Configuration of Required User and Operator Features on the UC500: The required phone and telephony features/services should be configured on the UC500/CME-ISR prior to the installation and configuration of the Smart CallConnector

Server. See Required UC500 Configuration for the Advanced Client and Operator.

- PAK ID: This is a number sent with the purchase of the Smart CallConnector Server. It
  is used together with information from your personal computer to register and activate
  the license from the CallConnector Software License site.
- Internet Access the CallConnector License Server: The Smart CallConnector Server application requires the license to be registered.

## Selecting the Local Network Adapter

Most new Server PCs have two or more network adapters. During installation, you have to select the IP Address (and the associated network adapter) that is accessible from the user's computers. All the user's PCs need to have a non-NAT (Network Address Translation) access to the server PC IP Address over both TCP and UDP transmissions.

## **Static IP Requirement**

The Smart CallConnector Server PC or Standalone Operator installs <u>must have a Static IP Address</u>. If for some reason this IP address changes, then you must run the Configuration Manager and from the Setup Router and Servers → Server Options page, select the new IP address and Save the changes.

Then restart the Smart CallConnector Services to apply the changes to the services.

## UC500/CME-ISR IP Address Incorrect or Changed

The UC500/CME-ISR IP Address is entered during the installation. This address is not verified at this time. If you have entered an invalid address, then from the "Manage Routers and Servers" page in the Configuration Manager, you will need to delete the router by pressing the Delete Router button and add in a new router (UC500/CME-ISR) with the correct information.

## **Licensing Activation Options**

During installation, two license activation options are presented - Trail License for 45 day evaluation and Registration of the PAKID.



#### **Evaluation/Trial License**

You can run the Smart CallConnector Server in the evaluation/trial mode for a period of 45 days. In the trial mode up to eight advanced client can be used. The trail license can be converted to a full license from the Configuration Manager.

#### **On-Line License Registration**

When you purchase the Smart CallConnector Server, an email with the PAKID is send to you. This is the Server license. Select the option "Use PAK ID or Serial Number for automatic licensing" option and enter the PAK ID, then click on Activate. The Result code =Success indicates that the license has been activated.



The Off-Line Licensing option method to use a SWIFT License File can be accessed from the Advanced Activation button as shown above. The Off-Line Licensing the SWIFT method is not supported on x64-bit Windows OS or on Virtual Machine environments.

## **Installing on VMWare Systems**

- Virtual machine environments are supported for the Smart CallConnector Server only. Production Operator Standalone on VMWare not recommended.
- The License Activation checking is not performed during the installation, but when the Configuration Manager is first run. Note internet access required.
- The Server installation is locked to the Cisco Router that was specified during installation.
- If this router is replaced, then the license checking will fail and you will need to contact TAC or Cisco CallConnector team to reset. Provide the PAKID or CallConnector serial number and the registering email address to the clear the condition.
- Off-Line Licensing using the SWIFT method is not supported.

## Requirements for Sending Email from Configuration Manager

To send email for problem reports or for messages to the users, you will require the SMTP server address and the email account username and password.

## **Location or Dialing Patterns Not Available**

In the event that the required Location and/or the Dialing Patterns are not available in the pulldown lists during installation, enter the choice that comes closest to your required value. Once installation has completed, from the Configuration Manager, "Setup Routers and Server" section click on the folder for Location Management, select the country and add in the required locations and number patterns. These locations can now be selected from the Dial Plan Settings configuration page.

## **Running the First Time**

When installation has completed, restart the Server PC.

- Configuration Manager is the Server Setup Utility. This is automatically started after installation. If not running, then start it from Program Files->Cisco Systems-> Smart CallConnector Server.
- Changing login account or server IP address requires re-boot. Connection Error may also require re-boot
- Trail vs. Full-License: The Login dialog displays number of days left. If the trial period has expired, you will be prompted to enter the PAK-ID or serial number
- Default Administrator username = cisco and Password = cisco. Click on Login.
- If you get the message "Establishing Connection to Database" and it does not clear;
   Try restarting the CallConnector Services from Windows Services

Note: Do not delete the administrative account. You will not be able to log in to the Configuration Manager. You will need one administrative account to log in to the Configuration Manager.

If you have deleted the administrative account, then send an email to <u>cs-callconnector@external.cisco.com</u> with your PAKID to request assistance.

## **CallConnector Service Applications**

The CallConnector Server applications include the following:

- Database Server provides SIP-based access to the user profile and configuration, directory data and read/write access to CME configuration
- CallController Server maintains all the SCCP connections to the CME. Clients receive call state information and can send commands to make, answer calls
- Presence Server includes Radius Server. It receives telephone status information from CME, maintains and broadcasts presence, location and phone status to the clients
- Instant Message Server enables the group chat features for clients; One-to-One IM is peer-to-peer
- SIP Server is a standard SIP registrar; System Tracker supports error recovery by notifying service up/down

The application and the debug file names are shown in the table below:

Server Application	Application File Name	Debug Trace File
Database Server	ccDatabaseServer	ccdatabaseserver.log
CallController Server	ccCallControllerServer	cccallcontrollerserver.log
Presence Server	ccPresenceServer	ccpresenceserver.log, ccradiusserver.log
Instant Message Server	cclMServer	cclMserver.log
System SIP Server	ccSystemSIPServer	ccsystemsipserver.log
System Tracker	ccSystemTracker	ccsystemtracker.log
Local SIP Server	ccLocalSIPServer	cclocalsipserver.log

## **Upgrading Smart CallConnector Server**

Smart CallConnector 2.1 Server does not support upgrade from Smart CallConnector Server. Please do not upgrade from CallConnector Server 1.5.0 or earlier versions. You will need to uninstall the current version and re-install the 2.1 Server.

## Installing a Server for Customers with CallConnector Standalone Operator

If the customer site has the CallConnector Operator Standalone installed. Then this must be un-installed first and replaced with the CallConnector Operator Client instead. The Operator Standalone is comprised of the Operator client and the Server components. Changing a Standalone Operator to work in the client/server mode requires the server components to be removed and the operator client pointed to the CallConnector Server. This requires the uninstallation of the Standalone Operator and installation of the Operator client.

