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SBA

COLLABORATION

DEPLOYMENT GUIDE

Help Desk Using Cisco UCCX Deployment Guide

SMART BUSINESS ARCHITECTURE

August 2012 Series

Preface

Who Should Read This Guide

This Cisco® Smart Business Architecture (SBA) guide is for people who fill a variety of roles:

- Systems engineers who need standard procedures for implementing solutions
- Project managers who create statements of work for Cisco SBA implementations
- Sales partners who sell new technology or who create implementation
 documentation
- Trainers who need material for classroom instruction or on-the-job training

In general, you can also use Cisco SBA guides to improve consistency among engineers and deployments, as well as to improve scoping and costing of deployment jobs.

Release Series

Cisco strives to update and enhance SBA guides on a regular basis. As we develop a series of SBA guides, we test them together, as a complete system. To ensure the mutual compatibility of designs in Cisco SBA guides, you should use guides that belong to the same series.

The Release Notes for a series provides a summary of additions and changes made in the series.

All Cisco SBA guides include the series name on the cover and at the bottom left of each page. We name the series for the month and year that we release them, as follows:

month year Series

For example, the series of guides that we released in August 2012 are the "August 2012 Series".

You can find the most recent series of SBA guides at the following sites:

Customer access: http://www.cisco.com/go/sba

Partner access: http://www.cisco.com/go/sbachannel

How to Read Commands

Many Cisco SBA guides provide specific details about how to configure Cisco network devices that run Cisco IOS, Cisco NX-OS, or other operating systems that you configure at a command-line interface (CLI). This section describes the conventions used to specify commands that you must enter.

Commands to enter at a CLI appear as follows:

configure terminal

Commands that specify a value for a variable appear as follows:

ntp server 10.10.48.17

Commands with variables that you must define appear as follows:

class-map [highest class name]

Commands shown in an interactive example, such as a script or when the command prompt is included, appear as follows:

Router# enable

Long commands that line wrap are underlined. Enter them as one command:

wrr-queue random-detect max-threshold 1 100 100 100 100 100

100 100 100

Noteworthy parts of system output or device configuration files appear highlighted, as follows:

interface Vlan64

ip address 10.5.204.5 255.255.25.0

Comments and Questions

If you would like to comment on a guide or ask questions, please use the SBA feedback form.

If you would like to be notified when new comments are posted, an RSS feed is available from the SBA customer and partner pages.

August 2012 Series

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What's In This SBA Guide

Cisco SBA Collaboration

Cisco SBA helps you design and quickly deploy a full-service business network. A Cisco SBA deployment is prescriptive, out-of-the-box, scalable, and flexible.

Cisco SBA incorporates LAN, WAN, wireless, security, data center, application optimization, and unified communication technologies—tested together as a complete system. This component-level approach simplifies system integration of multiple technologies, allowing you to select solutions that solve your organization's problems—without worrying about the technical complexity.

Cisco SBA Collaboration is a design incorporating unified communications, video collaboration, and web conferencing. By building upon the hierarchical model of network foundation, network services, and user services, Cisco SBA Collaboration provides dependable delivery of business applications and services.

Route to Success

To ensure your success when implementing the designs in this guide, you should first read any guides that this guide depends upon—shown to the left of this guide on the route below. As you read this guide, specific prerequisites are cited where they are applicable.

About This Guide

This *deployment guide* contains one or more deployment chapters, which each include the following sections:

- Business Overview—Describes the business use case for the design. Business decision makers may find this section especially useful.
- Technology Overview—Describes the technical design for the business use case, including an introduction to the Cisco products that make up the design. Technical decision makers can use this section to understand how the design works.
- **Deployment Details**—Provides step-by-step instructions for deploying and configuring the design. Systems engineers can use this section to get the design up and running quickly and reliably.

You can find the most recent series of Cisco SBA guides at the following sites:

Customer access: http://www.cisco.com/go/sba

Partner access: http://www.cisco.com/go/sbachannel



Introduction

Business Overview

The ability to easily add functionality into the telephony environment for corporate help desks has been challenging. Organizations use help desks in their Human Resources departments to answer personnel questions, in IT departments to help employees with their computer problems, and in their facilities departments to maintain and manage their buildings. A help desk helps to minimize the time it takes to answer employees' questions and maximize the available internal resources.

Traditional contact center solutions are difficult to implement because of the additional hardware components and the complexity of the software needed to implement them. The work is normally done by highly trained engineers who spend the majority of their time working with contact centers. The complexity makes the implementation a long process and the additional expertise makes the installation and maintenance quite expensive. Agents are required to work at the location of the contact center equipment because the inherent limitations of the hardware prevent them from working remotely. It is very difficult to integrate the overall system with the corporate data because common interfaces are not readily available.

Technical Overview

The next-generation IP help desk takes advantage of a company's internal network by making use of the IP private branch exchange (PBX) and other IP-based applications to create a better experience for the callers. Calls are routed to available agents who have the expertise to answer the questions, regardless of their physical location in the company. Agents can view information about the caller through integration with corporate databases; and historical data is saved and viewed in easily readable reports that help improve the day-to-day workings of the help desk. These are just a few of the benefits offered by a fully integrated IP help desk.

Cisco Unified Contact Center Express (Unified CCX) is the IP-based help desk solution offered by Cisco Systems. It is tightly integrated with other Cisco Unified Communications platforms. Design and testing is performed on the suite of Unified Communications products as part of a complete solution. Configuration of Unified CCX is easier than traditional systems because the components talk to each other over the internal IP network, which helps streamline the procedures. For example, when a phone number is created on Unified CCX to reach a help desk application, no additional configuration is needed in the Cisco Unified Communications Manager (Unified CM). The configuration is sent over the network to Unified CM and the directory number is created. Unified CM is automatically configured to pass calls for the directory number to Unified CCX for further processing.

When a call is placed to the help desk, it is first processed by Cisco Unified CM, which recognizes that the number is destined for the Cisco Unified CCX application server. Unified CCX receives the incoming call and identifies which application script is needed to handle the request based on the extension number that was dialed. The script plays prompts and collects digits as dictated by the steps in the script and, if necessary, uses the information from the caller to select an appropriate agent. If an appropriate agent is not available, the call is put in queue and music is streamed to the caller. As soon as an agent is available, Unified CCX instructs Unified CM to ring the agent's phone. When the agent picks up, information about the caller is populated into the agent's desktop application and the conversation begins.

Cisco Unified CCX has the features of a large contact center packaged into a single- or dual-server deployment. The system scales up to 400 concurrent agents, 42 supervisors, 150 agent groups, and 150 skill groups. It includes email, outbound calling, inbound calling, workforce optimization, and reporting.



