

Deploying Avaya Aura[®] Contact Center DVD for Avaya Communication Server 1000

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Chapter 1: Introduction

This document describes how to install and un-install server software for Avaya Aura[®] Contact Center Release 7.0 in an Avaya Communication Server 1000 AML-based solution.

Purpose

This document describes how to prepare a server and install Avaya Aura[®] Contact Center software.

Intended audience

This document is intended for people who install Avaya Aura® Contact Center software.

Related resources

Avaya Aura[®] Contact Center Documentation

The following table lists the documents related to Avaya Aura[®] Contact Center. Download the documents from the Avaya Support website at <u>https://support.avaya.com</u>.

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Title	Use this document to:	Audience
Avaya Aura [®] Contact Center and Avaya Communication Server 1000 Integration	This document contains information and procedures to integrate the Avaya Communication Server 1000 platform with Contact Center.	Implementation personnel
Deploying Avaya Aura [®] Contact Center DVD for Avaya Aura [®] Unified Communications	This document contains information about Contact Center DVD installation, initial configuration, and verification for the Avaya Aura [®] Unified Communications platform.	Implementation personnel
Deploying Avaya Aura [®] Contact Center DVD for Avaya Communication Server 1000	This document contains information about Contact Center DVD installation, initial configuration, and verification for the Avaya Communication Server 1000 platform.	Implementation personnel
Deploying Avaya Aura [®] Contact Center Software Appliance for Avaya Aura [®] Unified Communications	This document describes how to deploy the Avaya Aura [®] Contact Center Software Appliance for the Avaya Aura [®] Unified Communications platform.	Implementation personnel
Avaya Aura [®] Contact Center Commissioning for Avaya Aura [®] Unified Communications	This document contains information for Contact Center preparation, process, initial configuration, and verification of the installation on the Avaya Aura [®] Unified Communications platform.	Implementation personnel
Avaya Aura [®] Contact Center Commissioning for Avaya Communication Server 1000	This document contains information for Contact Center preparation, process, initial configuration, and verification of the installation on the Avaya Communication Server 1000 platform.	Implementation personnel
Avaya Aura [®] Contact Center and Proactive Outreach Manager Integration	This document provides conceptual and procedural information on the integration between Avaya Aura [®] Contact Center (AACC) and Avaya Proactive Outreach Manager (POM); it describes the tasks required for AACC and POM integration.	Implementation personnel
Upgrading and patching Avaya Aura [®] Contact Center	This document contains information and procedures to upgrade from previous releases to Contact Center, migrating the databases, and information and procedures to download and install service packs.	Implementation personnel and system administrators
Administering		
Avaya Aura [®] Contact Center Server Administration	This document contains information and procedures for day-today	System administrators

Title	Use this document to:	Audience
	maintenance of all servers in the Contact Center suite, including server maintenance tasks, administrative tasks, managing data, configuring data routing, performing archives, and backing up data. It also describes the optional configuration procedures for server configuration.	
Avaya Aura [®] Contact Center Client Administration	This document contains information and procedures to configure the users and user access, skillsets, server management, and configuration data in the Contact Center database.	System administrators and contact center supervisors
Using Contact Center Orchestration Designer	This document contains information and procedures to configure script and flow applications in Contact Center Orchestration Designer.	System administrators
Maintaining		
Maintaining Avaya Aura [®] Contact Center	This document contains routine maintenance procedures such as installing service packs, and maintaining the databases for the Contact Center system.	System administrators and support personnel
Troubleshooting Avaya Aura [®] Contact Center	This document contains system-wide troubleshooting information and procedures for Contact Center hardware, software, and network.	System administrators and support personnel
Contact Center Event Codes	This document contains a list of errors in the Contact Center suite and recommendations to resolve them. This document is a Microsoft Excel spreadsheet	System administrators and support personnel
Using	- F	
Using Avaya Aura [®] Contact Center Reports and Displays	This document contains procedures to generate performance reports, and to monitor and analyze performance data and performance measurements.	System administrators and contact center supervisors
Using Agent Desktop for Avaya Aura [®] Contact Center	This document provides information and procedures for agents who use the Agent Desktop application to accept, manage, and close contacts of all media types in Contact Center.	Contact center agents and supervisors
Using the Contact Center Agent Browser application	This document provides information and procedures for agents who use	Contact center agents

Title	Use this document to:	Audience
	the Agent Browser application to log on to Contact Center and perform basic tasks.	

Finding documents on the Avaya Support website

Procedure

- 1. Navigate to http://support.avaya.com/.
- 2. At the top of the screen, type your username and password and click Login.
- 3. Click Support by Product > Documents.
- 4. In **Enter your Product Here**, type the product name and then select the product from the list.
- 5. In Choose Release, select an appropriate release number.
- 6. In the **Content Type** filter, click a document type, or click **Select All** to see a list of all available documents.

For example, for user guides, click **User Guides** in the **Content Type** filter. The list displays the documents only from the selected category.

7. Click Enter.

Viewing Avaya Mentor videos

Avaya Mentor videos provide technical content on how to install, configure, and troubleshoot Avaya products.

About this task

Videos are available on the Avaya Support website, listed under the video document type, and on the Avaya-run channel on YouTube.

Procedure

- To find videos on the Avaya Support website, go to <u>http://support.avaya.com</u> and perform one of the following actions:
 - In Search, type Avaya Mentor Videos to see a list of the available videos.
 - In **Search**, type the product name. On the Search Results page, select **Video** in the **Content Type** column on the left.
- To find the Avaya Mentor videos on YouTube, go to <u>www.youtube.com/AvayaMentor</u> and perform one of the following actions:
 - Enter a key word or key words in the **Search Channel** to search for a specific product or topic.
 - Scroll down Playlists, and click the name of a topic to see the available list of videos posted on the website.



Videos are not available for all products.

Support

Go to the Avaya Support website at <u>http://support.avaya.com</u> for the most up-to-date documentation, product notices, and knowledge articles. You can also search for release notes, downloads, and resolutions to issues. Use the online service request system to create a service request. Chat with live agents to get answers to questions, or request an agent to connect you to a support team if an issue requires additional expertise.

Chapter 2: Changes in this release

The following sections describe the new features and changes in Avaya Aura[®] Contact Center Release 7.0.

Features

See the following sections for information about feature changes.

New features in the Release 7.0 base build

See the following sections for information about new features in the Release 7.0 base build:

- Avaya Aura Contact Center® Ignition Wizard on page 18
- Avaya Aura Contact Center® supports Microsoft Windows Server 2012 R2 on page 19
- Contact Center Manager Administration support for Caché database on page 19

New features in Release 7.0 Feature Pack 2

See the following sections for information about new features added by Feature Pack 2:

<u>Removal of default security configuration</u> on page 19

Avaya Aura[®] Contact Center Ignition Wizard

Avaya Aura[®] Contact Center Release 7.0 introduces a configuration utility called the Ignition Wizard. After you install Avaya Aura[®] Contact Center software, you use the Ignition Wizard to configure the initial networking, locale, administration, and licensing solution details.

If you know the contact center solution details, you can run the Ignition Wizard directly after installing the Avaya Aura[®] Contact Center software. Alternatively, you can install the Avaya Aura[®] Contact Center software and then defer running the Ignition Wizard until you know the solution details. This gives you the flexibility to install the server software and then, at a later date or different location, configure the solution details.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational.

Avaya Aura[®] Contact Center supports Microsoft Windows Server 2012 R2

Avaya Aura[®] Contact Center Release 7.0 is supported on the Microsoft Windows Server 2012 R2 operating system. Avaya Aura[®] Contact Center Release 7.0 is not supported on Microsoft Windows Server 2008 R2. Customers upgrading to Avaya Aura[®] Contact Center Release 7.0, must migrate to a new Microsoft Windows Server 2012 R2 server.

Contact Center Manager Administration support for Caché database

In Contact Center Release 7.0, Contact Center Manager Administration (CCMA) stores information in a Caché database. Contact Center Release 7.0 stores agent, user, statistical, scheduling, and reporting information in Caché databases. This simplifies Contact Center data management, migration, and maintenance. This also simplifies the resiliency configuration processes.

In Contact Center Release 7.0, Contact Center Manager Administration (CCMA) does not store information using Active Directory Lightweight Directory Services (AD-LDS) or Microsoft Access databases.

Removal of default security configuration

From Release 7.0 Feature Pack 2, for new installations Contact Center no longer provides a default security store and default security certificates. At the installation stage, you can now use the Ignition Wizard to create a security store, generate a Certificate Signing Request (CSR) and import a Certificate Authority root certificate. Alternatively, you can choose to skip security configuration at the installation stage and configure your security certificates later in the commissioning process using Security Manager.

Other changes

See the following sections for information about changes that are not feature-related:

Other changes in the Release 7.0 base build

See the following sections for information about changes that are not feature-related in the Release 7.0 base build:

- Knowledge Worker server type no longer supported on page 20
- <u>Microsoft Windows Server 2008 is no longer supported</u> on page 21

- New Avaya Aura Contact Center minimum hardware specifications on page 21
- New Avaya Aura Contact Center minimum virtual machine specifications on page 21

Other changes in Release 7.0 Feature Pack 2

See the following sections for information about changes that are not feature-related in Release 7.0 Feature Pack 2:

• Installation account for Contact Center install on page 20

Other changes in Release 7.0 Feature Pack 3

See the following sections for information about changes that are not feature-related in Release 7.0 Feature Pack 3:

• Contact Center backwards compatibility with previous version of Agent Desktop on page 20

Contact Center backwards compatibility with previous version of Agent Desktop

From Release 7.0 Feature Pack 3, Contact Center supports backwards compatibility with the previous Feature Pack or Service Pack version of Agent Desktop. This allows you to upgrade the Contact Center server without the requirement to upgrade Agent Desktop in a single maintenance window. For example, if you upgrade to Release 7.0 Feature Pack 3, you can use the Release 7.0 Feature Pack 2 version of Agent Desktop.

New Agent Desktop features added in the latest Contact Center release are not available until you upgrade Agent Desktop to that release.

Backwards compatibility is not supported for major or minor releases. For example, if you upgrade to Release 7.1, you cannot use the Release 7.0 version of Agent Desktop.

Installation account for Contact Center install

From Release 7.0 Feature Pack 2, you can use any account with local administrative rights to install Contact Center, provided that you disable the Admin Approval Mode security feature on the Contact Center server. You can also use any account with local administrative rights to upgrade and patch Contact Center; you do not need to always use the same administrative account to perform these tasks.

Knowledge Worker server type no longer supported

Avaya Aura[®] Contact Center Release 7.0 does not support the Knowledge Worker server type. Customers with an existing Knowledge Worker solution can migrate to an Avaya Aura[®] Contact Center Release 7.0 Voice and Multimedia Contact Server or a Voice Contact Server.

Microsoft Windows Server 2008 is no longer supported

Avaya Aura[®] Contact Center Release 7.0 is supported only on Microsoft Windows Server 2012 R2. Avaya Aura[®] Contact Center Release 7.0 is not supported on Microsoft Windows Server 2008 R2. Customers upgrading to Avaya Aura[®] Contact Center Release 7.0 must migrate to a new Microsoft Windows Server 2012 R2 server.

New Avaya Aura[®] Contact Center minimum hardware specifications

Avaya Aura[®] Contact Center Release 7.0 continues to support Platform Vendor Independence (PVI) for physical server hardware deployments. Avaya Aura[®] Contact Center Release 7.0 defines three new minimum levels of hardware specification; a new Entry-level, a new Mid-range, and a new High-end server hardware specification. For Avaya Aura[®] Contact Center Release 7.0 installations on physical servers, only the new PVI server hardware specifications are supported.

New Avaya Aura[®] Contact Center minimum virtual machine specifications

Avaya Aura[®] Contact Center Release 7.0 continues to support VMware and virtualization. Avaya Aura[®] Contact Center Release 7.0 defines three new minimum levels of virtual machine specification; a new Entry-level, a new Mid-range, and a new High-end virtual machine specification. For virtualized Avaya Aura[®] Contact Center Release 7.0 installations on virtual machines, only the new virtual machine specifications are supported.

Chapter 3: Overview

Avaya Aura[®] Contact Center supports a range of server types for Avaya Communication Server 1000 AML-based solutions. Each server type installs a combination of Avaya Aura[®] Contact Center applications suitable for a specific contact center function. Some Contact Center servers support only voice contacts, some Contact Center servers support only multimedia contacts, and some Contact Center servers support both voice and multimedia.

The Contact Center solution can include one or more servers. The installation configuration you choose depends on the hardware resources and performance demands of your contact center. To implement the Avaya Aura[®] Contact Center High Availability feature, your solution requires additional standby servers to provide resiliency and redundancy.

You can install the following Contact Center server types:

Voice and Multimedia Contact Server — Install this server to provide context sensitive and skillbased routing for customer voice and multimedia contacts. This server provides routed contact support for email messages, web communications, voice mail messages, scanned documents, fax messages, and SMS text messages. A Voice and Multimedia Contact Server has the following software components:

- Contact Center Manager Server (CCMS)
- Contact Center License Manager (LM)
- Contact Center Manager Server Utility (SU)
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)
- Contact Center Multimedia (CCMM)

In a small to medium solution using a Voice and Multimedia Contact Server, agents download and install Agent Desktop software from the Voice and Multimedia Contact Server.