- Step 1. Write down the PAK-ID or serial number from the Server Wizard->Versions page and from the Popup About dialog accessed by right-clicking on the phone icon in the system tray.
- Step 2. Make a record of any configuration information such as selected phone and user's contact data that you may require for the new install.
- Step 3. Uninstall the Standalone CallConnector from the Control Panel.
- Step 4. Create an operator account on the CallConnector Server and configure the required operator parameters.
- Step 5. Install the Operator Client at the operator position and point it to the CallConnector Server IP Address with the operator user account that you have created.

## **Appending Long-Distance Access Code in Lookup Number**

In locales where the contact numbers are stored with the long distance codes, the is a new option in the Location Management Window (Configuration Manager) to enable (or disable) the pre-pending of the long-distance access number in front of the contact number for lookup and storage purposes.

## **CallConnector Configuration Manager**

The CallConnector Configuration Manager is a replacement for the Server Wizard. It is a totally new administrative application for the CallConnector Server. The same Configuration Manager is used to configure the Standalone CallConnector Operator console and the CallConnector Server.

The primary objective of the new Configuration Manager is to simplify the setup of the CallConnector Server (and Operator). The required UC500 features for the user's phone should be configured using CCA (or CCP) and then the user and phone details can be downloaded to the Smart CallConnector Server.

## **Configuration Manager Summary of Changes**

The following is a list of enhancements in the Configuration Manager:

- Changes in logic to detect the required privilege level settings. Handling of login banners, help button beside Download Router Configuration" with the required CLI settings to allow Telnet access.
- Managing Advanced Client Licenses on the Server
- · Support for adding and activating Advanced Client licenses
- New Import methods for downloading users and contacts from Active Directory and Exchange folders.
- Setup of the External IM Server connection parameters
- Updates in the Dial Plan Settings and logic for a handling additional European regions
- New feature to make a new version of the Advanced Client installation file available to the users for automatic update.
- Miscellaneous bug fixes and enhancements



## **Default Administrative Account**

The Configuration Manager requires an administrative account to login. A default account is created during installation with the username "cisco" and password "cisco".

We strongly recommend:

- 1. There MUST be at least one administrative account on the CallConnector to allow the Configuration Manager to be logged in. The default admin account should not be removed unless a new administrative account has been created.
- 2. All user accounts are displayed in the Corporate directory so the first name, last name, password and other contact details should be changed with the details of your system administrator. (The username login account name cannot be changed).
- 3. If you have removed all administrator accounts and cannot log in, then contact TAC for a workaround.
- 4. When creating a new user, determine the user type, Admin for Config Mgr access or Operator type. Don't change the default admin user to type Operator.

## Synchronization with UC500/CME-ISR Configuration Changes

Any changes in the UC500/CME-ISR for the ephone, ephone-DN, ephone-hunt, dial plans require re-download of the phone configuration to the Smart CallConnector Server using the Configuration Manager.

To download the current router configuration, Open the Configuration Manager to the Setup Routers and Server section, select the Manage Routers tab, and select the desired router from the Router list if there are more than one router configured and then click on the Download Router Configuration button.

Note: With the version 2.1 of the CallConnector Server, the Configuration Manager can be scheduled to run at specified times to automatically download the router configuration and restart the CallConnector Services.

## **Navigation Guides**

The Navigation Guides provide detailed step-by-step instructions for completing a configuration task. Example of such tasks are Configuring the Server, Configuring a New Operator, Adding or deleting a CallConnector User etc. When you open the guide for a task, the navigation guide will take you to the required Configuration Manager page and provide detailed instructions for the actions that are to be performed on that page. When you click on next it will take you to the next configuration step and to the appropriate configuration page.

We recommend that the navigation guides be used by the newer partners that may be unfamiliar with the Configuration Manager to accomplish their administrative tasks.

## Required Basic Configuration on the UC500/CME-ISR

For UC 500 installations it is recommended and assumed through this document, that user is installing the Cisco UC500 using CCA. In addition it is assumed that user upgrades the UC500 system to 8.0.4 software pack before starting the Smart CallConnector Server installation. Appendix A provides information for setting the necessary access and accounting information via the CLI, required for SCC Server .

The following configuration <u>must be provisioned on the UC500/CME-ISR</u> to allow the Configuration Manager to connect with the router and download/write configuration data.

To setup the parameters required for CallConnector Configuration Manager to access the Cisco Router, perform the following steps:

## **SUMMARY STEPS:**

- 1. configure terminal
- 2. ip http server
- 3. ip http authentication local
- 4. ip http timeout-policy idle 180 life 180 requests 86400
- 5. aaa new-model
- 6. username username privilege 15 password 0 password
- 7. line vty 0 9
- 8. transport input all
- 9. transport preferred none
- 10. privilege level 15
- 11. end

## **DETAILED STEPS:**

	Command	Purpose
Step 1	configure terminal Example: Router# configure terminal	Enters global configuration mode.
Step 2	(Not required on UC 500 when configured through CCA) ip http server  Example:  Router(config)# ip http server	Enables the Cisco web browser user interface on the local Cisco router.
Step 3	(Not required on UC 500 when configured through CCA) ip http authentication local Example: Router(config)# ip http authentication local	Sets http server authentication method to local user authentication.
Step 4	(Not required on UC 500 when configured through CCA) ip http timeout-policy idle 180 life 180 requests 86400 Example: Router(config)# ip http timeout-policy idle 180 life 180 requests 86400	Sets http server time-out policy parameters.
Step 5	(Not required on UC 500 when configured through CCA)aaa new-model Example: Router(config)# aaa new-model	Enables the AAA access control system.
Step 6	(Not required on UC 500 when configured through CCA) username username privilege 15 password 0 password Example: Router(config)# username cisco privilege 15 password 0 cisco	Creates a local user account with enough privilege to be used to access Cisco router http service.
Step 7	(Not required on UC 500 when configured through CCA)line vty 0 4 Example: Router(config)# line vty 0 4	Required for Telnet session.
Step 8	(Not required on UC 500 when configured through CCA)transport input all Example:  Router(config-line)# transport input all	Allow all protocols when connecting to the terminal server.
Step 9	transport preferred none Example:     Router(config-line)# transport     preferred none	No preferred protocol to use.
Step 10	(Not required on UC 500 when configured through CCA) **privilege level 15	** This setting is required if the command prompt after logging in to the telnet session shows Router#. However, it's not necessary with User EXEC mode which shows Router>

## **Restrictions for Standalone**

The Standalone Operator position includes the Smart CallConnector Server components. However, it is restricted to two operator accounts (primary and backup operator accounts) and one administrative account only. For this reason, import of CallConnector users is not available in the standalone deployment.