The Cisco Unified CCX features are listed in more detail below:

- Automatic call distributor (ACD)—Unified CCX routes calls by using skills or resource groups. Skills-based routing distributes the call based on the skill level of the agent for a particular topic. It is the method most often used. Resource-group routing distributes calls to agents based on the resource group to which the agents are assigned.
- Interactive voice response (IVR)—IVR controls the interaction between the caller, prompts, and menus. Depending on the options the caller enters into the system, IVR uses an application script to determine how to handle the call. IVR can read or write corporate database information, play information such as tracking numbers to callers, and collect information from the caller through digits or speech recognition.
- Agent Email—Agent Email allows customers to contact the help desk by email. Agents are assigned skills, and email is distributed to agents based on their skills. Email agents can use preset templates in their replies to avoid writing repetitive emails.
- Agent Desktop—Cisco Agent Desktop is an application that resides on the agent's computer. Agents use the application to log in at the beginning of their shifts, indicate whether they are in a ready state or on a break, and log out at the end of the day. When an agent is logged in and ready, calls are sent to Agent Desktop, which presents information about the incoming call. The application has an integrated browser to access a customer database or browse the Internet to help answer a question. Agent Desktop is a great tool for agents because everything they need to do their job is in one place, which allows them to focus on answering the caller's question.
- Supervisor Desktop—Cisco Supervisor Desktop helps supervisors keep track of real-time statistics such as how many calls are in queue, the number of agents available, and the average time a caller is spending in queue. Supervisors can also use Supervisor Desktop to coach agents by silently monitoring calls, chatting with agents, joining a call, and pushing a webpage down to an Agent Desktop. Supervisor Desktop helps supervisors ensure that calls are being handled on a timely basis and agents are not giving callers incorrect information. If there is an issue, Supervisor Desktop allows them to quickly address the problem.

- **Reporting**—Cisco Unified CCX saves statistics in an internal database that can be accessed by the historical reporting client application to create reports. Reports can be scheduled on a recurring basis or created as needed. Reports can be general, such as information about the entire help desk over a year, or specific, such as information about a particular agent for one day. Historical reports allow managers to get a big picture of their help desk and to make changes to address issues.
- Workforce Management—Workforce Management is a tool that uses a sophisticated algorithm to look through historical data and create a schedule that will have the right number of agents on staff at the right times during the day. This tool helps ensure that more agents are on staff at busy times and agents have scheduled breaks during slow times.
- Quality Manager—Quality Manager is a tool that records calls. Quality
 Manager randomly selects calls throughout the day to be recorded, or
 you can select specific calls to record. This tool also creates standardized score sheets to help determine how well the agent handled the call.
 Quality Manager is a great coaching tool designed to make the helpdesk experience more satisfying for the caller.

Cisco Unified CCX is a powerful application. Through its strong scripting engine, easy-to-use desktops, extensive reporting tools, and sophisticated workforce optimization, it can successfully operate even the most complicated corporate help desks. The next several sections of this document will guide you through the process of installing and configuring Cisco Unified CCX in a Unified CM environment.

Deployment Details

Cisco Unified CCX runs on the same Linux operating systems as several other Unified Communications platforms from Cisco. You install the operating system with the application by using the standard installation DVD.

Process

Preparing the Platform for Unified CCX

- 1. Prepare a virtual machine for Unified CCX
- 2. Prepare a server for Unified CCX

For a quick and easy installation experience, it is essential to know up-front what information you will need. For Unified CCX, make sure you have completed the following steps before you start:

- If you are installing Unified CCX on a new virtual machine (VM), download the Open Virtualization Archive (OVA) file from the Cisco website at: http://www.cisco.com/cisco/software/release.html?mdfid=270569179&s oftwareid=283733053
- Check the Cisco website to determine if there is a patch for your version of Unified CCX: http://www.cisco.com/cisco/software/release.html?mdfi d=270569179&flowid=5217&softwareid=280840578

If you are installing a virtual machine, follow the steps in "Prepare a virtual machine for Unified CCX," later in this guide.

If you are installing a standalone server, locate the Unified CCX DVD that shipped with your order, and then follow the steps in "Prepare a server for Unified CCX," later in this guide.

Procedure 1

Prepare a virtual machine for Unified CCX

When you install Cisco Unified CCX on VMware, follow the steps below to deploy an OVA file to define the virtual machine requirements. You use the Open Virtualization Format (OVF) support of VMware to import and deploy the OVA file.

The Cisco Unified CCX OVA file for 100 agents defines the following virtual machine:

- Number of virtual CPUs—2 (with 900 MHz reservation)
- Amount of RAM—4 GB (with 4 GB reservation)
- Hard disk—146 GB
- ESXi support—ESXi 4.0 or ESXi 4.1 (VM version 7)
- OS support—Red Hat Enterprise Linux 4 (32-bit)

The Cisco Unified CCX OVA file for 300 agents defines the following virtual machine:

- Number of virtual CPUs—2 (with 900 MHz reservation)
- Amount of RAM—4 GB (with 4 GB reservation)
- · Hard disks-2 x 146 GB
- ESXi support—ESXi 4.0 or ESXi 4.1 (VM version 7)
- OS support—Red Hat Enterprise Linux 4 (32-bit)

The Cisco Unified CCX OVA file for 400 agents defines the following virtual machine:

- Number of virtual CPUs—4 (with 900 MHz reservation)
- Amount of RAM—8 GB (with 8 GB reservation)
- Hard disks—2 x 146 GB
- ESXi support—ESXi 4.0 or ESXi 4.1 (VM version 7)
- OS support—Red Hat Enterprise Linux 4 (32-bit)

Step 1: In the VMware vSphere client, choose File > Deploy OVF Template.

Step 2: Click the Browse button next to the Deploy from a file or URL box, find the location of the OVA file that you downloaded from Cisco, and then click Next.

Step 3: Verify the information on the OVF Template Details screen, and then click Next.

Step 4: Read the End User License Agreement, click Accept, and then click Next.

Step 5: Enter the following information in the Deploy OVF Template wizard, and then click **Finish**.

- On the Name and Location page, in the Name box, enter the virtual machine name CCX1, and then click Next.
- On the **Deployment Configuration** page, choose the **Configuration** type from the pull-down menu, and then click **Next**.
- On the Datastore page, choose the location to store the VM files, and then click Next.
- On the **Disk Format** page, choose a format in which to store the virtual machine's virtual disks, and then click **Next**.
- On the **Network Mapping** page, choose the **Source Networks** to map to the **Destination Networks**, and then click **Next**.
- On the **Ready to Complete** page, verify the settings, and then click **Finish**.

Source OVF Template Details Name and Location Deployment Configuration	Deployment settings: OVF file:		l. ts\SBA\2012 2H Aug\UCM Foundat	ion\UCM CUC\(
Datastore Disk Format Ready to Complete	Download size: Size on disk: Name: Deployment Configuration: Host/Cluster: Datastore: Disk Format: Network Mapping:	95.0 KB 256.0 KB CCX1 400 Agents chas2-s3.cisco.local datastore1 C2-S3 Thick Provisioning "eth0" to "Servers_1"		
Help	,		< Back Finish	Cancel

Step 6: After the virtual machine is created, on the **Getting Started** tab, choose **Edit virtual machine settings**.

Step 7: On the Hardware tab, select CD/DVD Drive 1.

Step 8: Select **Datastore ISO File**, click **Browse**, and then navigate to the location of the Cisco Unified CCX bootable installation file.