Voice Contact Server Only — Install this server to provide context sensitive and skill-based routing for customer voice contacts in a large contact center solution. A Voice Contact Server has the following software components:

- Contact Center Manager Server
- Contact Center License Manager
- Contact Center Manager Server Utility
- Contact Center Manager Administration

Communication Control Toolkit

In a solution where agents use Agent Desktop to log on and handle customer calls, each Voice Contact Server requires one Multimedia Contact Server. In an Avaya Communication Server 1000 AML-based voice-only solution, where agents use Agent Desktop to log on and handle customer calls, each Voice Contact Server requires one Multimedia Contact Server. In an Avaya Communication Server 1000 AML-based voice-only solution, where agents use their desk phones to log on and handle customer calls, and where the agents do not use Agent Desktop, a Multimedia Contact Server is not required.

Multimedia Contact Server Only — Install this server to increase the number of contact center agents in your enterprise solution. When installed, this server provides the multimedia contact processing capabilities and the Voice Contact Server processes only voice contacts. In a solution using a Multimedia Contact Server, agents download and install Agent Desktop software from the Multimedia Contact Server. Administrators configure Agent Desktop features and functions using the CCMM Administration utility installed on the Multimedia Contact Server.

A Multimedia Contact Server has the following software components:

Contact Center Multimedia

Network Control Center Server Only — Install this server to add networking, network skill-based routing, and consolidated reporting support for a number of Voice and Multimedia Contact Servers operating as a single distributed contact center. Use this server to configure contact routing between the Voice and Multimedia Contact Server nodes of a distributed contact center solution. A Network Control Center Server has the following software components:

- Contact Center Manager Server Network Control Center
- Contact Center Manager Administration
- Contact Center License Manager

Server Operating Systems

The workflows in this book include installing the server Operating Systems (OS) required by Avaya Aura[®] Contact Center software applications. You must complete a fresh install of the OS for each Contact Center installation. Do not install Contact Center applications on an existing OS from which you uninstalled either Contact Center or other software applications.

Platform Vendor Independence checking utility

You can purchase your choice of server hardware as long as it complies with the Platform Vendor Independence (PVI) specification for Avaya Aura[®] Contact Center software. You have the flexibility to purchase a hardware specification that conforms to your corporate standard. For more information about the Avaya Aura[®] Contact Center PVI server specifications, see *Avaya Aura[®] Contact Center Overview and Specification*.

The Platform Vendor Independence utility is included in the Contact Center product installation DVD. The utility runs automatically before the software is installed to verify the system.

Free open source software licensing

Avaya Aura[®] Contact Center contains a number of open source software packages, which are embedded and delivered as part of the installation.

For details of the suppliers of these packages and the associated public licenses, see the Third Party terms for Avaya Aura[®] Contact Center in the Policies & Legal, License Terms section on <u>http://support.avaya.com</u>.

Prerequisites for Contact Center installation

Procedure

- Ensure all your server hardware meets the requirements described in *Avaya Aura*[®] *Contact Center Overview and Specification.*
- Know the installation configuration you plan to use in your contact center. For more information see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- Ensure that your PABX is configured. For more information about configuring the PABX, see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- If you want to enable security on the Contact Center server, and complete security configuration when installing Contact Center software, you must ensure that a shared network location exists on the Contact Center server before running the Contact Center Ignition Wizard.

Chapter 4: Deployment process

Install Avaya Aura[®] Contact Center for an Avaya Communication Server 1000 AML-based contact center solution.

For more information, see the following:

- Installation checklist on page 27
- <u>Voice and Multimedia Contact Server for CS1000 installation</u> on page 32
- Primary Voice and Multimedia Contact Server for CS1000 software installation in a domain on page 61
- <u>Standby Voice and Multimedia Contact Server for CS1000 software installation in a domain</u> on page 89
- RGN Voice and Multimedia Contact Server for CS1000 installation in a domain on page 112
- <u>Voice Contact Server for CS1000 installation</u> on page 135
- Primary Voice Contact Server for CS1000 installation in a domain on page 162
- <u>Standby Voice Contact Server for CS1000 installation in a domain on page 190</u>
- RGN Voice Contact Server for CS1000 installation in a domain on page 213
- Multimedia Contact Server software installation on page 237

The following additional and optional server type is also supported in Avaya Communication Server 1000 AML-based contact center solutions:

<u>Network Control Center Server software installation</u> on page 265

This work flow shows the sequence of tasks you perform to install one or more Contact Center servers in an AML-based Avaya Communication Server 1000 contact center solution.



Figure 1: Contact Center installation for Avaya Communication Server 1000 based solutions

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Chapter 5: Installation checklist

The following checklists describe the main Avaya Aura[®] Contact Center configuration and deployment details. You must know these configuration details before you can deploy and commission an Avaya Aura[®] Contact Center solution.

Complete these checklists before continuing.

Avaya Communication Server 1000 configuration checklist

Before you install Avaya Aura[®] Contact Center, complete the following Avaya Communication Server 1000 checklist.

Task	Description	Notes	~
Avaya Communication Server 1000 Release	Note the version of Avaya Communication Server 1000 you are using in your solution.	Avaya Aura [®] Contact Center supports Avaya Communication Server 1000 7.6.	
Avaya Communication Server 1000 name	Note the name of your Avaya Communication Server 1000.		
Avaya Communication Server 1000 CLAN IP address	Note the CLAN IP address of your Avaya Communication Server 1000.		
Avaya Communication Server 1000 ELAN IP address	Note the ELAN IP address of your Avaya Communication Server 1000.		
Avaya Communication Server 1000 serial number	Note the serial number of your Avaya Communication Server 1000.		
Avaya Communication Server 1000 user ID	The user ID that you use to log on to the Avaya Communication Server 1000 PABX administration terminal.		
Avaya Communication Server 1000 password	The password that you use to log on to the Avaya		

Task	Description	Notes	~
	Communication Server 1000 PABX administration terminal.		
Avaya Communication Server 1000 packages and patches	Ensure that you have applied the required packages and patches on your Avaya Communication Server 1000.	Some Contact Center features are supported only when you apply certain Avaya Communication Server 1000 packages and patches. For more information, see Avaya Aura [®] Contact Center and Avaya Communication Server 1000 Integration.	
ACD numbers or range	Note the ACD numbers, or range of ACD numbers, defined on the Avaya Communication Server 1000 platform.		
CDN numbers or range	Note the CDN numbers, or range of CDN numbers, defined on the Avaya Communication Server 1000 platform.		
Home Location Code (HLOC)	Note the HLOC configured on the Avaya Communication Server 1000 platform.	HLOC valid values: 0–3999.	
Agent phone type	Note the phone types used by your Contact Center agents.		
DN AST keys defined	To enable CTI call control for each agent phone, configure Associate Set Assignment (AST) on the SCR and ACD keys, and then set IAPG (ISDN/AP status message group) for that phone.		

Avaya Aura[®] Contact Center installation checklist

The following tables list and describe the configuration details required by Avaya Aura[®] Contact Center.

The following table lists the main Microsoft Windows Server 2012 R2 configuration questions.

Configuration Item	Your value	Description
Server hostname		The host name of the Avaya Aura [®] Contact Center server.
		Server names must adhere to RFC1123. For more information, see <i>Avaya Aura[®] Contact Center Overview and Specification</i> .
		Avaya recommends that you configure the server final production name when installing Avaya Aura [®] Contact Center.
Server IP address		The IP address of the Avaya Aura [®] Contact Center server.
Server ELAN IP address		The ELAN IP address of the Avaya Aura [®] Contact Center server.
Server mask		The network mask of the Avaya Aura [®] Contact Center server.
Server default gateway		The default gateway used by the Avaya Aura [®] Contact Center server.
MAC address of Avaya Aura [®] Contact Center server		You use this unique MAC address to obtain a Contact Center WebLM license from the Avaya Product Licensing and Delivery System (PLDS).
DNS server IP address		The IP address of the DNS server used by Avaya Aura [®] Contact Center.
Domain name		The Avaya Aura [®] Contact Center server Windows domain.
Country or region		The Microsoft Windows Server 2012 country or region server setting.
Time and currency		The Microsoft Windows Server 2012 time and currency server setting.
Keyboard layout		The Microsoft Windows Server 2012 keyboard layout server setting.
Microsoft Windows Server 2012 R2 SP1 product key		The Microsoft Windows Server 2012 R2 SP1 product key used to activate the Operating System.
Administrator password		A password for the Avaya Aura [®] Contact Center server Administrator account.

The following table lists the main Avaya Aura® Contact Center configuration questions.

Configuration Item	Your value	Description
Site Name		The site name for the Contact Center server.
RSM IP address		The Real-time Statistics Multicast IP address of the server to associate with sending real-time data.
System Account Configuration		The password for the CCMA System Account user account.

The following table lists the main Avaya Aura[®] Contact Center Licensing configuration questions.

Configuration Item	Your value	Description
License File Location		The folder on the server which contains the license file.
License Manager IP address		The IP address of the License Manager.
Licensing Package		The licenses that you have purchased
Optional Packages		

The following table lists the main Avaya Aura[®] Contact Center and Avaya Communication Server 1000 configuration questions.

Configuration Item	Your value	Description
Switch Name		The name of the Avaya Communication Server 1000 PABX.
CS1000 IP address		The IP address of the Avaya Communication Server 1000 PABX.
CS1000 Customer Number		The number of the customer on the Avaya Communication Server 1000 PABX that integrates with Avaya Aura [®] Contact Center.
CallPilot IP address		The ELAN IP address of the CallPilot server.

The following table lists the main Avaya Aura[®] Contact Center multimedia configuration questions.

Configuration Item	Your value.	Description
Inbound Mail Server (POP3)		The name of the server on which email messages are received in your network.
Outbound Mail Server (SMTP)		The name of the server from on which email messages are sent. Your inbound and outbound mail servers can have the same name.

Part 1: Avaya Communication Server 1000

Chapter 6: Voice and Multimedia Contact Server for CS1000 installation

This chapter describes how to install a Voice and Multimedia Contact Server in a solution with an Avaya Communication Server 1000 (CS1000) platform. A Voice and Multimedia Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)
- Contact Center Multimedia (CCMM)

Install this server to provide context-sensitive and skill-based routing for customer voice and multimedia contacts. This server provides routed contact support for voice calls, email messages, Web communications, voice mail messages, scanned documents, fax messages, and SMS text messages. This server provides extensive tools for agent management, real-time and historical reporting, and graphical tools to create contact flows and treatment rules. Use this server for license management, High Availability configuration, networking, Open Interfaces Web Service and third-party application interfaces integration.

If the server is to be used in a domain, Avaya recommends that you add the server to the domain before installing Contact Center software.

You can change the name of a Contact Center server, but because this is time consuming, Avaya recommends that you configure the server final production name before installing Contact Center software.

If you plan to follow the Microsoft server hardening guidelines, complete those procedures before installing Avaya Aura[®] Contact Center.

You can use any account with local administrative rights to install Avaya Aura[®] Contact Center. You can use any account with local administrative rights to upgrade and patch Avaya Aura[®] Contact Center; you do not need to always use the same account to perform these tasks.

Important:

You must disable the Admin Approval Mode security feature on the Contact Center server. This ensures that accounts with local administrative rights get full privileges for running applications on the Contact Center server.

Voice and Multimedia Contact Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Voice and Multimedia Contact Server ELAN NIC and ELAN subnet are optional.

Complete all the procedures in this section in sequential order.

Voice and Multimedia Contact Server installation prerequisites

Procedure

- Copy the most recent patches for the Contact Center software.
- Ensure that your new Contact Center license file is available.

Important:

For the system to correctly handle backup and restore SNMP events, you must install Windows SNMP Service before you install Contact Center server software.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.
- 4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in Avaya Aura[®] Contact Center Overview and Specification.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> .
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura[®] Contact Center Overview and Specification</i> for the server.

The following table lists the main inputs to consider while installing the operating system.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.
- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I accept the license terms**.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.

- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura[®] Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive.	E:	—
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Multimedia Contact Server database drive	G:	300 GB NTFS
Database journal	H:	100 GB NTFS

Navigating the Microsoft Windows Server 2012 R2 User Interface

This section describes how to navigate between the main user interface screens of the Windows Server 2012 R2 operating system.
The following table describes some of the main Microsoft Windows Server 2012 R2 user interface screens.

Screen name	Description
Start	The Start screen contains shortcuts to the main administration interfaces of the server. If you have an application that you access on a regular basis, you can add it to the Start screen so that it's more immediately accessible. The Start screen displays the currently logged on user and provides some basic server log out and locking functions. This is the operating system default screen.
Apps	The Apps screen contains shortcuts to the applications and utilities installed on the server. The server applications and utilities are grouped into categories. Third-party vendors and applications can also add custom, vendor or product specific, categories to the Apps screen.
Desktop	The Desktop screen contains the Windows start button, the Windows Taskbar, Recycle Bin, and shortcuts to the Windows Explorer utility, among others. The Taskbar displays the Windows Notification Area and System Tray. The notification area is located on the right portion of the Taskbar next to the time.