If you need to import contacts from the router, then use the Import Wizard and import contacts from the router to the corporate directory.

## **Dial Plan Changes**

## **Advanced Client, Operator and Personal Client Version 2.1**

All the dial plan changes and transformation are performed on the CallConnector Server. This means that the dialing and lookup rules have to be correctly setup and verified on the server. Dial plan changes are made once on the server and are then available to all the CallConnector client applications.

#### **Older Versions of Personal Clients**

When running in client/server mode, Smart CallConnector Server will perform number translation prior to sending the number to CME. Therefore, any number translation on the older SCC clients will be <u>subsequently re-translated by the rules on the server-side</u>. In order to have SCC client-side dial plan work with the server-side dial plan, the following <u>must be</u> configured:

- Country, Local Area Code, outside access code must be the on the clients and the server and equal the settings on the router to which the user's phone is connected.
- Outside access code for both local and long distance must be the same.
- Special PSTNs need to be added as 'Dial' and 'Lookup' translation rules on the server-side.

Even with the all the prerequisites in place, SCC client may still encounter the following problems:

- Lookup and display functions use client-side dial plan and will not be affected by any server-side translation rule. However, there will be discrepancies in term of number displaying between client-side and server-side.
  - PROBLEM: From IE & Outlook sidebar, an administrator can add a non-SCC contact with number formatted using client-side dial plan and can be different from that of server-side.

SOLUTION: Use the same display format for both client and server.

## • Dialing:

 PROBLEM: If extension mask is not setup correctly at client-side, number will be dialed as international number with full access code. When server receives this number, it will perform a server-side translation on the already transformed number.

SOLUTION: Set the extension masks to match the extension lengths on the server-side. For example, if the extension lengths are 3 and 4, the extension masks should be xxx and xxxx.

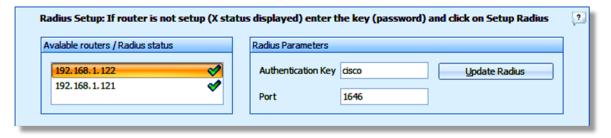
 PROBLEM: Local Area Code rules will be overridden by server-side translation rules.

SOLUTION: All Local Area Code rules must be added from the server-side.

These issues are not encountered with the Advanced Client or the Operator as all dialing translations are performed on the CallConnector Server.

## **Setting Up Radius Parameters**

Radius setup can now be performed from the Configuration Manager. From the Setup Routers and Serves -> Setup Radius page, you can write the required configuration changes to the router.

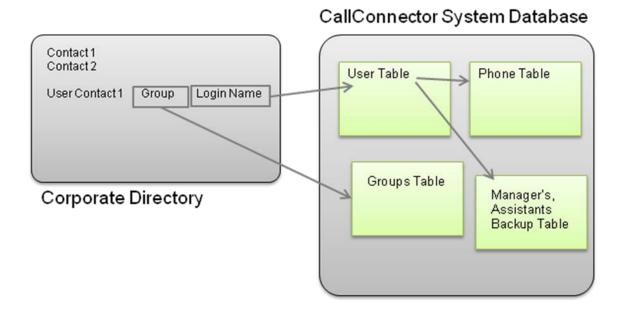


The Radius Status check marks indicate if the radius parameters have been correctly configured on the router. If they are not configured an "X" mark will indicate error status.

Enter the desired Authentication key (Password) and click on Update Radius button.

## **Difference between CallConnector Users and Contacts**

Contacts in the Corporate Directory can be a CallConnector User or a Non-User. For contacts that are Users, the CallConnector maintains database links to additional user configuration information in the system databases as shown below. When a contact is added from a Corporate Directory application, only the Corporate Directory database is updated with the new data, the system databases for the user information are not changed.



## User in Corporate Directory Linked to Configuration Data in System Database

When added/imported to the CallConnector system, each user will be assigned a user account and an IP phone. The user contact information and organizational information is saved in the Corporate Directory. The system administrator can associate the user with the user's manager, assistant and backup person. The user is also assigned to a group/department.

Note: for Operator only installs, only one or two operators and one admin account are allowed. Do not add all UC500/CME users. Instead import them as contacts, see next section.

## **Importing Users**

The CallConnector Users can be imported using the Import Wizard in the Configuration Manager from the router or from a CSV formatted text file. Import Users is only available in CallConnector Server.



When importing users from the router, information from each ephone with a username and password is downloaded and added to CallConnector as a user. The first and last names are derived from the value associated with the name field of the first ephone-DN configured on the phone. The login username and password are same as set to be the same as the ephone.

## **Importing Contacts**

Contact information can be imported from the router, text file or from a Outlook contact folder. Contacts imported from the router are derived from the ephone-DN configured on the router. The first and last names are derived from the name field of the DN, and the work number is from the number field of the DN.

When contacts are imported from a text file, make sure that the file is in the comma-delimited format and that the first row contains the field header information. The field mapping function in the Import Wizard uses this information to allow you to map the input fields to the fields of the corporate directory database.

## **Configuring Operator Parameters**

Once a CallConnector User of type Operator has been configured, additional parameters are required to be setup for the operator console operation. These include:

- 1. Defining the call queues for the operators
- 2. Selecting the Park slots for use by the operators
- 3. Entering the system speed numbers for the operators
- 4. Selecting the page (overhead or IP phone page) numbers

Detailed provisioning and configuration steps for the Operator Parameters are provided in the Administrator's Guide.

## **No GUI for Mobility Configuration**

The Configuration Manager does not provide a graphical interface for setting up the Mobility SNR services.

## Restart CallConnector Services

Once the configuration changes have been made using the Configuration Manager, particularly to the users, phone selections or when changes to the router configuration have been downloaded, the CallConnector Services have to be restarted to reload the configuration data.

## Re-format Contacts/Users Phone numbers

Once the Dial plan changes have been made using the Configuration Manager, all phone numbers of Contacts and Users have to be re-formatted by clicking on the Format Numbers with Dial Plans button in Setup Router and Servers section.