Hardware Options Resources		Virtual Machine Versio
Show All Devices	Add Remove	Device Status
Hardwara		
Hardware Memory CPUs Video card VMCI device SCSI controller 0 Hard disk 1 Hard disk 2 CD/DVD Drive 1 (edited) Network adapter 1 Floppy drive 1	Summary 4096 MB 2 Video card Restricted LSI Logic Parallel Virtual Disk Virtual Disk [Software (Openfiler Servers_1 Floppy drive 1	✓ Connect at power on Ourice Type Client Device Note: To connect this device, you must power on the virtual machine and then click the Connect CD/DVD button in the toolbar. Host Device ✓ Datastore ISO File [Software (Openfiler)] Cisco/UC/UCC Browse Mode Passthrough IDE (recommended) ⓒ Emulate IDE Virtual Device Node ⓒ IDE (1:0) CD/DVD Drive 1 ✓

Step 9: On the Options tab, choose Boot Options.

Step 10: Select The next time the virtual machine boots, force entry into the BIOS setup screen, and then click OK.

Hardware Options Resources		Virtual Machine Version: 7
Hardware Options Resources Settings General Options VMware Tools Power Management Advanced General CPUID Mask Boot Options Fibre Channel NPIV CPU/MMU Virtualization Swapfile Location	Summary UCCX1 Shut Down Standby Normal Expose Nx flag to Delay 0 ms None Automatic Use default settings	Virtual Machine Version: 7 Power On Boot Delay Whenever the virtual machine is powered on or reset, delay the boot for the following number of milliseconds: Force BIOS Setup The next time the virtual machine boots, force entry into the BIOS setup screen. Failed Boot Recovery When the virtual machine fails to find boot device, automaticaly retry boot after 10 = seconds

Step 11: On the Getting Started tab, choose Power on the virtual machine, and then click the Console tab to watch the server boot.

Step 12: After the machine boots into the PhoenixBIOS Setup Utility, use the right arrow key to move to the **Boot** tab.

Step 13: Edit the boot order with the **+** and **-** keys to make CD-ROM Drive the first item and Hard Drive the second.

Main	Adva	inced	Phoen Secur		Setup Boot	Utility Exit	
	DOM Due :						Item Specific Help
+Ha +Re	-ROM Dri rd Drive movable twork bo	Devices	AMD Am'	79C970A			Keys used to view or configure devices: <enter> expands or collapses devices with a + or - <ctrl+enter> expands all <+> and <-> moves the device up or down. <n> May move removable device between Hard Disk or Removable Disk <d> Remove a device that is not installed.</d></n></ctrl+enter></enter>
	lp 1↓ it ↔	Select Select		-/+ Enter		Values ► Sub-M	F9 Setup Defaults enu F10 Save and Exit

Step 14: To save the BIOS settings, press the F10 key.

Step 15: To complete the installation, follow the procedures in "Installing Cisco Unified CCX," later in this guide.

Procedure 2

Prepare a server for Unified CCX

When installing Cisco Unified CCX on a standalone server, use the following system requirements:

- · CPU—Single Xeon Nehalem quad-core E5504 at 2.0 GHz
- · RAM—8 GB
- Hard disks—2 x 146 GB SAS
- · OS support—Red Hat Enterprise Linux 4 (32-bit)

Step 1: Physically install the server and attach the monitor, keyboard, and network cable.

Step 2: Insert the Cisco Unified CM DVD into the DVD drive.

Step 3: Power up the server. It boots from the DVD.

Step 4: After the DVD loads, follow the procedures in "Installing Cisco Unified CCX" to complete the installation.

Process

Installing Cisco Unified CCX

- 1. Install the Unified CCX platform
- 2. Set up application administration

The process is the same whether you are installing in a virtual environment or on a standalone server.

Make sure you have the following information:

- Time zone for the server
- Host name, IP address, network mask, and default gateway
- Domain Name System (DNS) server IP addresses
- Administrator ID and password
- Organization and unit
- · Location, state, and country
- Network Time Protocol (NTP) server IP addresses
- Security password
- Application username and password

Complete the tasks listed below before you start the installation:

- Configure Cisco Unified CCX host name (CCX1) in DNS.
- · Obtain license files from the Cisco licensing system.

Procedure 1

Install the Unified CCX platform

Step 1: On the DVD Found screen, choose to perform a media check by selecting Yes.

Step 2: If the media check is successful, click **OK** in order to continue with the installation process.

Step 3: If the media check does not pass, contact Cisco Technical Assistance Center or your local representative to replace the media, and then repeat Step 1.

Step 4: On the Product Deployment Selection page, click OK.

Step 5: On the **Proceed with Install** page, verify that the version is correct, and then click **Yes**.

Step 6: On the Platform Installation Wizard page, click Proceed.

Step 7: On the Apply Patch page, do one of the following:

- If no upgrade patch exists for the version you are installing, click No.
- If an upgrade patch does exist, click **Yes**, and then follow the instructions on the screens to complete the process.

Step 8: On the Basic Install page, click Continue.

Step 9: On the **Timezone Configuration** page, choose the correct time zone for the server location, and then click **OK**.



Step 10: On the Auto Negotiation Configuration page, click Yes.

Step 11: On the **MTU Configuration** page, click **No**. This keeps the default maximum transmission unit (MTU) size.

Step 12: On the **Static Network Configuration** page, enter the following information, and then click **OK**.

- Host Name—CCX1
- IP Address—10.4.48.126
- · IP Mask-255.255.255.0
- · GW Address-10.4.48.1



Step 13: On the first DNS Client Configuration page, click Yes.

Step 14: On the second **DNS Client Configuration** page, enter the following information, and then click **OK**.

- Primary DNS—10.4.48.10
- Domain—cisco.local

DNS Clie	nt Configuration	• 00
Primary DNS	10.4.48.10	
Secondary DNS (optional)		
Doma in	cisco.local	
OK	Back Help	

Step 15: On the **Administrator Login Configuration** page, enter the following information, and then click **OK**.

- Administrator ID—Admin
- · Password—[password]
- Confirm Password—[password]

Administ	rator Login Configuration	on
	administration username rname and password guid	-
Administrator ID	Admin	
Password	*****	
Confirm Password	*****	
ОК	Back	Help

Step 16: On the **Certificate Information** page, enter the information that will be used to generate security certificates, and then click **OK**.

- Organization—Cisco Systems, Inc.
- Unit—Unified Communications Group
- Location—San Jose
- · State-California
- Country—United States



Step 17: On the First Node Configuration page, click Yes.

Step 18: On the **Network Time Protocol Client Configuration** page, enter the following information, and then click **OK**.

• NTP server 1—10.4.48.17



Step 19: On the **Security Configuration** page, enter the password for server-to-server communication, and then click **OK**.



Tech Tip

These passwords must match the information submitted to Cisco, or the licenses will not be valid.



Enter the system security password. This password is used to secure communication between cluster nodes and will also be used by DRS for encryption of backup tar files. Choose Help for username and password guidelines.



Step 20: On the SMTP Host Configuration page, click No.

Step 21: On the **Application User Configuration** page, enter the following information, and then click **OK**.