Navigation tips:

- Use the up low and down low arrow icons to navigate between the Start and Apps screens.
- To display the **Start** screen, on the **Desktop** screen, click the Windows start button.
- To display the **Desktop** screen, on the **Start** screen select the **Desktop** tile.
- To display the **Desktop** screen, on the **Apps** screen select the **Desktop** tile.
- To switch between the **Start** screen and the **Desktop** screen press the Windows start button on your keyboard.
- To access the Control Panel, on the Apps or Start screen click on the Control Panel tile.
- To access the Administration Tools, on the **Apps** or **Start** screen click on the **Administrative Tools** tile.

These screen navigation methods work when you are using the server's keyboard and mouse directly, or when you are using Remote Desktop to access the server.



Figure 2: Example of the Start screen, with the down arrow icon highlighted in a red box.

Desktop	Administrative Tools	Services	Remote Desktop Connection	? Help and Suppo
Internet Explorer	Component Services	System Configuration	Steps Recorder	Run
	Computer Management	System Information	Windows Server Backup	Task Manager
	Defragment and Optimize Drives	Task Scheduler	WordPad	This PC
	Event Viewer	Windows Firewall with Advanced	Windows Ease of Access	Windows PowerShell
	iSCSI Initiator	Windows Memory Diagnostic	Magnifier	
	Local Security Policy	Windows PowerShell (x86)	Narrator	
	ODBC Data Sources (32-bit)	Windows PowerShell ISE	On-Screen Keyboard	
	ODBC Data Sources (64-bit)	Windows PowerShell ISE	Windows System	
	Performance Monitor	Windows Accessories	Administrative Tools	
	Resource Monitor	Calculator	Command Prompt	
	Security Configuration	Notepad	Control Panel	
	Server Manager	Paint	File Explorer	

Figure 3: Example of the Apps screen, with the up arrow icon highlighted in a red box.



Figure 4: Example of the Desktop screen, with the Windows start button highlighted in a red box.

lcon	Name	Description
	Windows start button	Use the Windows start button to navigate to the Start screen. Use this button to switch between the Start screen and the Desktop screen.
F=	Server Manager	Use this button to access the Server Manager to configure the roles and features to the server.
	PowerShell	Use the PowerShell button to start the Windows PowerShell console. Windows PowerShell is a command-line shell that provides cmdlets (pronounced command-lets) for server configuration and management. PowerShell also provides scripting functions for task automation.
	This PC	Use this button to start the This PC Windows Explorer. Use this to access and navigate the folders, files, and storage devices on the server.

The following table describes some of the Taskbar sections of the **Desktop** screen.

The contents of your screens can vary depending on the roles, features, and applications installed on your server.

For more information about the Windows Server 2012 R2 operating system, refer to the Microsoft support website and Microsoft product documentation.

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.

- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding the server to a domain or workgroup

About this task

Add the server to a domain or workgroup. Avaya recommends that you add the server to the domain or workgroup before installing Contact Center software.

If you are using a domain:

- Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).
- Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** or **Workgroup** value.

The System Properties dialog box appears.

- 5. In the System Properties dialog box, click the Computer Name tab.
- 6. Click Change.
- 7. To add the server to a workgroup, skip to step 9.
- 8. To add the server to a domain, in the Member of dialog box, click the **Domain** option.
 - a. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).
 - b. Click OK.
 - c. Type the domain administrator **User name** and **Password**.
 - d. Click OK.
 - e. Skip to step 10.

- 9. To add the server to a workgroup, in the **Member of** dialog box, click the **Workgroup** option.
 - a. Type the workgroup name.
 - b. Click OK.
 - c. Type the workgroup administrator **User name** and **Password**.
 - d. Click OK.
- 10. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.
- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the WINS tab.
- 11. Select the **Disable NetBIOS over TCP/IP** check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the Contact Center server network interface card to the contact center subnet.
- Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😵 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

Procedure

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.

- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click **OK**.

If prompted, restart the server.

a	Local Security Policy	_ □	x
File Action View Help			
 Security Settings Account Policies Local Policies Audit Policy Security Options Windows Firewall with Advanced Security Opticies Public Key Policies Software Restriction Policies Application Control Policies Advanced Audit Policy Configuration 	Policy Network security: Restrict NTLM: NTLM authentication in th Network security: Restrict NTLM: Outgoing NTLM traffic to Recovery console: Allow automatic administrative logon Recovery console: Allow floppy copy and access to all drives Shutdown: Allow system to be shut down without having to Shutdown: Clear virtual memory pagefile System cryptography: Force strong key protection for user k System objects: Require case insensitivity for non-Windows System objects: Strengthen default permissions of internal s System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executabl User Account Control: Admin Approval Mode for the Built-i User Account Control: Behavior of the elevation prompt for User Account Control: Behavior of the elevation prompt for User Account Control: Only elevate executables that are sign User Account Control: Only elevate executables that are sign User Account Control: Only elevate WIAccess applications then pr User Account Control: Nonly elevate executables that are sign User Account Control: Nonly elevate executables that are sign User Account Control: Nonly elevate WIAccess applications th User Account Control: Nonly elevate UIAccess applications th	Security Setting Not Defined Not Defined Disabled Disabled Disabled Disabled Enabled Disabled Disabled Disabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled	
	<u> </u>		Ľ

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.



8. From the File menu, select Exit.

Installing the Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice and Multimedia Contact Server software on the server.

Procedure

1. Insert the Contact Center DVD into the DVD drive of your server.

- 2. If the installation does not automatically start, double-click **Setup.exe**.
- 3. Click **Accept** to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

Select Voice Platform		
⊖ Avaya Aura® - SIP		
Avaya Communication Server 1000 - AML		
Select Server Installation Option		
⊃ Voice and Multimedia Contact Server without Avaya Aura® Me	edia Server	
○ Voice Contact Server Only		
O Multimedia Contact Server Only		
Network Control Center Server Only		

- 7. In the Select Server Installation Option section, select Voice and Multimedia Contact Server without Avaya Aura Media Server.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- 10. Under **Voice Contact Server Database Drive**, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.

- 11. Under **Multimedia Contact Server Database Drive**, select the drive for the Contact Center Multimedia database. The default drive partition is G:.
- 12. In the **Service Packs** section, browse to and select the Service Pack.

AVAYA	Avaya Aura [®] Contact Center 7.0	
Selection Destination Drives		
~		
Voice Contact Server Databas	se Drive	
Multimedia Contact Server Da	tabase Drive	
•		
- Service Packs Select the source location for	service packs	_
2		
	Install	Cancel

- 13. Click Install.
- 14. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 15. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click **Print**.
- 16. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 17. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.

- If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
- To print the license terms, click **Print**.
- 18. The **Progress** window appears and displays the installation progress.
- 19. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the Contact Center Voice and Multimedia Contact Server software and enable your contact center to route contacts to the agents that can answer the call with the correct skills.

Procedure

1. Log on to the Contact Center server using the Administrator account details.

- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.
- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.
- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the Core tab, and configure the server details.

Avaya Cont	act Center
Configuration Data	AVAYA
Core Licensing Multimedia CS1000 Security Configur	ation
Site Name Site Name CC7SIP	System Account Configuration Enter a password for the Contact Center administration Windows account. Password
Real-Time Statistics Multicast IP Address IP Address 234.5.6.10	Confirm Password
Network Configuration CLAN IP Address ELAN IP Address	
Click Next to Continue	

- In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters.
- In the Real-Time Statistics Multicast IP Address box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The IP Address must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- In the Network Configuration section, in the ELAN IP Address box, type the IP Address of the embedded local area network. The embedded local area network (ELAN) is a dedicated Ethernet LAN that connects Contact Center to the PABX.

- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.
- 12. In the **Confirm Password** box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the Multimedia tab, and configure the Contact Center Multimedia details.

Avaya Contact Center	
Configuration Data	AVAYA
Core Licensing Multimedia CS1000 Security Configuration	
Incoming Mail Server Host Name Protocol Outgoing Mail Server Host Name Protocol SMTP	
Click Next to Continue	
	< Back Next > Cancel

- 20. In the **Incoming Mail Server** box, type the name of the server on which email messages are received in your network.
- 21. From the **Protocol** list, select the communication protocol for the inbound email server. Select **POP3** or **IMAP**. The default protocol is POP3.
- 22. In the **Outgoing Mail Server** box, type the name of the server from on which email messages are sent. Your inbound and outbound mail servers can have the same name.
- 23. Select the **CS1000** tab.

Configuration Data Enter the required configuration data. Core Licensing Multimedia CS1000 Switch Data Switch Name Switch IP Address Switch Customer Number Switch Serial Number Alternative Switch IP Address Alternative Switch Customer Number CLAN II	
Core Licensing Multimedia CS1000 Security Configuration Switch Data Voice Server Switch Name Voice C Switch IP Address Image: CallPilot Switch Customer Number CallPilot Switch Serial Number CallPilot Alternative Switch IP Address CPHA N Alternative Switch Customer Number CLAN II	AVAYA
CS1000 Switch Data Switch Name Voice Serv Switch IP Address Switch Customer Number Alternative Switch IP Address CHA N CLAN II CLAN II	
Alternative Switch Serial Number	rices Setup onnection Type aya Aura Experience Portal IIPilot Configuration Address Port Ianaged CLAN IP Address P Address

- 24. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.
- 25. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 26. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 27. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.

- 28. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 29. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 30. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 31. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 32. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 33. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 34. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

	Avaya Contact Cer	nter
Configuration Data		AVAYA
Core Licensing Multimedia CS1000 S	ecurity Configuration	
Security Store Details Full Computer Name (FQDN) Nai CC7SIP.aaccdomain.com	me of Organizational uni me of Organization ry or Locality ate or Province	Subject Alternative Name Type DNS Value Add Remove
Skip Security Configuration		Create Store
Click Next to Continue		
		< Back Next > Cancel

 If you do not want to enable security, select the Skip Security Configuration checkbox and skip to <u>step 54</u> on page 58.



A warning message appears.

36. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 37. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 38. In the Name of Organization box, type the company name.
- 39. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 40. In the **State or Province** box, type the state or province in which the contact center is located.
- 41. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 42. In the **Security Store password** box, type a password for accessing the new security store.
- 43. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 44. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the **Type** drop-down list, select DNS.
 - b. In the **Value** field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

45. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 46. Click Create Store.
- 47. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya Contact Center	
Configuration Data	AVAYA
inter the required configuration data.	
Core Licensing Multimedia CS1000 Security Configuration	
Imported Trusted Certificate Authority Root Certificate(s)	Status
Imported Trusted Certificate Authority Root Certificate(s)	Status Ensure that a removable or network drive is available.
Add	Create the Certificate Signing Request file and save it to a removable or network drive.
Imported Identity Security Certificate	Alternatively, to defer Security Configuration and continue
Add	Reset
Click Next to Continue	

- 48. Click Create CSR File.
- 49. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 50. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 51. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 52. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 53. In the **Open** dialog box, browse to the location of the certificate and click **Open**.

- 54. Click Next.
- 55. Review and verify the summary information, and click Configure.
- 56. After the installation is complete, click **Finish**.
- 57. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the **Task Scheduler** window, in the left pane, select **Task Scheduler Library** > **Microsoft** > **Windows** > **TaskScheduler**.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.



8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Installing the external Web communication server software

Before you begin

• Install Contact Center Multimedia software.

About this task

If you use Web communications in your contact center, you can use the Sample Customer Interface (CI) website implementation to help you develop pages for your corporate website. The Web services architecture is a platform-independent interface that customers can access from both Microsoft .NET and Java applications. Customer websites or third-party applications use the open interface for integration with the Contact Center Multimedia system.

The Customer Interface Web services provide a range of methods to perform the following functions:

- Register new customers in the Contact Center Multimedia database
- · Log on or log off existing customers
- Update customer logon credentials
- Create customer contacts
- Update customer details
- Read customer information

- · Review a customer contact history
- Request immediate or scheduled callback requests
- · Read a contact
- Create and maintain a Web communications chat session

To integrate Web Communications with the Contact Center Multimedia system, download the Avaya Aura[®] Contact Center Web Communications SDK package and Reference Implementation from <u>www.avaya.com/devconnect</u>. The Web Communications Reference Implementation contains information about customizing the Web communication application to your solution.

Important:

Do not install the Web Communications Reference Implementation on an Avaya Aura[®] Contact Center server. Install the Web Communications Reference Implementation on your own server in the contact center solution.

Procedure

- 1. Locate and download the Web Communications Reference Implementation software from <u>www.avaya.com/devconnect</u>.
- 2. Copy the Web Communications Reference Implementation software to the external Web server.
- 3. Follow the Reference Implementation instructions to install and commission the Web Communications server.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 7: Primary Voice and Multimedia Contact Server for CS1000 software installation in a domain

This chapter describes how to install a primary Voice and Multimedia Contact Server in a solution that supports High Availability and has an Avaya Communication Server 1000 (CS1000) platform. A Voice and Multimedia Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)
- Contact Center Multimedia (CCMM)

Install this server to provide context-sensitive and skill-based routing for customer voice and multimedia contacts. This server provides routed contact support for voice calls, email messages, Web communications, voice mail messages, scanned documents, fax messages, and SMS text messages. This server provides extensive tools for agent management, real-time and historical reporting, and graphical tools to create contact flows and treatment rules. Use this server for license management, High Availability configuration, networking, Open Interfaces Web Service and third-party application interfaces integration.

You can change the name of a Contact Center server, but because this is time consuming, Avaya recommends that you configure the server final production name before installing Contact Center software.