## **Apostrophe Support**

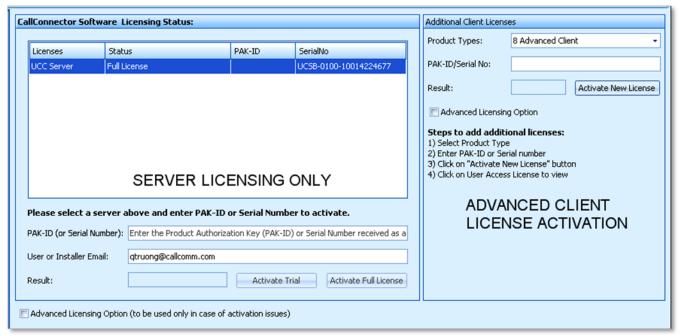
Currently Configuration Manager does not support apostrophe. When importing Users/Contacts, apostrophe will be stripped from imported data.

## Username and login password are case insensitive

In the Configuration Manager, username and login password are case insensitive.

## **CallConnector Server License Management**

Configuration Manager provides management interface for the Server licenses and for the Advanced Client licenses.



## **Converting Trial to Full-License**

If the Server is using the Trial/Evaluation license, then these can be converted to fill-license.

- Step 1. Select the Server in the License Management page in the Guides, License and Maintenance section of the Configuration Manager.
- Step 2. In the fields below the Server Licensing table (on the left), enter the PAKID, email address.
- Step 3. Click on the Activate Full-License button. Result=Success indicates that the activation is completed,

## **Adding Advanced Client Licenses**

The Advanced Client Licenses are managed from the Configuration Manager. Each purchased L-SW-SCC-8ADVANCED SKU provides eight advanced client licenses. Licenses are added from the **Additional Client Licenses form** on the right hand side of the License Management page. To add these licenses:

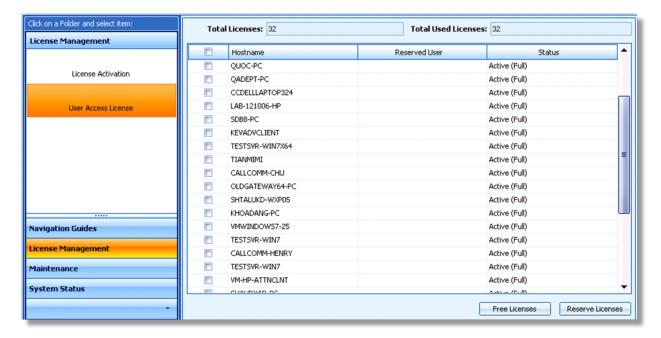
- Step 1. Enter the Advanced Client PAKID in the form to the right of the Server table.
- Step 2. Click on the Activate New License button. Result=Success indicates that the required advanced client licenses have been added.
- Step 3. Verify the licenses by clicking on the User Access Licenses item in the License Management folder and viewing the available licenses.

## Managing Client Licenses

By default, the available client licenses are not reserved and are allocated to the Advanced Clients on a first come, first served basis when the client first logs in. Once a license has been allocated, it is locked to that Advanced Client and the PC on which the client was installed. Administrators can view and manager the client licenses from the User Access License page of the Configuration Manager.

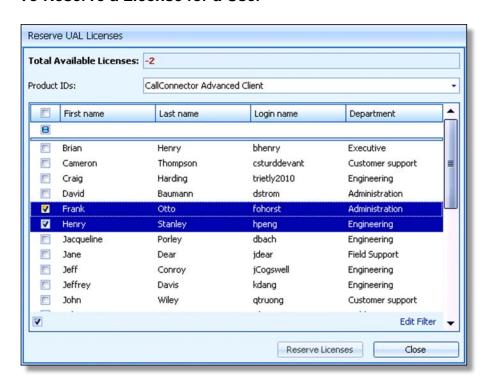
#### Notes:

- 1. The Advanced Client license quantities are checked against the purchase order. In the event there is a discrepancy, the Server license can be disabled.
- 2. The Advanced Client licenses are associated with the Server License. You will need to provide the Server PAKID and registering email address.



## To Remove and Free an Allocated License

- Step 1. Click on the User Access License item in the License Management folder.
- Step 2. Click on the checkbox to the right of one or more allocated licenses in the User Access License table. All the allocated licenses will have a Host Name associated with them.
- Step 3. Click on the Free License button at the bottom of the table. The license allocation will be released and the licenses will become available for the next unregistered advanced client to login



## To Reserve a License for a User

- Step 1. Click on the User Access License item in the License Management folder.
- Step 2. Click on the Reserve Licenses button at the bottom of the page.
- Step 3. Select on the checkbox to the left of the users for whom you want to reserve the licenses.
- Step 4. Click on Reserve Licenses to reserve the licenses for these users, Note if you do not have sufficient available, unallocated licenses you will receive an error message.

## **External IM Services Setup**

SCC Server 2.0 supports external IM federation. Before using external services, the external IM services need to be configured (By default, Gtalk and Facebook IM Services are preconfigured)

## To Configure external IM Service

- Step 1. Click on Setup Router and Servers tab and click on External IM Options folder
- Step 2. Click on the row with text "Enter new External IM Server data here" to add new IM Service's configuration information. Please Enter when done

Except DNS Domain field, all other fields are required

## **Publishing Software Updates**

This option allows an administrator make an newer version of the Advanced Client available for update. The Advanced Client software verified that the posted version is higher and copies and runs the installation program on the local PC.

- Advanced Client Checks for new version at login
- Publishing of Update is controlled by the Administrator
- Administrator can download and copy desired new version to shared drive and publish that for update.
- Clients copy the installation program to their local PC, run the install and exit the Advanced Client
- Client login needs to have local admin rights for the Automatic Software Update

## To Publish a Newer Version

- Step 1. Click on Guides, License and Maintenance Tab and click on the Maintenance Folder
- Step 2. Click on Publish Software Updates item in the folder
- Step 3. Copy new Adv-CL Install file to shared drive
- Step 4. Click on Browse button to select Install File
- Step 5. Config-Mgr will read version and file location. Click on Save
- Step 6. New Version is available to clients
- Step 7. To Stop Publishing, click on Reset

## **CallConnector Presence Server and Directories**

The Presence Server is a multi-functional component of the CallConnector Server. It is a service application that send out presence and telephone status messages to the users in real-time.