- Application User Username—CCXAdmin
- · Password—[password]
- · Confirm Password—[password]

Tech Tip

These values are used to initially access the Cisco Unified CCX Administration page and must match the license information submitted to Cisco. When specific users are given administrative rights during the application setup procedure, the initial username and password entered above will no longer work.



Step 22: On the Platform Configuration Confirmation page, click OK.

Step 23: On the Unified CCX Deployment Type Selection page, choose Cisco Unified Communications Manager, and then click OK.

The system will go through the rest of the installation process without user input. The system will reboot a few times during installation. The process can take 60 minutes or more, depending on your hardware.

Eventually, the server will open the command-line interface (CLI). For access to the CLI, use the administrator credentials entered on the **Administrator Login Configuration** screen in Step 15.

Step 24: If you deployed your server from a virtual template, return to the VMware vSphere client to disable the CD/DVD drive.

Step 25: From the vSphere client, navigate to the virtual machine's **Getting Started** tab, and choose **Edit virtual machine settings**.

Step 26: On the Hardware tab, choose CD/DVD Drive 1.

Step 27: Clear Connect at power on, and then click OK.

Procedure 2

Set up application administration

After the software is installed, use the web interface to complete the rest of the procedures.

Step 1: Using the web browser on your PC, access the Cisco Unified CCX Administration interface.

Step 2: In the center of the page, click the Cisco Unified Contact Center Express link.



If you receive a warning about the website's security certificate, ignore it and continue to the page.

Step 3: Enter the name and password you entered on the Application User Configuration page in Step 21 of, "Install the Unified CCX platform," and then click **Login**.

Step 4: On the Cisco Unified CCX Administrator Setup screen, choose Fresh Install, and then click Next.

Step 5: On the Cisco Unified CM Configuration - Service Provider Configuration screen, enter the following information, and then click Next.

- · Unified CM server IP address—10.4.48.110 (publisher)
- AXL Admin UserName—CUCMAdmin
- Password—[password] (must match the password on Cisco Unified CM)

Unified CM Server Host Name or IP address*	10.4.48.110
AXL Admin User Name*	CUCMAdmin
Password*	•••••

Step 6: On the **License Information** screen, enter the location of the Unified CCX license file received from Cisco, and then click **Next**.

Enter a license or zip file name

License File* C:\Users\kfleshne\Documents\SBA\2012 2H Aug\

Step 7: After the license has been validated, click Next.

Step 8: After all of the components are successfully activated, click Next.

Component(s) successfully Activated.	
Component Name	Status
Cisco Monitoring	Activated
Cisco Recording	Activated
Cisco Unified CCX Agent Datastore	Activated
Cisco Unified CCX Config Datastore	Activated
Cisco Unified CCX Engine	Activated
Cisco Unified CCX Historical Datastore	Activated
Cisco Unified CCX Node Manager	Activated
Cisco Unified CCX Repository Datastore	Activated

Step 9: On the Publisher Activation screen, click Next.

	Datastore Name	Server Name	Status
1	Cisco Unified CCX Historical Datastore	CCX1	Not Activated
\checkmark	Cisco Unified CCX Agent Datastore	CCX1	Not Activated
\checkmark	Cisco Unified CCX Repository Datastore	CCX1	Not Activated

Step 10: On the **Cisco Unified CM Configuration** screen, in the AXL Service Provider Configuration section, under Selected AXL Service Providers, select the Unified CM server **10.4.48.110** (publisher), and then click the **right-facing arrow** to remove it from the list.

Step 11: Under Available AXL Service Providers, select the Unified CM servers **10.4.48.111** (subscriber 1) and **10.4.48.112** (subscriber 2), and then click the **left-facing arrow** to move them under Selected AXL Service Providers.

Step 12: In the Cluster Wide Parameters section, enter the following information:

- · User Name—CUCMAdmin
- Password—[password]

	rovider Configuration Service Providers	.[Cisco Unified CM Ve		.2.21900(5)] XL Service Providers	
×	10.4.48.111 10.4.48.112			10.4.48.113 10.4.48.114 10.4.48.120 10.4.48.121 10.4.48.110	
Cluster Wide I	Parameters				
User Name*		CUCMAdmin			
Password*		•••••	•		

Step 13: In the Unified CM Telephony Subsystem - Unified CM Telephony Provider Configuration section, under Available CTI Managers, select the Unified CM servers **10.4.48.111** (subscriber 1) and **10.4.48.112** (subscriber 2), and then click the **left-facing arrow** to move them under Selected CTI Managers. **Step 14:** In the Cluster Wide Parameters section, enter the following information:

- User Prefix—CCX_jtapi
- · Password—[password]
- · Confirm Password—[password]

Unified CM Tel	ephony Subsystem - l	Jnified CM Telephony	y Provider Co	onfiguration	
Selected CTI M	lanagers		Available	CTI Managers	
•	10.4.48.111 10.4.48.112		*	10.4.48.110 10.4.48.113 10.4.48.114 10.4.48.120 10.4.48.121	
Cluster Wide I	Parameters				
User Prefix*		CCX_jtapi			
Password*		•••••			
Confirm Passw	ord*	•••••			

Step 15: In the RmCm Subsystem - RmCm Provider Configuration section, under Available CTI Managers, select the Unified CM servers **10.4.48.111** (subscriber 1) and **10.4.48.112** (Subscriber 2), and then click the left-facing arrow to move them under Selected CTI Managers.

Step 16: In the Cluster Wide Parameters section, enter the following information, and then click **Next**.

- · User Id—CCX_rmjtapi
- · Password—[password]
- · Confirm Password—[password]

Selected CTT Ma	anagers		Available CT	TI Managers	
•	10.4.48.111 10.4.48.112		•	10.4.48.110 10.4.48.113 10.4.48.114 10.4.48.120 10.4.48.121	
luster Wide P	arameters				
		CCX_rmjtapi			
Jser Id*					
Jser Id* Password*		*******			

Unified CCX will send the user information to the Unified CM server, and the application users will be created automatically.

Tech Tip

For historical reporting of the number of HR sessions, use the maximum number of supervisors or administrators who will be running Unified CCX reports at the same time. For the Recording Count, enter the maximum number of concurrent ad-hoc recording sessions.

Step 17: On the **System Parameters Configuration** screen, enter the following information, and then click **Next**:

- Number of HR sessions—4
- Recording Count-25
- Number of Outbound seats—100
- · Codec-G.711

Number of HR sessions*	4	
Recording Count*	25	(Limit : 84)
Number of Outbound seats*	100	(Maximum limit :100)
Codec	G711 🔻	

Step 18: On the **Language Configuration** screen, enter the language that will be used for default IVR prompts, the Cisco Agent Desktop, and the Cisco Supervisor Desktop, and then click **Next**.

	Language Group en_AU	Group Default	Country Specific		
English		-			
English	en_CA	\bigcirc			
	en_GB	\bigcirc			
	en_US	۲			
CAD/CSD La	nguage config	guration			

Step 19: On the Desktop Client Configuration Tool message, click OK.