If you plan to follow the Microsoft server hardening guidelines, complete those procedures before installing Avaya Aura[®] Contact Center.

You can use any account with local administrative rights to install Avaya Aura[®] Contact Center. You can use any account with local administrative rights to upgrade and patch Avaya Aura[®] Contact Center; you do not need to always use the same account to perform these tasks.

Important:

You must disable the Admin Approval Mode security feature on the Contact Center server. This ensures that accounts with local administrative rights get full privileges for running applications on the Contact Center server.

Voice and Multimedia Contact Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Voice and Multimedia Contact Server ELAN NIC and ELAN subnet are optional.

You must complete all the procedures in this section in sequential order.

Voice and Multimedia Contact Server installation prerequisites

Procedure

- Copy the most recent patches for the Contact Center software.
- Ensure that your new Contact Center license file is available.

Important:

For the system to correctly handle backup and restore SNMP events, you must install Windows SNMP Service before you install Contact Center server software.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.
- 4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura[®] Contact Center Overview and Specification*.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see Avaya Aura [®] Contact Center Overview and Specification.
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura[®]</i> Contact Center Overview and Specification for the server.

The following table lists the main inputs to consider while installing the operating system.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.
- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I accept the license terms**.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.

- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura[®] Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive.	E:	—
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Multimedia Contact Server database drive	G:	300 GB NTFS
Database journal	H:	100 GB NTFS

Navigating the Microsoft Windows Server 2012 R2 User Interface

This section describes how to navigate between the main user interface screens of the Windows Server 2012 R2 operating system.

The following table describes some of the main Microsoft Windows Server 2012 R2 user interface screens.

Screen name	Description
Start	The Start screen contains shortcuts to the main administration interfaces of the server. If you have an application that you access on a regular basis, you can add it to the Start screen so that it's more immediately accessible. The Start screen displays the currently logged on user and provides some basic server log out and locking functions. This is the operating system default screen.
Apps	The Apps screen contains shortcuts to the applications and utilities installed on the server. The server applications and utilities are grouped into categories. Third-party vendors and applications can also add custom, vendor or product specific, categories to the Apps screen.
Desktop	The Desktop screen contains the Windows start button, the Windows Taskbar, Recycle Bin, and shortcuts to the Windows Explorer utility, among others. The Taskbar displays the Windows Notification Area and System Tray. The notification area is located on the right portion of the Taskbar next to the time.

Navigation tips:

- Use the up low and down low arrow icons to navigate between the Start and Apps screens.
- To display the Start screen, on the Desktop screen, click the Windows start button.
- To display the **Desktop** screen, on the **Start** screen select the **Desktop** tile.
- To display the **Desktop** screen, on the **Apps** screen select the **Desktop** tile.
- To switch between the **Start** screen and the **Desktop** screen press the Windows start button on your keyboard.
- To access the Control Panel, on the Apps or Start screen click on the Control Panel tile.
- To access the Administration Tools, on the **Apps** or **Start** screen click on the **Administrative Tools** tile.

These screen navigation methods work when you are using the server's keyboard and mouse directly, or when you are using Remote Desktop to access the server.



Figure 5: Example of the Start screen, with the down arrow icon highlighted in a red box.

Primary Voice and Multimedia Contact Server for CS1000 software installation in a domain

Desktop	Administrative Tools	Services	Remote Desktop Connection	Pelp and Sup
Internet Explorer	Component Services	System Configuration	Steps Recorder	C Run
	Computer Management	System Information	Windows Server Backup	Task Manage
	Defragment and Optimize Drives	Task Scheduler	WordPad	This PC
	Event Viewer	Windows Firewall with Advanced	Windows Ease of Access	Windows PowerShell
	iSCSI Initiator	Windows Memory Diagnostic	Magnifier	
	Local Security Policy	Windows PowerShell (x86)	Narrator	
	ODBC Data Sources (32-bit)	Windows PowerShell ISE	On-Screen Keyboard	
	ODBC Data Sources (64-bit)	Windows PowerShell ISE	Windows System	
	Performance Monitor	Windows Accessories	Administrative Tools	
	Resource Monitor	Calculator	Command Prompt	
	Security Configuration	Notepad	Control Panel	
	Server Manager	Paint	File Explorer	

Figure 6: Example of the Apps screen, with the up arrow icon highlighted in a red box.



Figure 7: Example of the Desktop screen, with the Windows start button highlighted in a red box.

lcon	Name	Description
	Windows start button	Use the Windows start button to navigate to the Start screen. Use this button to switch between the Start screen and the Desktop screen.
F=	Server Manager	Use this button to access the Server Manager to configure the roles and features to the server.
$\mathbf{\Sigma}$	PowerShell	Use the PowerShell button to start the Windows PowerShell console. Windows PowerShell is a command-line shell that provides cmdlets (pronounced command-lets) for server configuration and management. PowerShell also provides scripting functions for task automation.
	This PC	Use this button to start the This PC Windows Explorer. Use this to access and navigate the folders, files, and storage devices on the server.

The following table describes some of the Taskbar sections of the **Desktop** screen.

The contents of your screens can vary depending on the roles, features, and applications installed on your server.

For more information about the Windows Server 2012 R2 operating system, refer to the Microsoft support website and Microsoft product documentation.

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.

- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding a server to a domain

Before you begin

- Ensure that you have domain administrator privileges, or ask the Domain Administrator to assign you a domain user account for remote access.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).

About this task

Add the server to an existing domain.

😵 Note:

Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.

Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

If your solution is going to use High Availability, ask your System Administrator to add one DNS static entry for each managed name and associated managed IP address. A typical High Availability campus solution with a pair of servers requires three DNS static entries; one DNS static entry for the active server, one DNS static entry for the standby server, and one DNS static entry for the managed name and associated IP address. Avaya Aura[®] Contact Center High Availability solutions do not support Windows Server Dynamic DNS.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** value.

The System Properties dialog box appears.

- 5. In the **System Properties** dialog box, click the **Computer Name** tab.
- 6. Click Change.
- 7. In the **Member of** section, click the **Domain** option.
- 8. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).

Primary Voice and Multimedia Contact Server for CS1000 software installation in a domain

- 9. Click **OK**.
- 10. Type the domain administrator **User name** and **Password**.
- 11. Click OK.
- 12. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.
Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the Remote tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.

- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the **WINS** tab.
- 11. Select the **Disable NetBIOS over TCP/IP** check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- · Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.

- Connect the Contact Center server network interface card to the contact center subnet.
- Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😵 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.
- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click **OK**.

If prompted, restart the server.

1	Local Security Policy	_ □	x
File Action View Help Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings	Local Security Policy Policy Policy Network security: Restrict NTLM: NTLM authentication in th Network security: Restrict NTLM: Outgoing NTLM traffic to Recovery console: Allow automatic administrative logon Recovery console: Allow floppy copy and access to all drives Shutdown: Allow system to be shut down without having to	Security Setting Not Defined Not Defined Disabled Disabled Disabled	×
 Windows Firewall with Advanced Sect Network List Manager Policies Public Key Policies Software Restriction Policies Application Control Policies IP Security Policies on Local Compute Advanced Audit Policy Configuration 	 Shutdown: Allow System to be shut down without having to Shutdown: Clear virtual memory pagefile System cryptography: Force strong key protection for user k System cryptography: Use FIPS compliant algorithms for en System objects: Require case insensitivity for non-Windows System objects: Strengthen default permissions of internal s System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executabl User Account Control: Admin Approval Mode for the Built-i User Account Control: Allow UlAccess applications to prom User Account Control: Behavior of the elevation prompt for 	Disabled Disabled Not Defined Disabled Enabled Disabled Disabled Disabled Prompt for consent for	
<	 User Account Control: Behavior of the elevation prompt for User Account Control: Detect application installations and p User Account Control: Only elevate executables that are sign User Account Control: Only elevate UlAccess applications th User Account Control: Run all administrators in Admin Appr User Account Control: Switch to the secure desktop when pr User Account Control: Virtualize file and registry write failure 	Prompt for credentials Enabled Disabled Enabled Enabled Enabled Enabled	>

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.

- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.

•	Task Scheduler		x
File Action View Help Image: SpacePort Image Image Image Image: SpacePort Image Image Image Image Image: SpacePort Image I	Name St Idle Maintenance Di Maintenance Configurator Re Manual Maintenance Re Regular Maintenance Di	tatus Triggers N Disabled When computer is idle Leady Multiple triggers defined 1 Leady Disabled At 2:00 AM every day 1	Next Run ¹ 10/6/2015 10/6/2015
Time Zone	×		>

8. From the File menu, select Exit.

Installing the Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice and Multimedia Contact Server software on the server.

Procedure

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click **Setup.exe**.
- 3. Click Accept to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and

consult *Avaya Aura[®] Contact Center Overview and Specification* to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

Select Voice Platform	
⊖ Avaya Aura® - SIP	
Avaya Communication Server 1000 - AML	
Select Server Installation Option	
○ Voice and Multimedia Contact Server without Avaya Aura® Media Server	
○ Voice Contact Server Only	
○ Multimedia Contact Server Only	
Network Control Center Server Only	

- 7. In the Select Server Installation Option section, select Voice and Multimedia Contact Server without Avaya Aura Media Server.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- 10. Under **Voice Contact Server Database Drive**, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.
- 11. Under **Multimedia Contact Server Database Drive**, select the drive for the Contact Center Multimedia database. The default drive partition is G:.
- 12. In the **Service Packs** section, browse to and select the Service Pack.

AVAYA	Avaya Aura [®] Contact Center 7.0	
Selection Destination Drives Journal Database Drive Voice Contact Server Database	se Drive	
Multimedia Contact Server Da	tabase Drive	
Select the source location for	service packs	
	<u>I</u> nstall <u>C</u> ancel	

- 13. Click Install.
- 14. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 15. Read the terms of the license.
 - If you accept the terms, click **I ACCEPT THE LICENSE TERMS**. The installation continues.
 - If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
 - To print the license terms, click **Print**.
- 16. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 17. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
 - To print the license terms, click Print.

- 18. The **Progress** window appears and displays the installation progress.
- 19. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see *Avaya Aura*[®] Contact Center and Avaya Communication Server 1000 Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the Contact Center Voice and Multimedia Contact Server software and enable your contact center to route contacts to the agents that can answer the call with the correct skills.

- 1. Log on to the Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.

- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.
- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the **Core** tab, and configure the server details.

				Avaya Contact	Center	
Cor	figur	ation	Data	I	AVAy	/Α
Core	Licensing	Multimedia	CS1000	Security Configuration	n	
Sit	e Name C7SIP				Enter a password for the Contact Center administration Windows account.	
Rea IP 23	al-Time Stat Address 14.5.6.10	istics Multica	st IP Add	ress	Confirm Password	
-Net	work Confi AN IP Addre	guration ss	ELAN IP	Address		
Click Ne	ext to Conti	nue				
					< Back Next >	Cancel

- In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters.
- 8. In the **Real-Time Statistics Multicast IP Address** box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The **IP Address** must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- In the Network Configuration section, in the ELAN IP Address box, type the IP Address of the embedded local area network. The embedded local area network (ELAN) is a dedicated Ethernet LAN that connects Contact Center to the PABX.

- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.
- 12. In the **Confirm Password** box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the Multimedia tab, and configure the Contact Center Multimedia details.

		Avaya Contact Center	
Con	figuration	Data	AVAYA
Enter tr	Licensing Multimedia	CS1000 Security Configuration	
Inco	ming Mail Server		
Hos	st Name	Protocol POP3 v	
Out	going Mail Server st Name	Protocol	
Click No.	wt to Continue		
Click Ne	ext to Continue		
			< Back Next > Cancel

- 20. In the **Incoming Mail Server** box, type the name of the server on which email messages are received in your network.
- 21. From the **Protocol** list, select the communication protocol for the inbound email server. Select **POP3** or **IMAP**. The default protocol is POP3.
- 22. In the **Outgoing Mail Server** box, type the name of the server from on which email messages are sent. Your inbound and outbound mail servers can have the same name.
- 23. Select the **CS1000** tab.

				Avaya Contact	Center	
Cor	nfigur	ation	Data	I	4	
Core	Licensing	Multimedia	CS1000	Security Configuration		
Sv Sv Sv Sv Sv Sv	1000 Switch vitch Name vitch IP Addr vitch Custom witch Serial N	Data ress ler Number Number itch IP Addres	35		Voice Services Setup Voice Connection Type None Avaya Aura Experien CallPilot CallPilot Configuration ELAN IP Address CPHA Managed CLAN IP A	ce Portal Port ddress
Click No	ternative Sw ternative Sw ext to Conti	itch Customer itch Serial Nu nue	r Number mber		CLAN IP Address	

- 24. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.
- 25. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 26. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 27. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.

- 28. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 29. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 30. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 31. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 32. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 33. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 34. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

A	vaya Contact Center
Configuration Data	AVAYA
Core Licensing Multimedia CS1000 Secur	ity Configuration
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level Name o SHA256 City or Key Size 2048 State o Security Store Password Confirm Store Password Confirm Store Password	Subject Alternative Name Type DNS Organization Locality Add Remove
Skip Security Configuration	Create Store
Click Next to Continue	
	< Back Next > Cancel

 If you do not want to enable security, select the Skip Security Configuration checkbox and skip to <u>step 54</u> on page 87.