## Services Provided by Presence Server

The Presence Server provides the following services to the CallConnector client applications:

- Presence Server maintains the presence status of the users and propagates the state changes to all the subscribing clients.
- Presence Server manages access control to the presence information including enforcing policies related to which users/groups can receive this information.
- Presence Server includes a Radius Server that receives call state events from the router and translates that to telephone status messages to the clients
- Presence Server connects to Cisco Unity Express using SIP to receive the voice message waiting information and propagates that out to the users.
- Presence Server writes the call details to the log database from which users can view their missed, incoming and outgoing calls and the call detail reports can be generated.
- Presence Server receives the keep-alive messages from the clients and makes the users 'unavailable' if the keep-alive has timed out.

## **Pre-requisites for Displaying Telephone Status**

Correct display of telephone status requires the following steps occur:

- CME/IOS is setup to send radius packets with caller/called numbers to Presence Server
- The caller and called numbers are converted to lookup format using dial plan. If dial plan is not setup correctly then the numbers received from radius will not be found in the set of the user's numbers. Note the format of the numbers sent by radius can be different from the way numbers are displayed on the phone. Additional lookup rules can be added to enable this conversion.
- The caller/called numbers are looked up in Corporate Directory to locate a user (matched is performed work, work 2, home, mobile numbers)
- A telephone status update message is sent to the user whose contact numbers are in the radius messages.
- If there are multiple users with same matching number, message is sent to each user.
- Telephone Status message is sent only to the subscribed users
- Clients receive this message and update all GUI where status is displayed

## **Common Configuration Issues**

- Server needs to be setup with a Static IP Address otherwise the messages from the routers cannot be received.
- Radius is not setup. In this case, the telephone status is not displayed at the CallConnector clients.
- The Dial Plan lookup numbers Is not setup correctly. Once the numbers received from Radius are converted they do not match the user's telephone numbers.
- Telephone numbers are not in the users corporate contact list.
- CallConnector client is not subscribed to the presence server.

## **Pre-Requisites for Rich Message Indicator**

The Presence Server establishes a SIP subscription for each voicemail configured for the users. CUE sends detailed message waiting indications when new voice massages are stored. The Presence Server notifies the of the voice message details. This information is used to present the popup notification. If voice message notification is not being received, then check:

- User has a voicemail box defined.
- CUE is configured for sending rich voice message indication using SIP.
- Presence Server has setup SIP connections to CUE and is receiving the notify messages.

## **CallConnector Directories**

The CallConnector clients support multiple directories. Of these, the data for Corporate, External and Personal directories is saved on the server and retrieved by the clients. Corporate and External directories are shared. Personal and Outlook contacts are personal to the user.

- Four Directories Contact information in four directories—organizational with phone status display, external with import option from a comma-separated value (CSV) file or Outlook folder, Personal for your own contacts and buddies and Outlook Private Address List.
- Global search Quickly locate a contact by entering the first few letters, for names, departments, or phone numbers of any entry in the directory.
- Multiple listed numbers Multiple phone numbers are supported per contact; work, home, mobile, alternate, backup, and colleague's numbers.
- Phone & Presence status The organizational directory shows UC500 phone status (idle, ringing, or connected) plus presence availability and location
- Integrated calling and messaging- Advanced Clients can dial numbers, transfer calls, and set up conferences from the directory. They can also send Email and SMS messages to contacts.
- Customizable views Advanced Clients can customize how the directory information is presented by selecting the information fields to view and the display style—tabular or hierarchical. Show Avatar or non-Avatar Views
- Manage contacts Advanced Clients can add, modify, or delete directory contacts in Personal and Outlook Directories.

## **CallConnector Server Component Enhancements**

The CallConnector Server adds additional support for multiple Cisco ISR/Cisco UC500 routers and support for UC500/CME 8.0 features. Users can see the presence information and telephone status of all users across multiple locations. See the technical overview and administrator guides for the specific networking requirements to support multiple routers in different locations. Multiple router support includes server-side dial plan capability, which needs to be configured by the system administrator.

CallConnector Server 2.1 <u>does not support the Mobility Service</u>. Single Number Reach is provided directly by the UC500/CME-ISR and configured via CCA (UC500) or Command Line Interface

## **Call Controller Server**

- Smart recovery for the "tapi connection" :
  - if the particular phone's down time >= 2 minutes & the a client tries to log in and repeats the attempt to setup the tapi connection again, the CallConnector will attempt to connect to the router. Before this change the CallController would wait 6 minutes -> 1 hour
- Support Hunt group log in/ log out
- Notify the call park number
- Support group pickup when the router has multiple groups configured
- Limited log size

#### **Database Server**

- Provides reading and writing interfaces to the configuration on the Cisco router
- Supports virtual machine environment.
- Provides user access license management.

 Improved SIP message definition for more efficient request/response transaction between the server and SCC clients.

## **Presence Server**

- Optimized memory and CPU consumption
- Added message sequence and time stamp
- Synced server status with Radius component's status
- Allowed client to request removal of any call
- Enhanced performance throughput
- Enhanced performance throughput and reduced memory leak.
- Writing call logs to the log database.
- Subscribing to Cisco Unity Express and receiving SIP Notify messages when new voice messages saved.
- Keep-alive handshake between Advanced Clients and the Presence Server to detect if a client has disconnected without making themselves unavailable.

## Radius Server component:

- Supports outgoing PSTN calls with voice-translation rule applied.
- Correct the call timestamp issues.
- Supports call state processing for the following call flows:
  - Ephone hunt group
  - Voice hunt group
  - B-ACD call
  - o Park call
- Provides call removal interface to remove a sticky call on demand.
- Handles Radius packet re-transmission and out-of order issues.
- Provides periodical and event-based call purging for removing sticky calls.
- Optimized memory consumption of the server.
- Has a file size limit on the server's trace log.

## **Telephone Status Reset Timeout**

The Presence Server has options to reset or clear out call that exceed the timeout value set in the registry of that call state. This provides a mechanism to reset telephone status for calls that may be out of synchronization with the state in the CME.