Make sure you give your own account administrator rights. After you give one of the Unified CM users administrator rights, the admin user account created during installation will not work. Step 20: On the User Configuration page, select the Cisco Unified CM users who need administrative rights, click the left-facing arrow to move them to the Cisco Unified CCX Administrator section, and then click Finish.

The initial application administration setup is now complete. Please close your web browser.

Process

Configuring the Help Desk

- 1. Create the call control group
- 2. Create skills
- 3. Assign skills to contact service queues
- 4. Create resources
- 5. Configure the user's phone or extension
- 6. Assign skills to resources
- 7. Create the supervisors and teams
- 8. Create scripts and applications
- 9. Add a trigger
- 10. Associate application user with CTI
- 11. Create and upload the prompts
- 12. Verify Unified CCX Engine status

After you configure the application administration for the first time, the next task is to configure the help desk to allow the system to begin taking calls from end users.

Procedure 1

Create the call control group

A call control group creates a group of computer telephony integration (CTI) ports on Cisco Unified CM that are used to send calls to Unified CCX for IVR treatment and queuing. The call stays on the CTI port until it is sent to an agent.

Step 1: Using your web browser, access the Cisco Unified CCX Administration interface.

Step 2: In the center of the page, click the Cisco Unified Contact Center Express link.

Tech Tip

The account created during the installation of the server will no longer work for administering the application.

Step 3: Enter the username and password of one of the users you assigned administrative rights in Step 20 of the previous procedure, and then click **Login**.

Step 4: Navigate to Subsystems > Cisco Unified CM Telephony > Call Control Group, and then click Add New.

Step 5: Enter the following information, and then click **Add**.

- Description—Unified CM Telephony Group
- Number of CTI ports—4
- Media Termination Support-No
- Group Type—Inbound
- Device Name Prefix—CTIP
- Starting Directory Number—8009950
- Device Pool—DP_HQ1_1 (default for headquarters location)
- DN Calling Search Space—CSS_Base
- Location—Hub_None
- Partition—PAR_Base

Leave the rest of the fields at their default settings.

Procedure 2

Create skills

Create skills for each different type of call you expect to receive in the call center.

Step 1: Navigate to Subsystems > RmCm > Skills and click Add New.

Step 2: On the Skill Configuration screen, enter Information Technology, and then click Save.

Skill Name*

Information Technology

Step 3: On the Skills search screen, click Add New.

Step 4: On the Skill Configuration screen, enter Human Resource, and then click Save.

Step 5: To create additional skills, repeat Step 3 and Step 4.

Procedure 3

Assign skills to contact service queues

Create contact service queues for each skill entered in the previous procedure.

Tech Tip

The Contact Service Queue (CSQ) names created here must exactly match the queue names referenced in the application scripts which are described later in this document. The example script uses the CSQ names of IT and HR. Be sure to add these queues to the server.

Step 1: Navigate to Subsystems > RmCm > Contact Service Queues and click Add New

Step 2: On the first Contact Service Queue Configuration screen, enter the following information, and then click Next:

- Contact Service Oueue Name—IT
- Contact Service Queue Type—Voice
- Automatic Work—Disabled
- Wrap-up Time—Disabled
- Resource Pool Selection Model—Resource Skills
- Service Level—5 (seconds)
- Service Level Percentage—70
- Prompt—No Selection

Contact Service Queue Name*	Т
Contact Service Queue Type*	Voice
Contact Queuing Criteria	FIFO
Automatic Work*	🔘 Enabled 💿 Disabled
Wrapup Time*	© Enabled Second(s)
Resource Pool Selection Model*	Resource Skills 👻
Service Level*	5
Service Level Percentage*	70
Prompt	- No Selection -

Step 3: On the second Contact Service Queue Configuration screen, enter the following information, and then click Add:

- Resource Selection Criteria—Longest Available
- Select Required Skills—Information Technology (and then next to the window, click Add)
- Minimum Competence—5

Contact Service Queue Name	Information Technolo	gy
Resource Selection Criteria*	Longest Available 🔹	
Select Required Skills	Human Resource Information Technolo	gy
Skills	Minimum Competence	Delete
Information Technology	5	1

Step 4: For each additional skill, click **Add New**, and then repeat Step 2 and Step 3.

Procedure 4 Create resources

Perform the next two procedures on your Cisco Unified CM platform. First, you will assign phones to the agents and supervisors.

Step 1: From your browser, access the Unified CM Administration interface.

Step 2: In the center of the page, click the Cisco Unified CM Administration link.

Step 3: Enter the application administrator username and password for Unified CM, and then click **Login**.

Step 4: To locate an existing phone, navigate to **Device > Phone** and click Find.

Step 5: If the agent phone is found, click it to proceed to the next step. If the phone does not yet exist, click **Add New** to create it.

Step 6: On the **Phone Configuration** page, click **line [1]** to add Unified CCX information for the specific line on the phone.

If this is a new phone, fill out the other fields on the Directory Number Configuration page that are important to your environment.

Step 7: Scroll down to the bottom of the page, and click Associate End Users.

Step 8: On the **Find and List Users** screen, click **Find**, and then choose the appropriate user for this line by selecting the check box next to their name.

Step 9: Click Add Selected and you will return to the previous page.

Step 10: Scroll down to the bottom of the Directory Number Configuration screen, select the check box to the left of the user's name, and then click Save.

– User	s Associated with Line		
	Full Name	User ID	Permission
~	<u>Fleshner,Kelly</u>	kfleshne	1
	Associate End Users Select All	Clear All Delete Selecter	d

Step 11: Repeat Step 4 through Step 10 for each additional agent and supervisor phone.

Procedure 5

Configure the user's phone or extension

The next set of steps associates the phone to the agent or supervisor user ID.

Step 1: Navigate to User Management > End User and click Find.

Step 2: Select the agent or supervisor from the previous procedure and click the user ID.

Step 3: On the **End User Configuration** screen, scroll down to the Device Information section, and then click **Device Association**.

Step 4: On the User Device Association screen, click Find.

Step 5: Search for the agent device. Select the check box next to the agent's phone, and then click **Save Selected/Changes**.

Step 6: In the upper-right corner of this page, in the Related Links dropdown list, choose **Back to User**, and then click **Go**.