Important:

A warning message appears.

36. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 37. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 38. In the Name of Organization box, type the company name.
- 39. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 40. In the **State or Province** box, type the state or province in which the contact center is located.
- 41. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 42. In the **Security Store password** box, type a password for accessing the new security store.
- 43. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 44. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the **Type** drop-down list, select DNS.
 - b. In the **Value** field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

45. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 46. Click Create Store.
- 47. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya contact cent	er
Configuration Data	AVAYA
nter the required configuration data.	
Certificate Signing Request file Create CSR File	ning the Certificate Signing Request provided.
Imported Trusted Certificate Authority Root Certificate(s)	Status Ensure that a removable or network drive is available. Create the Certificate Signing Request file and save it to a

- 48. Click Create CSR File.
- 49. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 50. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 51. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 52. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 53. In the **Open** dialog box, browse to the location of the certificate and click **Open**.

- 54. Click Next.
- 55. Review and verify the summary information, and click **Configure**.
- 56. After the installation is complete, click **Finish**.
- 57. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the **Task Scheduler** window, in the left pane, select **Task Scheduler Library** > **Microsoft** > **Windows** > **TaskScheduler**.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.



8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 8: Standby Voice and Multimedia Contact Server for CS1000 software installation in a domain

This chapter describes how to install a standby Voice and Multimedia Contact Server for Avaya Communication Server 1000 (CS1000). This chapter describes how to install a Voice and Multimedia Contact Server in a solution using a Windows domain. A standby Voice and Multimedia Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)
- Contact Center Multimedia (CCMM)

Contact Center Manager Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center Manager Server ELAN NIC and ELAN subnet are optional.

You can install a standby Voice and Multimedia Contact Server and commission it to be the standby Voice and Multimedia Contact Server in a campus High Availability solution. The standby server takes over contact processing and becomes the active server if the existing active server fails. The standby server provides High Availability redundancy and resiliency. The standby and active servers must be at the same patch level and have the same hard disk drive partitions.

You must complete the procedures in this section in sequential order.

Standby Voice and Multimedia Contact Server installation prerequisites

Procedure

• Copy the most recent patches for the Contact Center software.

• Ensure that your new Contact Center license file with a High Availability standby server license is available.



For the system to correctly handle backup and restore SNMP events, you must install Windows SNMP Service before you install Contact Center server software.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura*[®] Contact Center Overview and Specification.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see Avaya Aura [®] Contact Center Overview and Specification.
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.

The following table lists the main inputs to consider while installing the operating system.

Table continues...

Name	Description
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.
- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I** accept the license terms.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura[®] Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive.	E:	—
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any		

Table continues...

Hard disk drive	Drive letter	Minimum size partition
DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Multimedia Contact Server database drive	G:	300 GB NTFS
Database journal	H:	100 GB NTFS

Installing the most recent supported operating system service packs

Before you begin

- · Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- 2. Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

- 1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.
- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding a server to a domain

Before you begin

- Ensure that you have domain administrator privileges, or ask the Domain Administrator to assign you a domain user account for remote access.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).

About this task

Add the server to an existing domain.

😒 Note:

Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.

Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

If your solution is going to use High Availability, ask your System Administrator to add one DNS static entry for each managed name and associated managed IP address. A typical High Availability campus solution with a pair of servers requires three DNS static entries; one DNS static entry for the active server, one DNS static entry for the standby server, and one DNS static entry for the managed name and associated IP address. Avaya Aura[®] Contact Center High Availability solutions do not support Windows Server Dynamic DNS.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** value.

The System Properties dialog box appears.

- 5. In the System Properties dialog box, click the Computer Name tab.
- 6. Click Change.

- 7. In the Member of section, click the Domain option.
- 8. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).
- 9. Click **OK**.
- 10. Type the domain administrator User name and Password.
- 11. Click OK.
- 12. Restart the server when you are prompted to do so.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.

7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.
- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the WINS tab.
- 11. Select the Disable NetBIOS over TCP/IP check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the Contact Center server network interface card to the contact center subnet.
- Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

Procedure

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.
- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click **OK**.

If prompted, restart the server.

1	Local Security Policy		x					
File Action View Help								
🗢 🔿 🙍 📰 🗙 🗐 🗟 🚺								
 Security Settings Account Policies Local Policies Local Policy User Rights Assignment Security Options Windows Firewall with Advanced Sec Network List Manager Policies Public Key Policies Software Restriction Policies Software Restriction Policies IP Security Policies on Local Comput Advanced Audit Policy Configuration 	Policy Network security: Restrict NTLM: NTLM authentication in th Network security: Restrict NTLM: Outgoing NTLM traffic to Recovery console: Allow automatic administrative logon Recovery console: Allow floppy copy and access to all drives Shutdown: Allow system to be shut down without having to Shutdown: Clear virtual memory pagefile System cryptography: Force strong key protection for user k System cryptography: Use FIPS compliant algorithms for en System objects: Require case insensitivity for non-Windows System objects: Strengthen default permissions of internal s System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executabl User Account Control: Admin Approval Mode for the Built-i User Account Control: Behavior of the elevation prompt for User Account Control: Detect application installations and p User Account Control: Only elevate executables that are sign User Account Control: Only elevate UlAccess applications th User Account Control: Nul all administrators in Admin Appr User Account Control: Nul all administrators in Admin Appr User Account Control: Nul all administrators in Admin Appr	Security Setting Not Defined Not Defined Disabled Disabled Disabled Not Defined Disabled Enabled Disabled Disabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Disabled Enabled Enabled Enabled Enabled Enabled Enabled						
< III >			~					

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.

- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.

٩	Task Scheduler	_ D X
File Action View Help		ingen
Storage Tiers Management Task Manager TaskScheduler TextServicesFramework	Name Status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internation of the status Image: Construction of the status Image: Construction of the status Image: International Internatinternation of the status Im	Iggers Next Run hen computer is idle ultiple triggers defined 10/6/2015
Time Synchronization Time Zone TPM	Kegular Maintenance Disabled At	2:00 AM every day 10/6/2015
	P P	

8. From the File menu, select Exit.

Installing the Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice and Multimedia Contact Server software on the server.

Procedure

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click **Setup.exe**.
- 3. Click Accept to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

Select Voice Platform	
) Avaya Aura® - SIP	
Avaya Communication Server 1000 - AML	
Select Server Installation Option	
◯ Voice and Multimedia Contact Server without Avaya Aura® Media Server	
O Voice Contact Server Only	
O Multimedia Contact Server Only	
Network Control Center Server Only	

- 7. In the Select Server Installation Option section, select Voice and Multimedia Contact Server without Avaya Aura Media Server.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- 10. Under **Voice Contact Server Database Drive**, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.
- 11. Under **Multimedia Contact Server Database Drive**, select the drive for the Contact Center Multimedia database. The default drive partition is G:.
- 12. In the Service Packs section, browse to and select the Service Pack.

avaya	Avaya Aura® Contact Center 7.0
election Destination Drives	
Journal Database Drive	
Voice Contact Server Databas	se Drive
•	
Multimedia Contact Server Da	tabase Drive
Multimedia Contact Server Da	tabase Drive
Multimedia Contact Server Da	service packs
Multimedia Contact Server Da	service packs

- 13. Click Install.
- 14. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 15. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click **Print**.
- 16. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 17. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click Print.

- 18. The **Progress** window appears and displays the installation progress.
- 19. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring the standby Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the Contact Center Voice and Multimedia Contact Server software to provide a resilient solution.

- 1. Log on to the Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.

- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.
- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the **Core** tab, and configure the server details.

				Avaya Contact	Center			
Con	nfigur	ation	Data	I			AVA	YA
nter ti Core	Licensing	Multimedia	CS1000	Security Configuratio	n			
Site	e Name				System Acc	ount Configu	ation	_
CC	C7SIP				administra Password	ation Windows	account.	
-Rea IP 23	al-Time Stat Address 34.5.6.10	istics Multica	ist IP Add	ress	Confirm Pa	ssword		
CL	work Confi AN IP Addre	guration ss	ELAN IP	Address				
lick Ne	ext to Conti	nue						
lick Ne	ext to Conti	nue				< Back	Next >	Са

- 7. In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters. The Site Name of the standby server must be the same as the Site Name of the primary server.
- In the Real-Time Statistics Multicast IP Address box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The IP Address must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- 9. In the **Network Configuration** section, in the **ELAN IP Address** box, type the IP Address of the embedded local area network. The embedded local area network (ELAN) is a dedicated Ethernet LAN that connects Contact Center to the PABX.

- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.
- 12. In the **Confirm Password** box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the Multimedia tab, and configure the Contact Center Multimedia details.

Avaya Contact Center	
Configuration Data	AVAYA
Core Licensing Multimedia CS1000 Security Configuration	
Incoming Mail Server Host Name Protocol Outgoing Mail Server Host Name Protocol SMTP	
Click Next to Continue	
	< Back Next > Cancel

- 20. In the **Incoming Mail Server** box, type the name of the server on which email messages are received in your network.
- 21. From the **Protocol** list, select the communication protocol for the inbound email server. Select **POP3** or **IMAP**. The default protocol is POP3.
- 22. In the **Outgoing Mail Server** box, type the name of the server from on which email messages are sent. Your inbound and outbound mail servers can have the same name.
- 23. Select the **CS1000** tab.

Configuration Data Enter the required configuration data. Core Licensing Multimedia CS1000 Switch Data Voice Switch Name Voice Switch IP Address O Switch Serial Number O Alternative Switch IP Address CPI	AVAYA
Core Licensing Multimedia CS1000 Security Configuration CS1000 Switch Data Voice 3 Switch Name Voice 3 Switch IP Address O Switch Customer Number O Switch Serial Number Call Alternative Switch IP Address CPI	
CS1000 Switch Data Switch Name Switch IP Address Switch Serial Number Alternative Switch IP Address CPI	
Alternative Switch Customer Number	Services Setup ce Connection Type) None) Avaya Aura Experience Portal) CallPilot Pilot Configuration AN IP Address HA Managed CLAN IP Address AN IP Address

- 24. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.
- 25. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 26. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 27. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.

- 28. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 29. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 30. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 31. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 32. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 33. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 34. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

	Avaya Contact Center	
Configuration Dat	ta	AVAYA
Enter the required configuration data	a. 00 Security Configuration	
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level SHA256 v Key Size 2048 v Security Store Password Confirm Store Password	Name of Organizational unit Name of Organization City or Locality State or Province Two letter country code	Subject Alternative Name Type DNS Value Add Remove
Skip Security Configuration Click Next to Continue		Create Store
		< Back Next > Cancel

35. If you do not want to enable security, select the **Skip Security Configuration** checkbox and skip to <u>step 54</u> on page 110.



A warning message appears.

36. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 37. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 38. In the Name of Organization box, type the company name.
- 39. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 40. In the **State or Province** box, type the state or province in which the contact center is located.
- 41. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 42. In the **Security Store password** box, type a password for accessing the new security store.
- 43. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 44. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the **Type** drop-down list, select DNS.
 - b. In the **Value** field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

45. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.
Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 46. Click Create Store.
- 47. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

onfiguration Data er the required configuration data. re Licensing Multimedia CS1000 Security Configuration tore created – Generate Identity Security Certificate by signing the Certi	ificate Signing Request provided.
er the required configuration data. re Licensing Multimedia CS1000 Security Configuration Store created – Generate Identity Security Certificate by signing the Certi	ificate Signing Request provided.
re Licensing Multimedia CS1000 Security Configuration Tore created – Generate Identity Security Certificate by signing the Certi	ificate Signing Request provided.
itore created – Generate Identity Security Certificate by signing the Certi	ificate Signing Request provided.
Imported Trusted Certificate Authority Root Certificate(s) Statu	IS
Imported Trusted Certificate Authority Root Certificate(s) Statu	is sure that a removable or 🔥
net	work drive is available.
Cre Rec	eate the Certificate Signing quest file and save it to a
Add rem	novable or network drive.
mported Identity Security Certificate Cor With With Security Certificate Cor	nfiguration and continue
Add	Reset
k Next to Continue	

- 48. Click Create CSR File.
- 49. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 50. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 51. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 52. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 53. In the **Open** dialog box, browse to the location of the certificate and click **Open**.

Standby Voice and Multimedia Contact Server for CS1000 software installation in a domain

- 54. Click Next.
- 55. Review and verify the summary information, and click Configure.
- 56. After the installation is complete, click Finish.
- 57. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.



8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 9: RGN Voice and Multimedia Contact Server for CS1000 installation

This chapter describes how to install a Remote Geographic Node (RGN) Voice and Multimedia Contact Server in a solution with an Avaya Communication Server 1000 (CS1000) platform. A Voice and Multimedia Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)
- Contact Center Multimedia (CCMM)

Install a Voice and Multimedia Contact Server and commission it to be the Remote Geographic Node (RGN) Voice and Multimedia Contact Server in a solution with Disaster Recovery. The Remote Geographic Node server shadows the active server. Remote Geographic Node servers do not automatically take over if the active server fails. The standby server, Remote Geographic Node server, and active server must be at the same patch level and have the same hard disk drive partitions.

You can change the name of a Contact Center server, but because this is time consuming, Avaya recommends that you configure the server final production name before installing Contact Center software.

If you plan to follow the Microsoft server hardening guidelines, complete those procedures before installing Avaya Aura[®] Contact Center.