These settings are under Cisco Systems->ccRDSTSP->SetupInfo

Ring Time Parameter= MaxSetupCallStateTimeout (Default value is 240)

Connected State Timeout= MaxConnectedCallStateTimeout (Default value is 3600)

🥸 Registry Editor File Edit View Favorites Help 😐 🦲 SAM Name Type SECURITY (Default) REG SZ (value not set) ConfigFile REG\_SZ C:\Program Files\Cisco Systems\Cisco Unifie Adobe **EnableTrace** REG\_DWORD 0x00000001 (1) Ahead MaxConnectedCallStateTimeout REG DWORD 0x00000e10 (3600) Automated QA MaxSetupCallStateTimeout 0x000000f0 (240) REG DWORD <u>⊕</u> <u>—</u> C07ft5Y **₩**]TraceFile REG\_SZ C:\Program Files\Cisco Systems\Cisco Unified TraceLevel REG\_DWORD 0x00000005 (5) Cisco Systems ccIMServer ccLocalSipServer ccRDSTSP 🖮 SetupInfo ccSystemTracker ConfigParam ConfigurationManager ServerWizard SetupWizard

Both are DWORD type and the value are in seconds.

In this release, the Connected State timeout value has been changed to one hour (3600 seconds)

## **IM SERVER**

- Support ad-hoc group-chat feature
- Support avatar image publishing and retrieving between SCC users

#### DIAL PLAN ENHANCEMENTS

Unified CallConnector Se

Support for pre-pending the long distance code to the look-up formatting of numbers for incoming calls and formatting for numbers being written to the directories.

This option can be enabled or disabled from the Location Management window of the Configuration Manager. The setting applies to all the customer routers configured for the CallConnector Server.

## Running Configuration Manager from Task Scheduler

The Configuration Manager can be scheduled to run from the Windows Task Scheduler to perform the following tasks:

- Stop CallConnector Server applications
- Start CallConnector Server applications
- Download Phone Configuration from UC500/CME-ISR
- Import Users from UC500/CME-ISR
- Compact databases to remove the deleted records

When run from the Windows Task Scheduler, the Configuration Manager does not present its graphical user interface; instead it displays a progress bar.

These scheduled tasks can be used to automatically download changes to the Cisco UC500/CME-ISR in the ephone, ephone-dn, hunt groups, etc and keep the CallConnector

configuration synchronized to the router. If the CallConnector Users are imported from the UC500/CME-ISR, then the user configuration parameters – such as the extension numbers, phone password etc changes can be downloaded and automatically updated.

Note: CME configuration changes can impact the consistency of the CallConnector configurations for user's phones, their extension numbers, the operator parameters etc. This impact is the same, whether the CME configuration changes are downloaded manually or automatically. Administrator's need to be aware of the CME configuration settings being used in the CallConnector Server and re-verify the CallConnector configurations if such changes are made.

## **Automatic Tasks Parameters**

The Configuration Manager can be run from the Windows Task Scheduler with the following parameters in the startup command line:

/stopSvrs This parameter causes the Configuration Manager to stop all the

CallConnector Service applications

/dwnIdCMEAII This parameter causes the Configuration Manager to download the phone

configuration from all the CME-ISR configured on the CallConnector

Server.

/compactdb This parameter causes the Configuration Manager to remove the deleted

records from all the CallConnector database files

/importCMEUsrs This parameter causes the Configuration Manager to import users and

update the existing user if the user has already been downloaded.

/startSvrs The parameter causes the Configuration Manager to start all the

CallConnector Server applications

ConfigurationManager.exe [/dwnldCMEAII] [/stopSvrs] [/startSvrs] [/compactdb]

An example of the command line parameters is shown below:

"C:\Program Files\Cisco Systems\Cisco Smart CallConnector Server\ConfigurationManager.exe" /stopSvrs /dwnldCMEAll /startSvrs

Notes on Automatic Scheduled Tasks:

- The commands are executed in the order from left to right. Therefore the stop command should come before the start command.
- The execution status of the tasks is written to the Configuration Manager log file in the Logs folder under the CallConnector Server folder.
- Changes in the UC500/CME-ISR configuration that are automatically downloaded can impact the consistency of the CallConnector Server configuration parameters. Some of the potential impacts are listed below.
- Import of Users from CME is the only supported import method.
- Download of the CME phone configuration downloads and updates the copy of these
  parameters maintained in the CallConnector. It requires a restart of the services to
  apply these changes to the CallController Server. However the download operation

- does not change the user configuration or their associated phone. This requires the re-import of the users from CME.
- Import of user's from CME will update the user' phone extension numbers, password, etc. It can add a new user if an ephone has been added.

## Impact of CME Configuration Changes

- Ephone Configuration Changes
  - o If ephone is removed, the user account is not removed after user import.
  - o If ephone is added, then user account is added after user import
  - If primary DN is changed, then the work number of the user is changed after user import.
- Ephone-DN changes
  - If the ephone-dn number or name changes, then this is reflected on the user account
- Operator parameters are not changed after user import. Any changes to operator
  extension numbers, hunt group number lists, park numbers etc need to be manually
  synchronized from the Configuration Manager.

## **CallConnector 2.1 Client Enhancements**

## **CallConnector Operator Enhancements**

Enhancements in the 2.1 CallConnector Operators include the following:

## Native x64-bit Operator Console Application for Outlook x64 support

- A new native x64-bit version of the Operator Console is available with the 2.1 release.
- The x64-bit version is required for supporting Outlook 2010 x64. This version includes x64-bit toolbar for Internet Explorer.

## **Instant Messaging to the CallConnector Clients**

- Operators can send instant messages from the Action bar and IM Conversation window to any CallConnector client connected to the server. Including the Advanced client, other Operator positions and the Personal Client configured in the server mode.
- Operator's can receive popup notification of the incoming IM messages. The messages are displayed in the CallConnector Conversation window.

## Support for External IM accounts

- Operator can configure external IM server accounts and provide an optional means of communication and access for the external parties.
- Operators can send IM messages to external contacts if the external IM accounts have been configured.

## **Support for Personal Directory**

 Personal directory has been added to allow operator personal contacts and the external buddy lists to be displayed.

#### Localization of GUI

 Operator GUI supports localization. The localization is dynamic and is based on the loaded language files. This allows additional languages to be added to existing installations.