— Device Information		
Controlled Devices	SEP001E4A34B03A	
		Device Association
Available Profiles	annc Profile	
	aobrien_Profile bethomas_Profile	
	callejas_Profile	
	~~~	
CTI Controlled Device Profiles		
		*

**Step 7:** On the **End User Configuration** page, scroll down to the Extension Mobility section. Ensure that the **Allow Control of Device from CTI** check box is selected.

- Extension Mobility			
Available Profiles	annc_Profile aobrien_Profile bethomas_Profile callejas_Profile cstokes_Profile		
	<b>~</b> ^		
Controlled Profiles			
			<b>v</b>
			^
Default Profile	Not Selected	•	
Presence Group*	Standard Presence group	•	
SUBSCRIBE Calling Search Space	< None >	•	
Allow Control of Device from C	ті		
Enable Extension Mobility Cross	s Cluster		

**Step 8:** Scroll down to the Directory Number Associations section, set the IPCC Extension to the agent directory number that you created in the previous procedure, and then click **Save**.

<ul> <li>Directory Numb</li> </ul>		
Primary Extension	< None >	-
IPCC Extension	4007 in PAR_Base	-

**Step 9:** For each additional agent or supervisor, repeat Step 2 through Step 8.

#### Procedure 6

**Assign skills to resources** 

Cisco Unified CM users associated with IPCC extensions show up automatically as resources in Cisco Unified CCX. Using the resource list on the Cisco Unified CCX Administration page, you assign skills to resources, making them available to answer calls in particular Contact Service Queues (CSQs).

**Step 1:** Using your browser, access the Unified CCX Administration interface.

Step 2: In the center of the page, click the Cisco Unified Contact Center Express link.

**Step 3:** Enter the name and password of a user with administrative rights to Unified CCX, and then click **Login**.

Step 4: Navigate to Subsystems > RmCm > Resources. On the Resources search page, click a user under the Resource Name.

**Step 5:** On the **Resource Configuration** page, in the Unassigned Skills field, select the skill that you want to assign, and then click the **left-facing arrow** to move it to Assigned Skills.

Step 6: Select the Competence Level for the resource and click Update.

Resource Name	Kelly F	leshner	
Resource ID	kfleshr	10	
IPCC Extension	4007		
Resource Group	-Not S	Selected-	•
Automatic Available*	En:	abled 🔘 Disabled	
Assigned Skills		Unassigned Skills	
Human Resource(5)	•		
Information Technology(5)			
Competence Level 5 - (1-Be	ainner, 10-E	Expert)	
Team	Defau		•

Step 7: For each additional resource, repeat Step 4 through Step 6.

#### Procedure 7

#### **Create the supervisors and teams**

The first step in building a team is to create a supervisor. A supervisor has a full view of a team's performance and can monitor the agents by using the Cisco Supervisor Desktop.

## Step 1: Navigate to Tools > User Management > Supervisor Capability View.

Step 2: On the User Configuration screen, in the Available Users field, select the users you want to designate as supervisors, click the left-facing arrow, and then click Update.

Cisco Unified CCX Supervisor*
nchiou

Step 3: Navigate to Subsystems > RmCm > Teams and click Add New.

**Step 4:** On the **Team Configuration** screen, enter the following information, and then click **Save**.

- Team Name—Information Technology
- Primary Supervisor—[Supervisor]
- Assigned Resources—[Agent or supervisor]
- Assigned CSQs—Information Technology

Team Name*		Information Technology
Primary Supervisor	[	Ming Chiou 👻
Secondary Supervisors	_ /	Available Supervisors
	-	
Assigned Resources		Available Resources
Miles Davis Kelly Fleshner	<b>▼</b>	Ming Chiou
Assigned CSQs		Available CSQs
Information Technology	<ul><li></li></ul>	Human Resource

Step 5: For each additional team, repeat Step 3 and Step 4.

#### Procedure 8

**Create scripts and applications** 

In this procedure an externally created script is uploaded to the server in order to quickly deploy the example configuration.



#### **Reader Tip**

This guide uses the example script and prompts from a zip file that is included with the document. The zip file can be found on http://www.cisco.com/go/sba/.

Step 1: Navigate to Applications > Script Management and click Upload Scripts.

**Step 2:** Click **Browse**, find the location of the script (scripts have the file extension .aef), and then click **Upload**.

Please click the browse button to locate the script or zip file and then click the upload button to upload the file.

File
Name*
C:\Users\kfleshne\Documents\SBA\2012 2H Aug\
Browse....

Step 3: After the script is successfully uploaded, click Return to Script Management.

Step 4: Navigate to Applications > Application Management and click Add New.

Step 5: On the Add A New Application screen, select Cisco Script Application, and then click Next.

**Step 6:** On the **Cisco Script Application** screen, enter the following information, and then click **Add**.

- Name—Help Desk
- · ID—[automatic setting] (do not change this value)
- Maximum Number of Sessions—4
- · Script—SCRIPT[SBAHelpdesk.aef]
- · Description—Help desk for IT and HR
- Enabled-Yes
- Default Script—System Default

Name *	Help Desk		
ID*	0		
Maximum Number of Sessions*	4		
Script*	SCRIPT[SBAHel	pdesk.aef]	•
Welcome	SBA_Welcome	Show Prompts	a¶j€
Goodbye	SBA_Goodbye	Show Prompts	ı¶j€
AfterHoursWelcome	SBA_AfterHou	Show Prompts	ı <b>ğ</b> €
EnterTicketNum	SBA_EnterCas	Show Prompts	ı <b>i</b> ğ€
ExpectedWaitTime		Show Prompts	ı₿€
MainMenu	SBA_Mainmer	Show Prompts	a∯€
ThankYouAdvice	SBA_ThankYo	Show Prompts	ı <b>ğ</b> €
TicketNumAvailable	SBA_TicketNu	Show Prompts	ı∦j€
VeryImportant	SBA_VeryImpc	Show Prompts	ı¶j€
Description	Helpdesk for IT a	ind HR	
Enabled	🖲 Yes 🔘 No		
Default Script	- System Default	-	-

#### Procedure 9 Add a trigger

The trigger for an application is the phone number the users will dial when they want to speak with someone in the help desk.

Step 1: In the upper-left of the Cisco Script Application screen, click Add New Trigger.

Step 2: In the Trigger Type drop-down list, choose Unified CM Telephony Trigger, and then click Next.

Step 3: On the Cisco Unified CM Telephony Trigger Configuration screen, enter the following information:

- Directory Number—8009940 (CTI Route Point that will be automatically created in Unified CM to direct calls to this application)
- · Language—English (United States) [en_US]
- · Device Name—InternalHelp
- Description—Trigger for Internal Help Desk
- Call Control Group—Unified CM Telephony Group(1)

Directory Information		
Directory Number*	8009940	
Trigger Information		
Language*	English [en]	
Application Name*	Help Desk	
Device Name*	InternalHelp	
Description*	Trigger for Internal Help Desl	
Call Control Group*	Unified CM Telephony Group(1) -	

Step 4: Click Show More, enter the following information, and then click Add:

- Enabled-Yes
- Maximum Number of Sessions—Default
- · Idle Timeout (in ms)-5000
- Override Media Termination—No
- Alerting Name ASCII—Help Desk Pilot
- Device Pool—DP_HQ1_1 (headquarters default)
- Location—Hub_None (headquarters default)
- · Partition—PAR_Base (phone default)
- Voice Mail Profile—None
- · Calling Search Space—CSS_Base

Leave the rest of the fields at their defaults.

Advanced Trigger Information			
Enabled	🖲 Yes 🔘 No		