You can use any account with local administrative rights to install Avaya Aura[®] Contact Center. You can use any account with local administrative rights to upgrade and patch Avaya Aura[®] Contact Center; you do not need to always use the same account to perform these tasks.

Important:

You must disable the Admin Approval Mode security feature on the Contact Center server. This ensures that accounts with local administrative rights get full privileges for running applications on the Contact Center server.

Voice and Multimedia Contact Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Voice and Multimedia Contact Server ELAN NIC and ELAN subnet are optional.

You must complete all the procedures in this section in sequential order.

Voice and Multimedia Contact Server installation prerequisites

Procedure

- Copy the most recent patches for the Contact Center software.
- Ensure that your new Contact Center license file is available.



For the system to correctly handle backup and restore SNMP events, you must install Windows SNMP Service before you install Contact Center server software.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura[®] Contact Center Overview and Specification*.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

The following table lists the main inputs to consider while installing the operating system.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see Avaya Aura [®] Contact Center Overview and Specification.
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- 8. Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.

- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I accept the license terms**.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura[®] Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

RGN Voice and Multimedia Contact Server for CS1000 installation

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive.	E:	_
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Multimedia Contact Server database drive	G:	300 GB NTFS
Database journal	H:	100 GB NTFS

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification*.

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- 2. Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the geographic node network

About this task

Connect the Contact Center server to the geographic node network. The geographic node network is the network at the remote geographic site.

Procedure

- 1. Locate the slot assigned to the geographic node network interface card for the server. Make a note of the slot.
- 2. Connect the cable from the geographic node network to the geographic node network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the geographic node network.
- 4. Use the ping command to test connectivity with the campus network and servers.

Adding a server to a domain

Before you begin

- Ensure that you have domain administrator privileges, or ask the Domain Administrator to assign you a domain user account for remote access.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).

About this task

Add the server to an existing domain.

😵 Note:

Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.

Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

If your solution is going to use High Availability, ask your System Administrator to add one DNS static entry for each managed name and associated managed IP address. A typical High Availability campus solution with a pair of servers requires three DNS static entries; one DNS static entry for the active server, one DNS static entry for the standby server, and one DNS static entry for the managed name and associated IP address. Avaya Aura[®] Contact Center High Availability solutions do not support Windows Server Dynamic DNS.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.

- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** value.

The System Properties dialog box appears.

- 5. In the System Properties dialog box, click the Computer Name tab.
- 6. Click Change.
- 7. In the **Member of** section, click the **Domain** option.
- 8. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).
- 9. Click **OK**.
- 10. Type the domain administrator **User name** and **Password**.
- 11. Click OK.
- 12. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Deploying Avaya Aura[®] Contact Center DVD for Avaya Communication Server 1000 118 <u>Comments on this document? infodev@avaya.com</u>

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.
- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the WINS tab.
- 11. Select the **Disable NetBIOS over TCP/IP** check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the Contact Center server network interface card to the contact center subnet.
- · Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😵 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

Procedure

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.

- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click **OK**.

If prompted, restart the server.

a	Local Security Policy		x
File Action View Help			
🗢 🄿 🖄 📰 🗙 🗐 🗟 🚺			
 Security Settings Account Policies Local Policies Audit Policy Security Options Windows Firewall with Advanced Security Optices Public Key Policies Software Restriction Policies Application Control Policies IP Security Policies on Local Compute Advanced Audit Policy Configuration 	Policy Image: System Setting: Restrict NTLM: NTLM authentication in th Image: System Setting: Restrict NTLM: Outgoing NTLM traffic to Image: System Setting: Restrict NTLM: Outgoing NTLM traffic to Image: System Setting: System Corpus and access to all drives Image: System Corpus Setting: System Setting: System Setting: System Setting: Optional subsystems Image: System Setting: Use Certificate Rules on Windows Executabl Image: Use Cartificate Rules on Windows Executabl Image: User Account Control: Admin Approval Mode for the Built-i Image: User Account Control: Behavior of the elevation prompt for Image: User Account Control: Detect application	Security Setting Not Defined Not Defined Disabled Disabled Disabled Disabled Not Defined Disabled Enabled Disabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Disabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled	
< III >			~

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.



8. From the File menu, select Exit.

Installing the Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice and Multimedia Contact Server software on the server.

Procedure

1. Insert the Contact Center DVD into the DVD drive of your server.

- 2. If the installation does not automatically start, double-click **Setup.exe**.
- 3. Click Accept to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

Avaya Aura® - SIP Avaya Communication Server 1000 - AML elect Server Installation Option Voice and Multimedia Contact Server without Avaya Aura® Media Server	Select Voice Platform			
Avaya Communication Server 1000 - AML elect Server Installation Option Voice and Multimedia Contact Server without Avaya Aura® Media Server	⊖ Avaya Aura®-SIP			
elect Server Installation Option	Avaya Communication Server	1000 - AML		
Voice and Multimedia Contact Server without Avaya Aura® Media Server	Select Server Installatio	n Option		
	O Voice and Multimedia Contact	Server without Avaya Aura® Media Server		
Voice Contact Server Only	○ Voice Contact Server Only			
/ Multimedia Contact Server Only	Multimedia Contact Server Only	(
Network Control Center Server Only	Network Control Center Server	Only		

- 7. In the Select Server Installation Option section, select Voice and Multimedia Contact Server without Avaya Aura Media Server.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- 10. Under **Voice Contact Server Database Drive**, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.

- 11. Under **Multimedia Contact Server Database Drive**, select the drive for the Contact Center Multimedia database. The default drive partition is G:.
- 12. In the **Service Packs** section, browse to and select the Service Pack.

AVAYA	Avaya Aura [®] Contact Center 7.0
election Destination Drives	
Voice Contact Server Databa	e Drive
2000 Block	
~	
Multimedia Contact Server Da	tabase Drive
✓ Multimedia Contact Server Da ✓	tabase Drive
Multimedia Contact Server Da	tabase Drive service packs
Multimedia Contact Server Da	tabase Drive service packs
Multimedia Contact Server Da	tabase Drive service packs

- 13. Click Install.
- 14. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 15. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click **Print**.
- 16. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 17. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.

- If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
- To print the license terms, click **Print**.
- 18. The **Progress** window appears and displays the installation progress.
- 19. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring the RGN Voice and Multimedia Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the RGN Contact Center Voice and Multimedia Contact Server software to provide data resiliency and Disaster Recovery.

Procedure

1. Log on to the RGN Contact Center server using the Administrator account details.

- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.
- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.
- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the Core tab, and configure the server details.

Avaya Con	tact Center
Configuration Data	Αναγα
Core Licensing Multimedia CS1000 Security Configu	ration
Site Name Site Name CC7SIP	System Account Configuration Enter a password for the Contact Center administration Windows account. Password
Real-Time Statistics Multicast IP Address IP Address 234.5.6.10	Confirm Password
Network Configuration CLAN IP Address ELAN IP Address	
Click Next to Continue	

- In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters.
- In the Real-Time Statistics Multicast IP Address box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The IP Address must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- In the Network Configuration section, in the ELAN IP Address box, type the IP Address of the embedded local area network. The embedded local area network (ELAN) is a dedicated Ethernet LAN that connects Contact Center to the PABX.

- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.
- 12. In the Confirm Password box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the Multimedia tab, and configure the Contact Center Multimedia details.

		Avaya Contact Center	
Con	figuration	Data	AVAYA
Enter tr	Licensing Multimedia	CS1000 Security Configuration	
Inco	ming Mail Server		
Hos	st Name	Protocol POP3 v	
Out	going Mail Server st Name	Protocol	
Click No.	wt to Continue		
Click Ne	ext to Continue		
			< Back Next > Cancel

- 20. In the **Incoming Mail Server** box, type the name of the server on which email messages are received in your network.
- 21. From the **Protocol** list, select the communication protocol for the inbound email server. Select **POP3** or **IMAP**. The default protocol is POP3.
- 22. In the **Outgoing Mail Server** box, type the name of the server from on which email messages are sent. Your inbound and outbound mail servers can have the same name.
- 23. Select the **CS1000** tab.

				Avaya Contact	Center	
Cor	nfigur	ation	Data	I	4	
Core	Licensing	Multimedia	CS1000	Security Configuration		
Sv Sv Sv Sv Sv Sv	1000 Switch vitch Name vitch IP Addr vitch Custom witch Serial N	Data ress ler Number Number itch IP Addres	35		Voice Services Setup Voice Connection Type None Avaya Aura Experien CallPilot CallPilot Configuration ELAN IP Address CPHA Managed CLAN IP A	ce Portal Port ddress
Click No	ternative Sw ternative Sw ext to Conti	itch Customer itch Serial Nu nue	r Number mber		CLAN IP Address	

- 24. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.
- 25. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 26. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 27. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.

- 28. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 29. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 30. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 31. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 32. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 33. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 34. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

	Avaya Contact Center	
Configuration Dat	а	AVAYA
Enter the required configuration data. Core Licensing Multimedia CS100	0 Security Configuration	
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level SHA256 v Key Size 2048 v Security Store Password Confirm Store Password	Name of Organizational unit Name of Organization City or Locality State or Province Two letter country code	Subject Alternative Name Type DNS Value Add Remove
Skip Security Configuration		Create Store
Click Next to Continue		
		< Back Next > Cancel

 If you do not want to enable security, select the Skip Security Configuration checkbox and skip to <u>step 54</u> on page 133.

Important:

A warning message appears.

36. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 37. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 38. In the Name of Organization box, type the company name.
- 39. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 40. In the **State or Province** box, type the state or province in which the contact center is located.
- 41. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 42. In the **Security Store password** box, type a password for accessing the new security store.
- 43. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 44. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the **Type** drop-down list, select DNS.
 - b. In the **Value** field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

45. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 46. Click Create Store.
- 47. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya Contact Center	
Configuration Data	AVAYA
Core Licensing Multimedia CS1000 Security Configuration	
Create CSR File Imported Trusted Certificate Authority Root Certificate(s)	Status
Add	Ensure that a removable or network drive is available. Create the Certificate Signing Equest file and save it to a removable or network drive.
Imported Identity Security Certificate Add	Alternatively, to defer Security Configuration and continue
Click Next to Continue	
	< Back Next > Cancel

- 48. Click Create CSR File.
- 49. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 50. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 51. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 52. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 53. In the **Open** dialog box, browse to the location of the certificate and click **Open**.

- 54. Click Next.
- 55. Review and verify the summary information, and click **Configure**.
- 56. After the installation is complete, click **Finish**.
- 57. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the **Task Scheduler** window, in the left pane, select **Task Scheduler Library** > **Microsoft** > **Windows** > **TaskScheduler**.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.



8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 10: Voice Contact Server for CS1000 installation

This chapter describes how to install a Voice Contact Server in a solution with an Avaya Communication Server 1000 (CS1000) platform. A Voice Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- · Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)

Install this server to provide context-sensitive and skill-based routing for customer voice contacts. This server provides routed contact support for voice calls. This server provides extensive tools for agent management, real-time and historical reporting, and graphical tools to create contact flows and treatment rules. Use this server for license management, High Availability configuration, networking, Open Interfaces Web Service and third-party application interfaces integration.

If the server is to be used in a domain, Avaya recommends that you add the server to the domain before installing Contact Center software.

You can change the name of a Contact Center server, but because this is time consuming, Avaya recommends that you configure the server final production name before installing Contact Center software.

If you plan to follow the Microsoft server hardening guidelines, complete those procedures before installing Avaya Aura[®] Contact Center.

You can use any account with local administrative rights to install Avaya Aura[®] Contact Center. You can use any account with local administrative rights to upgrade and patch Avaya Aura[®] Contact Center; you do not need to always use the same account to perform these tasks.

Important:

You must disable the Admin Approval Mode security feature on the Contact Center server. This ensures that accounts with local administrative rights get full privileges for running applications on the Contact Center server.

Contact Center Manager Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center Manager Server ELAN NIC and ELAN subnet are optional.

You must complete all the procedures in this section in sequential order.

All active and standby applications must be on the same patch level.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.
- 4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

 Ensure that you have a newly formatted server that meets the specifications in Avaya Aura[®] Contact Center Overview and Specification on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura*[®] Contact Center Overview and Specification.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

The following table lists the main inputs to consider while installing the operating system.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> .
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.

- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I accept the license terms**.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive	E:	_
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Database journal	H:	100 GB NTFS

Navigating the Microsoft Windows Server 2012 R2 User Interface

This section describes how to navigate between the main user interface screens of the Windows Server 2012 R2 operating system.

The following table describes some of the main Microsoft Windows Server 2012 R2 user interface screens.

Screen name	Description
Start	The Start screen contains shortcuts to the main administration interfaces of the server. If you have an application that you access on a regular basis, you can add it to the Start screen so that it's more immediately accessible. The Start screen displays the currently logged on user and provides some basic server log out and locking functions. This is the operating system default screen.
Apps	The Apps screen contains shortcuts to the applications and utilities installed on the server. The server applications and utilities are grouped into categories. Third-party vendors and applications can also add custom, vendor or product specific, categories to the Apps screen.
Desktop	The Desktop screen contains the Windows start button, the Windows Taskbar, Recycle Bin, and shortcuts to the Windows Explorer utility, among others. The Taskbar displays the Windows Notification Area and System Tray. The notification area is located on the right portion of the Taskbar next to the time.