## **Advanced Client Enhancements for 2.1 version**

Enhancements in the 2.1 CallConnector Advanced Client includes the following:

## Native x64-bit Advanced Client Application for Outlook x64 support

- A new native x64-bit version of the Advanced Client is available with the 2.1 release.
- The x64-bit version is required for supporting Outlook 2010 x64. This version includes x64-bit toolbar for Internet Explorer.

## **Instant Messaging to the CallConnector Personal Clients**

Support for sending and receiving instant messages from the personal clients.

#### Localization of GUI

 Operator GUI supports localization. The localization is dynamic and is based on the loaded language files. This allows additional languages to be added to existing installations.

#### CallConnector Personal Client Enhancements

Enhancements in the 2.1 CallConnector Personal include the following:

## Native x64-bit Personal Client Application for Outlook x64 support

- A new native x64-bit version of the Personal Client is available with the 2.1 release.
- The x64-bit version is required for supporting Outlook 2010 x64. This version includes x64-bit toolbar for Internet Explorer.

## **Instant Messaging to the CallConnector Clients**

 Send and receive instant messages from the Advanced Client and Operator applications.

## Synchronization of Presence to the Outlook Calendar

 Users can enable the option for their presence availability to track the Outlook calendar meetings.

## Support for Server-side Dial Plan

Personal client now supports the CallConnector Server dial plan.

## **Important Notes**

## Windows Computer System for CallConnector Server

The computer system performance and memory requirements are dependent on the number of users configured for the CallConnector Mobility Service. See the CallConnector Server datasheet for details.

## Ports, UDP and TCP Connections

The CallConnector Server applications, including the Mobility Service, setup UDP and TCP connections to UC500/CME and the each of the CallConnector Clients. See the CallConnector Server Administrator Guide for the list of the ports that must be available for the CallConnector Server applications to provide services. If the default port is not available, then you must change the port setting from the CallConnector Server wizard to an available port.

## **Additional Configuration of Cisco Smart CallConnector Operators**

Function	What needs to be setup
Configure the	The CallConnector Operator application allows the operators to control the
Operator's IP	calls on their IP phone from the PC. This requires the phone to be
Phone(s)	configured with directory numbers and features suitable for the operator
	call handling functions, These include:
	Personal Directory Number
	Directory Numbers for the incoming call of each category (call queues)
	Softkey Features including Transfer-to-Voicemail
Call Routing to	There can be several categories of calls received by the operators each
the Operator	requiring a distinct call treatment. Examples of such call categories might
Phones	include the Main Number calls, Customer Support calls, Sales calls or
	Internal calls. The routing of these calls to the operator phones needs to
	be configured in the Cisco Router. Generally these calls will be directed to
	different extension numbers in the operator's phone.
Multiple	If the organization has multiple operators, the calls need to be distributed
Operators	to the operators. The recommended method is to use a hunt group for
Deployments	each operator call queue.
Busy and Night	When the operators are not available during the work day the incoming
Service Routing	calls need to be routed either to an alternate number or to voice mail. For
	off-hour call routing, the Cisco router night service routing can be enabled.
Park and Page	Park slots or directory numbers need to be configured on the router to
Numbers	allow the operators to park the calls and make overhead announcements.
	This requires:
	Setting up the Park Ephone-DN in the router
	Setting up the overhead paging circuits and their associated DNs
Telephony	
Service	Voicemail number and Fac Standard need to be enabled to allow
Parameters	operators transfer calls directly to CUE.
	Hunt-group logout HLog is required for operators to perform hunt-group
	logout operation.
L	1

## **Additional Recommended CLI Settings**

```
!
telephony-service
    keepalive 30 auxiliary 4
    fac standard
    transfer-digit new-call
    transfer-system full-consult

CLI for Operators with Hunt Groups Queues
!
telephony-service
    keepalive 30 auxiliary 4
    hunt-group logout HLog
!
ephone-template 1
    softkeys connected Endcall Hold Transfer HLog
    softkeys idle Newcall Redial Pickup Cfwdall HLog
    softkeys seized Endcall Redial Pickup Cfwdall HLog
!
```

## **Blind Transfer Registry Settings**

We recommend the call transfer completion setting in UC500/CME for Cisco CallConnector is FULL-CONSULT. (This is a requirement for the Mobility Service). However if UC500/CME is configured for Blind Transfer, then the registry key values in the Cisco CallConnector Server must be manually set to indicate this configuration.

## Support for Multiple UC500/CME Routers

The Cisco CallConnector Server is designed to support multiple routers. However we have done limited testing of multiple router configurations. Following are known constraints for the multiple router environments:

- The network connection between the Cisco CallConnector Server and the routers must support the TCP and UDP sessions with sufficient bandwidth and minimum latency.
- Dial plan and location information must be setup for each router for the proper handling of the dialing numbers and looking up incoming caller numbers in the directories.
- Mobility ephones must be defined on each router for use by the Mobility Service.
- Direct transfer to Voice Mail must be configured for each router.
   CallConnector Mobility Service supports configuration of transfer to voice mail on a per router basis.
- The Hardware/Software Conference option can be set individually for each router.

- The RADIUS service must be enabled on all the routers and the authentication password must be the same on all the routers.
- Extension numbers and ephone usernames must be unique across all the routers.

## **Restrictions for Extension Mobility**

The Cisco CallConnector client/server does not work properly with UC500/CME Extension Mobility.

In the CallConnector Server configuration, when a user logs in to an ephone to apply their profile to that specific phone, the server connection to the phone is not refreshed immediately. This can take up to six minutes. . For a CallConnector Client running in the local mode, restarting Popup will connect the user to their currently logged in phone.

The user's ephone name and password must be that of the logged on profile. This might need to be configured manually for the ephone because this does not get downloaded from the telnet session.

## **Open Caveats**

This section describes possibly unexpected behavior and known caveats. Only the significant caveats are described in this section.

## General

CSCsr32805

CallConnector Server does not check the connection status of UC500/CME

The CallConnector Server does not track the status of UC500/CME. If UC500/CME is reset or restarted or when the phone configuration is changed, then the information displayed in the status windows and for some of the call states may not be correct any longer.

The workaround is to download and update the router configuration from the Configuration Manager and restart the CallConnector Server whenever UC500/CME is restarted or reset.

#### CallConnector Server

CSCsm75174

SCC client does not work properly with CIPC.