Maximum Number Of Sessions	Default		Unchecked:Default value is same as
Maximum Number Of Sessions			Number of Sessions set on the Application
Idle Timeout (in ms)	5000		
Override Media Termination	© Yes ◉ No		
CTI Route Point Information			
Alerting Name ASCII	Help Desk Pilo	t	
Device Pool	DP_HQ1_1		•
Location	Hub_None -		•
Directory Number Settings			
Partition	PAR_Base		•
Voice Mail Profile	None		•
Calling Search Space	CSS_Base		•
Calling Search Space for Redirect	Default Calling	Search Space	•
Presence Group	Standard Pres	ence group	•
Call Forward and Pickup Settings			
	Voice Mail	Destination	Calling Search Space
Forward Busy			None -

#### Procedure 10

#### Associate application user with CTI

This set of steps associates the CCX application user with the phones, CTI Route Point, and CTI Ports in Unified CM.

**Step 1:** From a new browser window, access the Cisco Unified CM Administration interface.

Step 2: In the center of the page, click the Cisco Unified CM Administration link.

**Step 3:** Enter the administrator username and password for Unified CM and then click **Login**.

Step 4: Navigate to User Management > Application User.

Step 5: On the Application User search page, click Find, and then select CCX_rmjtapi.

Step 6: On the Application User Configuration screen, in the Device Information section under Available Devices, select the agent and supervisor phones, the CTI ports, and the CTI route point, click the down-facing arrow, and then click Save.

- Device Information -			
Available Devices	SEP001DA2394A0C SEP001DA2394AFC SEP001F9EAC466E SEP00230432B845 SEP0023339C9515	~ 	Find more Phones Find more Route Points
Controlled Devices	CTIP_8009956 CTIP_8009957 InternalHelp SEP001E4A34B03A SEP0023049AAE6E SEP0023049AAE6E	▲ III	

#### Procedure 11

**Create and upload the prompts** 

Prompts are played to the callers when they are in the application. You must record the prompts as .wav files and save them in a location reachable by the PC accessing the Cisco Unified CCX Administration page.



#### **Reader Tip**

This guide uses the example script and prompts from a zip file that is included with the document. The zip file can be found here: http://www.cisco.com/go/sba/

Step 1: Return to the Cisco Unified CCX Administration main page.

Step 2: Navigate to Applications > Prompt Management, and then click the en_US folder.

Step 3: After the folder opens, click Upload Prompts.

Step 4: Browse to the prompt WAV file, select it, and then click Upload.

**Step 5:** For each of the prompts file needed, repeat Step 3 and Step 4, and then click **Return to Prompt Management**.

Name	Size	Date Modified	Modified By	Delete	Rename	Refresh
SBA_AfterHours.wav	110.06 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan	٢	2	•
SBA_EnterCaseNumber.wav	28.65 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan	1	3	٩
SBA_Goodbye.wav	13.49 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan		2	•
SBA_Mainmenu.wav	97.09 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan	1	2	•
SBA_ThankYouAdvice.wav	46.15 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan	1	2	•
SBA_TicketNumAvailable.wav	53.34 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan	1	3	٩
SBA_VeryImportant.wav	33.34 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan	1	3	٩
SBA_Welcome.wav	31.77 KB	05/31/2012 02:08:17 PM Pacific Standard Time	agroudan	1	3	٩

**Step 6:** Navigate to **Applications > Application Management**, and click the application that you created in Procedure 8, "Create scripts and applications."

Step 7: (Optional) If you need to change the names of the default prompts or use different prompts, select the check box next to each prompt, click Show Prompts, and then choose the appropriate prompt file. After they are all chosen, click Update.

### **Tech Tip**

In order to make custom prompts you must be sure to format the WAV files correctly before uploading them to the server.

Bit Rate: 64 kbps

Audio sample size: 8 bit

Channels: 1 (mono)

Audio sample rate: 8 kHz

Audio format: CCITT u-Law

Name	Help Desk		
ID*	0		
Maximum Number of Sessions*	4		
Script*	SCRIPT[SBAHelpdesk.aef]	•	Edit
Welcome	SBA_Welcome.wav	Show Prompts	a∯€
Goodbye	SBA_Goodbye.wav	Show Prompts	i <b>ig</b> €
AfterHoursWelcome	SBA_AfterHours.wav	Show Prompts	a∯∉
EnterTicketNum	SBA_EnterCaseNumber.wav	Show Prompts	u¶j€
ExpectedWaitTime		Show Prompts	i∯€
MainMenu	SBA_Mainmenu.wav	Show Prompts	a∯∉
ThankYouAdvice	SBA_ThankYouAdvice.wav	Show Prompts	a∯€
TicketNumAvailable	SBA_TicketNumAvailable.wav	Show Prompts	a∯€
VeryImportant	SBA_VeryImportant.wav	Show Prompts	]] <b>#</b> €€
Description	Helpdesk for IT and HR		
Enabled	🖲 Yes 🔘 No		
Default Script	- System Default -	-	Edit



Verify Unified CCX Engine status

Check the status of the server to ensure the integration with CUCM is working properly and is ready to receive calls.

Step 1: Using the Navigation drop down menu in the top right select Cisco Unified CCX Serviceability and click Go.

Step 2: Navigate to Tools > Control Center-Network Services.

**Step 3:** On the **Cisco Unified CCX Engine** line, the **Status** should read **In Service**; if this is the case configuration of the server is complete and you can skip ahead to Configuring the Client Desktop Software. If the **Status** is **Partial Service**, continue to the next step to attempt to fix the problem.

Step 4: Using the Navigation drop down menu in the top right select Cisco Unified CCX Administration and click Go.

Step 5: Navigate to Subsystems > Cisco Unified CM Telephony > Data Synchronization.

Step 6: Select Call Control Group(s), Trigger(s), and CM Telephony User(s) and click Data Resync.

**Step 7:** Repeat Step 1 thru Step 3 to recheck if Unified CCX Engine has come back into service.

#### Process

Configuring the Client Desktop Software

- 1. Download the client
- 2. Configure reason codes
- 3. Set up caution and warning levels

In this process, you download Cisco Agent Desktop, Cisco Supervisor Desktop, and Cisco Desktop Administrator clients from the server to a user's PC. You can download these applications to any PC that has network access to the server through the Cisco Unified CCX Administration page.

**Procedure 1** 

**Download the client** 

Step 1: Navigate to Tools > Plug-ins, and then click Cisco Unified CCX Desktop Suites.

Cisco Unified CCX Client Configuration tool	To download Cisco Unified CCX client configuration tool, click on this link
Cisco Unified CCX Desktop Product Suite	
Cisco Unified CCX Desktop Administrator	To install Cisco Unified CCX Desktop Administrator, click on this link
Cisco Unified CCX Supervisor Desktop	To install Cisco Unified CCX Supervisor and Agent Desktops, click on this link
Cisco Unified CCX Agent Desktop	To install Cisco Unified CCX Agent Desktop only, click on this link

It might become necessary to create debug logs for CAD-BE. To do this, right-click the <u>CAD-BE logging and debugging file</u> and save it to your computer as properties file.

- If using Internet Explorer, save the file to your desktop
- If using Mozilla Firefox for Windows, save the file to the C:\Program Files\Mozilla Firefox folder
   If using Mozilla Firefox for Linux, save the file to your barre director;
- If using Mozilla Firefox for Linux, save the file to your home directory.