Navigation tips:

- Use the up o and down arrow icons to navigate between the **Start** and **Apps** screens.
- To display the Start screen, on the Desktop screen, click the Windows start button.

- To display the **Desktop** screen, on the **Start** screen select the **Desktop** tile.
- To display the **Desktop** screen, on the **Apps** screen select the **Desktop** tile.
- To switch between the **Start** screen and the **Desktop** screen press the Windows start button on your keyboard.
- To access the Control Panel, on the Apps or Start screen click on the Control Panel tile.
- To access the Administration Tools, on the **Apps** or **Start** screen click on the **Administrative Tools** tile.

These screen navigation methods work when you are using the server's keyboard and mouse directly, or when you are using Remote Desktop to access the server.



Figure 8: Example of the Start screen, with the down arrow icon highlighted in a red box.

Desktop	Administrative Tools	Services	Remote Desktop Connection	? Help and Suppo
Internet Explorer	Component Services	System Configuration	Steps Recorder	Run
	Computer Management	System Information	Windows Server Backup	Task Manager
	Defragment and Optimize Drives	Task Scheduler	WordPad	This PC
	Event Viewer	Windows Firewall with Advanced	Windows Ease of Access	Windows PowerShell
	iSCSI Initiator	Windows Memory Diagnostic	Magnifier	
	Local Security Policy	Windows PowerShell (x86)	Narrator	
	ODBC Data Sources (32-bit)	Windows PowerShell ISE	On-Screen Keyboard	
	ODBC Data Sources (64-bit)	Windows PowerShell ISE	Windows System	
	Performance Monitor	Windows Accessories	Administrative Tools	
	Resource Monitor	Calculator	Command Prompt	
	Security Configuration	Notepad	Control Panel	
	Server Manager	Paint	File Explorer	

Figure 9: Example of the Apps screen, with the up arrow icon highlighted in a red box.



Figure 10: Example of the Desktop screen, with the Windows start button highlighted in a red box.

lcon	Name	Description
	Windows start button	Use the Windows start button to navigate to the Start screen. Use this button to switch between the Start screen and the Desktop screen.
F=	Server Manager	Use this button to access the Server Manager to configure the roles and features to the server.
2	PowerShell	Use the PowerShell button to start the Windows PowerShell console. Windows PowerShell is a command-line shell that provides cmdlets (pronounced command-lets) for server configuration and management. PowerShell also provides scripting functions for task automation.
	This PC	Use this button to start the This PC Windows Explorer. Use this to access and navigate the folders, files, and storage devices on the server.

The following table describes some of the Taskbar sections of the **Desktop** screen.

The contents of your screens can vary depending on the roles, features, and applications installed on your server.

For more information about the Windows Server 2012 R2 operating system, refer to the Microsoft support website and Microsoft product documentation.

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.

- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding the server to a domain or workgroup

About this task

Add the server to a domain or workgroup. Avaya recommends that you add the server to the domain or workgroup before installing Contact Center software.

If you are using a domain:

- Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).
- Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** or **Workgroup** value.

The System Properties dialog box appears.

- 5. In the System Properties dialog box, click the Computer Name tab.
- 6. Click Change.
- 7. To add the server to a workgroup, skip to step 9.
- 8. To add the server to a domain, in the Member of dialog box, click the **Domain** option.
 - a. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).
 - b. Click OK.
 - c. Type the domain administrator **User name** and **Password**.
 - d. Click OK.
 - e. Skip to step 10.
- 9. To add the server to a workgroup, in the **Member of** dialog box, click the **Workgroup** option.
 - a. Type the workgroup name.
 - b. Click OK.
 - c. Type the workgroup administrator **User name** and **Password**.
 - d. Click OK.
- 10. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.
- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the WINS tab.
- 11. Select the **Disable NetBIOS over TCP/IP** check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the Contact Center server network interface card to the contact center subnet.
- · Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😵 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.

- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click **OK**.

If prompted, restart the server.

a	Local Security Policy	_ □	x
File Action View Help			
 Security Settings Account Policies Local Policies Audit Policy Security Options Windows Firewall with Advanced Security Opticies Public Key Policies Software Restriction Policies Application Control Policies Advanced Audit Policy Configuration 	Policy Network security: Restrict NTLM: NTLM authentication in th Network security: Restrict NTLM: Outgoing NTLM traffic to Recovery console: Allow automatic administrative logon Recovery console: Allow floppy copy and access to all drives Shutdown: Allow system to be shut down without having to Shutdown: Clear virtual memory pagefile System cryptography: Force strong key protection for user k System objects: Require case insensitivity for non-Windows System objects: Strengthen default permissions of internal s System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executabl User Account Control: Admin Approval Mode for the Built-i User Account Control: Behavior of the elevation prompt for User Account Control: Behavior of the elevation prompt for User Account Control: Only elevate executables that are sign User Account Control: Only elevate executables that are sign User Account Control: Only elevate WIAccess applications then pr User Account Control: Nonly elevate executables that are sign User Account Control: Only elevate executables that are sign User Account Control: Nonly elevate WIAccess applications th User Account Control: Nonly elevate UIAccess applications th	Security Setting Not Defined Not Defined Disabled Disabled Disabled Disabled Enabled Disabled Disabled Disabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled Enabled	
	<u> </u>		Ľ

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.



8. From the File menu, select Exit.

Installing the Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see *Avaya Aura*[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice Contact Server software on the server.

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click **Setup.exe**.

3. Click **Accept** to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

Avaya Aura®- SIP Avaya Communication Server 1000 - AML Select Server Installation Option	
Avaya Communication Server 1000 - AML Select Server Installation Option	
Select Server Installation Option	
◯ Voice and Multimedia Contact Server without Avaya Aura® Media Server	
O Voice Contact Server Only	
O Multimedia Contact Server Only	
O Network Control Center Server Only	

- 7. In the Select Server Installation Option section, select Voice Contact Server Only.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- 10. Under **Voice Contact Server Database Drive**, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.
- 11. In the Service Packs section, browse to and select the Service Pack.

AVAYA	Avaya Aura® Contact Center 7.0
Selection Destination Drives	
Voice Contact Server Databas	e Drive abase Drive
Service Packs Select the source location for	service packs
	Install <u>C</u> ancel

- 12. Click Install.
- 13. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 14. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click **Print**.
- 15. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 16. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click Print.

- 17. The **Progress** window appears and displays the installation progress.
- 18. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the Contact Center Voice Contact Server software and enable your contact center to route contacts to the agents that can answer the call with the correct skills.

- 1. Log on to the Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.
- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.

- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the **Core** tab, and configure the server details.

		Avaya	Contact Center			
Con	nfigura	tion Data				¥
Enter th Core	he required co	onfiguration data. S1000 Security Configuration				
Site	e Name :e Name 27SIP		System Acc Enter a pa administra Password	ount Configurat ssword for the tion Windows a	tion Contact Cente account.	٢
Rea IP 23	al-Time Statisti Address 34.5.6.10	ics Multicast IP Address	Confirm Pa	ssword		
Net CL	work Configu AN IP Address	ELAN IP Address				
Click Ne	ext to Continu	e				
				< Back	Next >	Canc

- In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters.
- 8. In the **Real-Time Statistics Multicast IP Address** box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The **IP Address** must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- In the Network Configuration section, in the ELAN P Address box, type the IP Address
 of the embedded local area network. The embedded local area network (ELAN) is a
 dedicated Ethernet LAN that connects Contact Center to the PABX.
- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server

security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.

- 12. In the Confirm Password box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the CS1000 tab.

Configuration Data	AVAYA
Core Licensing CS1000 Security Configuration	
CS1000 Switch Data Switch Name Switch IP Address Switch Customer Number Switch Serial Number Alternative Switch IP Address Alternative Switch Customer Number Alternative Switch Serial Number Alternative Switch Serial Number	Voice Services Setup Voice Connection Type None Avaya Aura Experience Portal CallPilot CallPilot Configuration ELAN IP Address CLAN IP Address CLAN IP Address

20. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.

- 21. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 22. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 23. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.
- 24. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 25. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 26. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 27. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 28. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 29. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 30. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

Avaya Contact Center	
Configuration Data	AVAYA
Enter the required configuration data.	
Core Licensing CS1000 Security Configuration	
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level Name of Organization SHA256 City or Locality City or Locality City or Locality State or Province Security Store Password Confirm Store Password Skip Security Configuration	Subject Alternative Name Type DNS Value Add Remove Create Store
Click Next to Continue	
	< Back Next > Cancel

31. If you do not want to enable security, select the **Skip Security Configuration** checkbox and skip to <u>step 50</u> on page 159.

Important:

A warning message appears.

32. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 33. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 34. In the Name of Organization box, type the company name.
- 35. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 36. In the **State or Province** box, type the state or province in which the contact center is located.

- 37. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 38. In the **Security Store password** box, type a password for accessing the new security store.
- 39. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 40. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the Type drop-down list, select DNS.
 - b. In the **Value** field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

41. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 42. Click Create Store.
- 43. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya Contact Center	
Configuration Data	AVAYA
Enter the required configuration data.	
Core Licensing CS1000 Security Configuration	
Create CSR File Imported Trusted Certificate Authority Root Certificate(s) Add	Status Ensure that a removable or network drive is available. Create the Certificate Signing Request file and save it to a removable or network drive.
Imported Identity Security Certificate Add	Configuration and continue
Click Next to Continue	
	< Back Next > Cancel

- 44. Click Create CSR File.
- 45. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 46. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 47. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 48. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 49. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 50. Click Next.
- 51. Review and verify the summary information, and click **Configure**.
- 52. After the installation is complete, click **Finish**.
- 53. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.

•		Task Scheduler			_ 🗆 X
File Action View Help					
SpacePort Storage Tiers Management Task Manager TaskScheduler	^	Name Description: Maintenance Con Manual Maintena	Status Ready Ready Ready	Triggers When computer is idle Multiple triggers defined	Next Run Time
TextServicesFramework Time Synchronization Time Zone III	~	Regular Maintena	Ready	At 2:00 AM every day	10/6/2015 5:06:54

8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 11: Primary Voice Contact Server for CS1000 installation in a domain

This chapter describes how to install a Voice Contact Server in a solution with an Avaya Communication Server 1000 (CS1000) platform. This chapter describes how to install a Voice Contact Server in a domain. A Voice Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)

Install this server to provide context-sensitive and skill-based routing for customer voice contacts. This server provides routed contact support for voice calls. This server provides extensive tools for agent management, real-time and historical reporting, and graphical tools to create contact flows and treatment rules. Use this server for license management, High Availability configuration, networking, Open Interfaces Web Service and third-party application interfaces integration.

You can change the name of a Contact Center server, but because this is time consuming, Avaya recommends that you configure the server final production name before installing Contact Center software.

If you plan to follow the Microsoft server hardening guidelines, complete those procedures before installing Avaya Aura[®] Contact Center.

You can use any account with local administrative rights to install Avaya Aura[®] Contact Center. You can use any account with local administrative rights to upgrade and patch Avaya Aura[®] Contact Center; you do not need to always use the same account to perform these tasks.

Important:

You must disable the Admin Approval Mode security feature on the Contact Center server. This ensures that accounts with local administrative rights get full privileges for running applications on the Contact Center server.

Contact Center Manager Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center Manager Server ELAN NIC and ELAN subnet are optional.

All active and standby applications must be on the same patch level.

Voice Contact Server installation prerequisites

Procedure

- Copy the most recent patches for the Contact Center software.
- Ensure that your new Contact Center license file with a High Availability standby server license is available.

Important:

For the system to correctly handle backup and restore SNMP events, you must install Windows SNMP Service before you install Contact Center server software.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.
- 4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura[®] Contact Center Overview and Specification*.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see Avaya Aura [®] Contact Center Overview and Specification.
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

The following table lists the main inputs to consider while installing the operating system.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.
- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I** accept the license terms.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about

hard disk drives and partitions, see Avaya Aura[®] Contact Center Overview and Specification.

23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura[®] Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive	E:	—
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Database journal	H:	100 GB NTFS

Navigating the Microsoft Windows Server 2012 R2 User Interface

This section describes how to navigate between the main user interface screens of the Windows Server 2012 R2 operating system.

The following table describes some of the main Microsoft Windows Server 2012 R2 user interface screens.

Screen name	Description
Start	The Start screen contains shortcuts to the main administration interfaces of the server. If you have an application that you access on a regular basis, you can add it to the Start screen so that it's more immediately accessible. The Start

Table continues...

Screen name	Description
	screen displays the currently logged on user and provides some basic server log out and locking functions. This is the operating system default screen.
Apps	The Apps screen contains shortcuts to the applications and utilities installed on the server. The server applications and utilities are grouped into categories. Third-party vendors and applications can also add custom, vendor or product specific, categories to the Apps screen.
Desktop	The Desktop screen contains the Windows start button, the Windows Taskbar, Recycle Bin, and shortcuts to the Windows Explorer utility, among others. The Taskbar displays the Windows Notification Area and System Tray. The notification area is located on the right portion of the Taskbar next to the time.