In the SCC Server configuration, when the CIPC is closed, the connection to the ephone is dropped. The SCC Server will try to re-establish connection every six minutes.

As a workaround, you will need to wait at least six minutes before the connection to the CIPC is restored.

CSCtn97683

Certain inter-router call flows in multi-router configurations, can cause the telephone status to be inaccurate and/or stay stuck in incorrect state. This is visible in the telephone status and directory windows.

Deployments with multiple routers can have calls cross from one router to another and then execute multiple state transitions (forwards, transfers, etc). These call states are not correctly interpreted by the CallConnector Server. This can result in in-accurate or stuck call states.

As a workaround, you can set the automatic clearing of call longer than the specified period. Another option is to schedule automatic stop and restarts of the services nightly using the Windows Task Scheduler to run the Configuration Manager with these command parameters.

CSCtn57736

Call status does not get cleared and stays stuck. This is visible in the telephone status and directory windows.

Radius Service in CME/IOS has buffer overflow for certain call state transitions and in this case does not send STP packets to the CallConnector Server. This causes the calls not to get cleared.

A reproducible step to recreate the problem is to establish a two-way call and place the call hold and resume more than 10 times then the STOP packets won't be sent by the router due to the following error occurred (The same problem can happen when a CXFER/CALLFORWARD flow occurred more than certain number of times):

575149: Mar 2 22:02:38.148: %AAA-3-BUFFER\_OVERFLOW: Radius I/O buffer has overflowed - Traceback= 0x826D8938z 0x826D94FCz 0x826D9EF8z 0x80D90C44z 0x80D962FCz 0x80D91F10z 0x802D560Cz 0x802BBEB4z

```
575150: Mar 2 22:02:38.148: RADIUS/ENCODE(00043785): build from list; FAIL 575151: Mar 2 22:02:38.148: RADIUS/ENCODE(00043785): build packet; FAIL 575152: Mar 2 22:02:38.148: RADIUS/ENCODE(00043785): unable to build packet; FAIL 575153: Mar 2 22:02:38.148: RADIUS/ENCODE(00043785): send packet; FAIL_NO_RETRIES
```

As a workaround, you can set the automatic clearing of call longer than the specified period. These settings are under Cisco Systems->ccRDSTSP->SetupInfo
Ring Time Parameter= MaxSetupCallStateTimeout (Default value is 240)
Connected State Timeout= MaxConnectedCallStateTimeout (Default value is 3600)

Another option is to schedule automatic stop and restarts of the services nightly using the Windows Task Scheduler to run the Configuration Manager with these command parameters. Example: "C:\Program Files\Cisco Systems\Cisco Smart CallConnector Server\ConfigurationManager.exe" /stopSvrs /startSvrs

#### CSCtn97678

Change the ephone username and after import using Schedule Task->Configuration Manager. There are now two records – the user original record and a 2nd one is the modified one.

During the SCC Server Configuration Manager import users from CME, a user is associated with an ephone that has a username and password. If the user name changes, the import does not have a way to differentiate between manually added user records and these user records resulting from CME Config changes.

As a workaround, you will need to review the User Configuration from the Configuration Manager and manually correct duplicates or incorrect user records.

## CSCtn97675

Restart all the CallConnector Servers, the clients do not show connected calls.

There is no workaround, this situation will clear automatically once the call is dropped and new calls are started.

## CSCtn97673

Configuration Manager prompts "Registry is being written by a previous process. Please wait a few seconds and try again" after restart all the CallConnector Servers and is stuck in this state until click OK.

As a workaround, click on OK to continue.

## Configuration Manager

Sometimes Configuration Manager is stuck at "Establish connection to Database Server" step when Configuration Manager is started up or Configuration Manager

switches to Offline mode and never switches back to Online mode while it is running, especially after your server PC is waken up from sleep mode.

As a workaround, you will need to stop Local SIP Server and System SIP Server. Stopping System SIP Server will also stop Database Server. After stopping the servers, you need to start Local SIP Server and Database Server again.

## **Advanced Client**

#### CSCtn97667

Advanced Client x32 2.01.009 crashes when selecting the "Synchronize Presence with Outlook Calendar" option.

This has occurred with a customer with a Windows environment with write access to the C-Drive that has been locked down based on a domain-policy. Customer has been able to provide dump files as the dump files cannot be written either.

As a workaround, do not use "synchronize to calendar option" in these locked down conditions.

## CSCtn97664

No icon images in the Outlook Ribbon x64-bit version are displayed in certain conditions.

This has occurred when there is a connected call when the Outlook application is started.

As a workaround, move to the different tab like Home or Send/Receive and move back to CallConnector tab, the images are displayed. It seems like that this failed to initial the GUI but refresh works.

#### CSCtn97661

Cannot enable the Outlook 2010x64-bit CallConnector Ribbon.

In certain PC environments the CallConnector Ribbon in Outlook x64 does not get displayed. The registration of the ribbon library is successful but the ribbon in not added to the custom ribbon list.

This appears to be PC/Windows environment dependent. Workaround is not known.

## CSCtn68009

Interoperability issue between SCC tool bar and Advanced Client

Advanced Client installation for the 2.1 version, does not detect SCC Toolbar 2.1 as requiring un-install. It does detect version 2.0 toolbars are and uninstall them first.

Workaround is to always first un-install the SCC Toolbar or any Smart CallConnector applications, prior to installing the Advanced Client

## **Related Documentation**

Related Topic	Document Title
Cisco Smart CallConnector Server documentation	<ul> <li>Cisco Smart CallConnector Server Administrator's Guide</li> <li>Cisco Smart CallConnector Server Quick Start Guide</li> </ul>
Cisco Smart CallConnector Operator documentation	<ul> <li>Cisco Smart CallConnector Operator Installation and User Guide</li> <li>Cisco Smart CallConnector Server Administrator Guide</li> <li>Cisco Smart CallConnector Operator Quick Reference Guide</li> <li>Cisco Smart CallConnector Operator Quick Start Guide</li> <li>Cisco Smart CallConnector Operator VODs</li> </ul>
Cisco Smart CallConnector Suite Wiki area	https://supportforums.cisco.com/docs/DOC-13190

# Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Use this document in conjunction with the documents listed in the <u>"Related Documentation"</u> section.