## Тес

**Tech Tip** 

Because this is the first time you're downloading the desktop applications, you must run the Cisco Unified CCX Client Configuration Tool. You only have to do this once per installation or upgrade.

Depending on the operating system and browser on your PC, you will have to answer and acknowledge several security-related prompts to download and run the tool.

#### Step 2: Click Cisco Unified CCX Client Configuration Tool.

Step 3: On the CAD Client Configuration screen, which may be hidden behind other windows on your PC, enter 10.4.48.126, and then click Next.

Please enter the IP address of the server you downloaded this application from. For example (255.255.255.255).

IP Address:

10.4.48.126

The Client Configuration wizard configures the desktop applications into a format that can be downloaded by users of the system. After the wizard is finished, it returns to the download page of Unified CCX Administration. Depending on the speed of your connection to the server, this process can take up to 20 minutes to complete.

**Step 4:** Under Cisco Unified CCX Desktop Product Suite, click **Cisco Unified CCX Desktop Administrator**, and then follow the installation prompts. **Step 5:** After installing Desktop Administrator, click the link for the type of desktop that is appropriate for this end user's role, and then follow the installation prompts.

#### **Tech Tip**

**Tech Tip** 

Install either the supervisor or agent desktop on a particular PC, but not both. The Supervisor Desktop installation includes both the agent and supervisor applications. The Agent Desktop installation includes only the agent application.

Procedure 2

**Configure reason codes** 

Reason codes are used to identify the different tasks an agent may be doing before and after taking a call.

Step 1: Navigate to Start > Programs > Cisco > Desktop > Admin, and then click Cisco Desktop Administrator.

The default path to the application on your hard drive is as follows: C:\Program Files\Cisco\Desktop\bin\SplkView.exe

Step 2: Navigate to Call Center 1 > Work Flow Configuration > Reason Codes and click Edit Master List.

Step 3: On the Master Reason Code Editor page, enter the following information, and then click Add:

- Code—0 to 999 (Each reason must have a unique number.)
- Description—Describe the reason code.

Code	Description	
Add	Modify	Delete
Reasons List 1 End of Shift 2 Break 3 Lunch 4 Meeting		

Step 4: To add more reasons, repeat Step 3, and then click Done.

**Step 5:** After you have created the master reason list, on the **Logout** tab, select the appropriate reasons for logging out, and then click the right arrow to make them available.

📓 Cisco Desktop Work Flow Admi	inistrator	
File View Monitoring Window Help		
<ul> <li>Locations</li> <li>Call Center 1</li> <li>Pail Strings</li> <li>Pail Strings</li> <li>Pail Phone Book</li> <li>Pail Phone Phone Phone Phone Phone Pho</li></ul>	Logout Not Ready Available Reason Codes List 2 Break 3 Lunch 4 Meeting	Global Reason Codes List 1 End of Shift
۲	Edit Master List	Reserved List 22 Supervisor logout 1000 ACD voice 32749 Agent canceled call 32755 Call ended 32756 Device in service 32757 Call Manager failover
Ready		

**Step 6:** On the **Not Ready** tab, select the appropriate reasons that an agent might not be ready, and then click the left arrow to make them available.

Step 7: After the Logout and Not Ready tabs are completed, click Apply.

📓 Cisco Desktop Work Flow Admi	nistrator 📃 🗖 🔀
File View Monitoring Window Help	
1   ×	
<ul> <li>Locations</li> <li>Call Center 1</li> <li>Work Flow Configuration</li> <li>Dial Strings</li> <li>Dial Strings</li> <li>Phone Book</li> <li>Reason Codes</li> <li>Wrap-up Data</li> <li>Record / Monitor Configur</li> <li>Work Flow Groups</li> </ul>	Logout Not Ready Available Reason Codes List Global Reason Codes List 1 End of Shift 2 Break 3 Lunch 4 Meeting Reserved List 22 Supervisor logout
	1000     ACD voice       32749     Agent canceld call       32755     Call ended       32756     Device in service       32757     Call Manager failover
Ready	

**Procedure 3** 

Set up caution and warning levels

Caution and warning levels are thresholds set up by the administrator to let call center agents know when the call is going on longer than what is ideal for the given call center. You set the thresholds by using Cisco Desktop Workflow Administrator.

Step 1: Navigate to Call Center 1 > Work Flow Configuration > Work Flow Groups > default > Enterprise Data.

**Step 2:** On the **Call Activity** tab, specify the time thresholds for the CSQ (time the caller was in queue) and agent (time the caller has been speaking to the agent), and then click **Apply**.

📓 Cisco Desktop Work Flow Administrator	
File View Monitoring Window Help	
Record / Monitor Configur	
<ul> <li>Work Flow Groups</li> <li>default</li> <li>Enterprise Data</li> <li>Reason Codes</li> <li>Wrap-up Data</li> <li>Wrap-up Data</li> <li>CAD Agent</li> <li>CAD-BE Agent</li> <li>Seant</li> <li>The Warning threshold before entering a Caution threshold.</li> <li>The Warning threshold must be greater than the Caution threshold.</li> </ul>	
Apply Apply	

The baseline help desk configuration is now complete.

es	Notes	No	Notes			

## Appendix A: Product List

### **Data Center or Server Room**

Functional Area	Product Description	Part Numbers	Software	
Contact Center	Cisco Media Convergence Server 7845-13 for Unified Contact Center Express up to 400 agents	MCS-7845-I3-CCXB1	8.5.1 SU3	
	Cisco Media Convergence Server 7835-I3 for Unified Contact Center Express up to 100 agents	MCS-7835-I3-CCXB1		
Call Control	Cisco Media Convergence Server 7845-13 for Unified Communications Manager up to 10,000 users	MCS7845I3-K9-CMD3A	845I3-K9-CMD3A 8.6(2a)SU1	
	Cisco Media Convergence Server 7835-I3 for Unified Communications Manager up to 2500 users	MCS7835I3-K9-CMD3A		
Business Edition Virtual Server	Unified CMBE6K UCS C200M2 for Unified Communications Manager up to 500 users	UCS-C200M2-BE6K	8.6(2a)SU1 ESXi 4.1	
Call Control Virtual Servers	Cisco UCS C210 M2 General-Purpose Rack-Mount Server for unified com- munications applications	UCS-C210M2-VCD2	8.6(2a)SU1 ESXi 4.1	
	Cisco UCS C200 M2 High-Density Rack-Mount Server for unified communi- cations applications	UCS-C200M2-VCD2		
Contact Center Virtual Servers	Cisco UCS C210 M2 General-Purpose Rack-Mount Server for unified com- munications applications	k-Mount Server for unified com- ESXi 4.1		
	Cisco UCS C200 M2 High-Density Rack-Mount Server for unified communi- cations applications	UCS-C200M2-VCD2		

## Appendix B: Changes

This appendix summarizes the changes to this guide since the previous Cisco SBA series.

- We added server scaling information for customers who need to support up to 400 agents, 42 supervisors, 150 agent groups and skill groups.
- We changed the dial plan information, to align it with new telephony integration guides. This change ensures the voice guides use a common set of extension numbers and dialing rules.
- We updated the software on the voice infrastructure equipment and the endpoints to the latest shipping versions.

#### Notes

#### Feedback

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SMART BUSINESS ARCHITECTURE

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