Navigation tips:

- Use the up o and down arrow icons to navigate between the **Start** and **Apps** screens.
- To display the **Start** screen, on the **Desktop** screen, click the Windows start button.
- To display the **Desktop** screen, on the **Start** screen select the **Desktop** tile.
- To display the **Desktop** screen, on the **Apps** screen select the **Desktop** tile.
- To switch between the **Start** screen and the **Desktop** screen press the Windows start button on your keyboard.
- To access the Control Panel, on the Apps or Start screen click on the Control Panel tile.
- To access the Administration Tools, on the **Apps** or **Start** screen click on the **Administrative Tools** tile.

These screen navigation methods work when you are using the server's keyboard and mouse directly, or when you are using Remote Desktop to access the server.



Figure 11: Example of the Start screen, with the down arrow icon highlighted in a red box.

Desktop	Administrative Tools	Services	Remote Desktop Connection	Pelp and Suppo
Internet Explorer	Component Services	System Configuration	Steps Recorder	Run
	Computer Management	System Information	Windows Server Backup	Task Manager
	Defragment and Optimize Drives	Task Scheduler	WordPad	This PC
	Event Viewer	Windows Firewall with Advanced	Windows Ease of Access	Windows PowerShell
	iSCSI Initiator	Windows Memory Diagnostic	Magnifier	
	Local Security Policy	Windows PowerShell (x86)	Narrator	
	ODBC Data Sources (32-bit)	Windows PowerShell ISE	On-Screen Keyboard	
	ODBC Data Sources (64-bit)	Windows PowerShell ISE	Windows System	
	Performance Monitor	Windows Accessories	Administrative Tools	
	Resource Monitor	Calculator	Command Prompt	
	Security Configuration	Notepad	Control Panel	
	Server Manager	Paint	File Explorer	

Figure 12: Example of the Apps screen, with the up arrow icon highlighted in a red box.



Figure 13: Example of the Desktop screen, with the Windows start button highlighted in a red box.

lcon	Name	Description
	Windows start button	Use the Windows start button to navigate to the Start screen. Use this button to switch between the Start screen and the Desktop screen.
F=	Server Manager	Use this button to access the Server Manager to configure the roles and features to the server.
2	PowerShell	Use the PowerShell button to start the Windows PowerShell console. Windows PowerShell is a command-line shell that provides cmdlets (pronounced command-lets) for server configuration and management. PowerShell also provides scripting functions for task automation.
	This PC	Use this button to start the This PC Windows Explorer. Use this to access and navigate the folders, files, and storage devices on the server.

The following table describes some of the Taskbar sections of the **Desktop** screen.

The contents of your screens can vary depending on the roles, features, and applications installed on your server.

For more information about the Windows Server 2012 R2 operating system, refer to the Microsoft support website and Microsoft product documentation.

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.

- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding a server to a domain

Before you begin

- Ensure that you have domain administrator privileges, or ask the Domain Administrator to assign you a domain user account for remote access.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).

About this task

Add the server to an existing domain.

Note:

Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.

Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

If your solution is going to use High Availability, ask your System Administrator to add one DNS static entry for each managed name and associated managed IP address. A typical High Availability campus solution with a pair of servers requires three DNS static entries; one DNS static entry for the active server, one DNS static entry for the standby server, and one DNS static entry for the managed name and associated IP address. Avaya Aura[®] Contact Center High Availability solutions do not support Windows Server Dynamic DNS.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** value.

The System Properties dialog box appears.

- 5. In the **System Properties** dialog box, click the **Computer Name** tab.
- 6. Click Change.
- 7. In the **Member of** section, click the **Domain** option.
- 8. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).

- 9. Click **OK**.
- 10. Type the domain administrator **User name** and **Password**.
- 11. Click **OK**.
- 12. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.

- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the WINS tab.
- 11. Select the **Disable NetBIOS over TCP/IP** check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.

- Connect the Contact Center server network interface card to the contact center subnet.
- Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😵 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.
- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click **OK**.

1	Local Security Policy	_ □	x
File Action View Help Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Options Image: Security Options Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Security Settings Image: Settings Image: Settings Image: Settings Image: Settings Image: Settings	Policy Image: System objects: Require case insensitivity for non-Windows Image: System objects: Strengthen default permissions of internal s Image: System settings: Optional subsystems		×
 Public Key Policies Software Restriction Policies Application Control Policies IP Security Policies on Local Compute Advanced Audit Policy Configuration 	 System cryptography: Use FIPS compliant algorithms for en System objects: Require case insensitivity for non-Windows System objects: Strengthen default permissions of internal s System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executabl User Account Control: Admin Approval Mode for the Built-i User Account Control: Allow UIAccess applications to prom User Account Control: Behavior of the elevation prompt for User Account Control: Behavior of the elevation prompt for User Account Control: Detect application installations and p User Account Control: Only elevate executables that are sign User Account Control: Nul elevate UIAccess applications th User Account Control: Switch to the secure desktop when pr 	Disabled Enabled Enabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Enabled Disabled Enabled	Ш
< III >	in User Account Control: Virtualize file and registry write failure	Enabled	~

If prompted, restart the server.

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.

- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.

٩	Task Scheduler		_	□ X
File Action View Help File Action View Help SpacePort Storage Tiers Management Task Manager TaskScheduler TextServicesFramework Time Synchronization	Name (a) Idle Maintenance (b) Maintenance Configurator (c) Manual Maintenance (c) Regular Maintenance	Status Disabled Ready Ready Disabled	Triggers When computer is idle Multiple triggers defined At 2:00 AM every day	Next Run ¹ 10/6/2015 10/6/2015
TIME Zone				>

8. From the File menu, select Exit.

Installing the Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see *Avaya Aura*[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice Contact Server software on the server.

Procedure

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click Setup.exe.
- 3. Click Accept to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and

consult *Avaya Aura[®] Contact Center Overview and Specification* to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

Avaya Aura® - SIP Avaya Communication Server 1000 - AML Select Server Installation Option	
Avaya Communication Server 1000 - AML Select Server Installation Option	
Select Server Installation Option	
○ Voice and Multimedia Contact Server without Avaya Aura® Media Server	
O Voice Contact Server Only	
O Multimedia Contact Server Only	
Network Control Center Server Only	

- 7. In the Select Server Installation Option section, select Voice Contact Server Only.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- 10. Under **Voice Contact Server Database Drive**, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.
- 11. In the Service Packs section, browse to and select the Service Pack.

AVAYA	Avaya Aura [®] Contact Center 7.0
Selection Destination Drives	
~	
Voice Contact Server Databas	e Drive
Multimedia Contact Server Dat	tabase Drive
~	
Service Packs Select the source location for	service packs
	Install <u>C</u> ancel

- 12. Click Install.
- 13. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 14. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click **Print**.
- 15. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 16. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click Print.
- 17. The **Progress** window appears and displays the installation progress.
- 18. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the Contact Center Voice Contact Server software and enable your contact center to route contacts to the agents that can answer the call with the correct skills.

- 1. Log on to the Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.
- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.

- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the **Core** tab, and configure the server details.

	Avay	a Contact Center
Cor	figuration Data	AVAYA
Enter th Core	he required configuration data. Licensing CS1000 Security Configuration	
Site	e Name te Name C7SIP	System Account Configuration Enter a password for the Contact Center administration Windows account. Password
Rea IP 23	al-Time Statistics Multicast IP Address Address 14.5.6.10	Confirm Password
CL	AN IP Address ELAN IP Address	
Click Ne	ext to Continue	
		< Back Next > Cance

- In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters.
- 8. In the **Real-Time Statistics Multicast IP Address** box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The **IP Address** must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- In the Network Configuration section, in the ELAN P Address box, type the IP Address
 of the embedded local area network. The embedded local area network (ELAN) is a
 dedicated Ethernet LAN that connects Contact Center to the PABX.
- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server

security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.

- 12. In the Confirm Password box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the CS1000 tab.

Avaya Conta	act Center
Configuration Data	Αναγα
Core Licensing CS1000 Security Configuration	
CS1000 Switch Data Switch Name Switch IP Address Switch Customer Number Switch Serial Number Alternative Switch IP Address Alternative Switch Customer Number Alternative Switch Serial Number Alternative Switch Serial Number	Voice Services Setup Voice Connection Type None Avaya Aura Experience Portal CallPilot CallPilot Configuration ELAN IP Address CPHA Managed CLAN IP Address CLAN IP Address

20. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.

- 21. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 22. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 23. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.
- 24. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 25. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 26. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 27. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 28. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 29. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 30. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

Avaya Contact Center	
Configuration Data	AVAYA
Enter the required configuration data.	
Core Licensing CS1000 Security Configuration	
Full Computer Name (FQDN) Name of Organizational unit CC7SIP.aaccdomain.com	Type DNS Value Add Remove
Skip Security Configuration	Create Store
Click Next to Continue	
	< Back Next > Cancel

31. If you do not want to enable security, select the **Skip Security Configuration** checkbox and skip to <u>step 50</u> on page 187.

Important:

A warning message appears.

32. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 33. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 34. In the Name of Organization box, type the company name.
- 35. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 36. In the **State or Province** box, type the state or province in which the contact center is located.

- 37. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 38. In the **Security Store password** box, type a password for accessing the new security store.
- 39. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 40. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the Type drop-down list, select DNS.
 - b. In the **Value** field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

41. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 42. Click Create Store.
- 43. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya Contact Cente	r
Configuration Data	AVAYA
Enter the required configuration data.	
Core Licensing CS1000 Security Configuration	
Imported Trusted Certificate Authority Root Certificate(s) Add Imported Identity Security Certificate	Status Ensure that a removable or network drive is available. Create the Certificate Signing Request file and save it to a removable or network drive. Alternatively, to defer Security
Add	Configuration and continue
Click Next to Continue	

- 44. Click Create CSR File.
- 45. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 46. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 47. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 48. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 49. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 50. Click Next.
- 51. Review and verify the summary information, and click **Configure**.
- 52. After the installation is complete, click **Finish**.
- 53. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.

•		Task Scheduler			- 🗆 X
File Action View Help					
SpacePort Storage Tiers Management Task Manager TaskScheduler TextServicesFramework Time Synchronization Time Zone		Name () Idle Maintenance () Maintenance Con () Manual Maintena	Status Ready Ready Ready	Triggers When computer is idle Multiple triggers defined	Next Run Time
		Regular Maintena	Ready	At 2:00 AM every day	10/6/2015 5:06:54
		<u></u>			

8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 12: Standby Voice Contact Server for CS1000 installation in a domain

This chapter describes how to install a standby Voice Contact Server for Avaya Communication Server 1000 (CS1000). A standby Voice Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- · Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)

Voice Contact Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Voice Contact Server ELAN NIC and ELAN subnet are optional.

You can install a standby Voice Contact Server and commission it to be the standby Voice Contact Server in a campus High Availability solution. The standby server takes over contact processing and becomes the active server if the existing active server fails. The standby server provides High Availability redundancy and resiliency. The standby and active servers must be at the same patch level and have the same hard disk drive partitions.

You must complete the procedures in this section in sequential order.

Standby Voice Contact Server installation prerequisites Procedure

- Copy the most recent patches for the Contact Center software.
- Ensure that your new Contact Center license file with a High Availability standby server license is available.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.
- 4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura[®] Contact Center Overview and Specification*.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

The following table lists the main inputs to consider while installing the operating system.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> .
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- 8. Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.

- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I accept the license terms**.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura[®] Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Standby Voice Contact Server for CS1000 installation in a domain

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive	E:	_
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Database journal	H:	100 GB NTFS

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- 2. Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

- 1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.
- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding a server to a domain

Before you begin

- Ensure that you have domain administrator privileges, or ask the Domain Administrator to assign you a domain user account for remote access.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).

About this task

Add the server to an existing domain.

😵 Note:

Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.

Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

If your solution is going to use High Availability, ask your System Administrator to add one DNS static entry for each managed name and associated managed IP address. A typical High Availability campus solution with a pair of servers requires three DNS static entries; one DNS static entry for the active server, one DNS static entry for the standby server, and one DNS static entry for the managed name and associated IP address. Avaya Aura[®] Contact Center High Availability solutions do not support Windows Server Dynamic DNS.

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.

- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** value.

The System Properties dialog box appears.

- 5. In the System Properties dialog box, click the Computer Name tab.
- 6. Click Change.
- 7. In the **Member of** section, click the **Domain** option.
- 8. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).
- 9. Click **OK**.
- 10. Type the domain administrator **User name** and **Password**.
- 11. Click OK.
- 12. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Deploying Avaya Aura[®] Contact Center DVD for Avaya Communication Server 1000 196 <u>Comments on this document? infodev@avaya.com</u>

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.
- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the WINS tab.
- 11. Select the **Disable NetBIOS over TCP/IP** check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the Contact Center server network interface card to the contact center subnet.
- · Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😵 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.

- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click **OK**.

If prompted, restart the server.

Local Security Policy							
File Action View Help							
🗢 🍬 🖄 📰 🗙 🗐 🗟 🚺							
 Security Settings Account Policies Local Policies Audit Policy Muse Rights Assignment Security Options Windows Firewall with Advanced Security Policies Public Key Policies Software Restriction Policies Application Control Policies IP Security Policies on Local Compute Advanced Audit Policy Configuration 	Policy Policy Network security: Restrict NTLM: NTLM authentication in th Network security: Restrict NTLM: Outgoing NTLM traffic to Recovery console: Allow automatic administrative logon Recovery console: Allow floppy copy and access to all drives Shutdown: Allow system to be shut down without having to Shutdown: Clear virtual memory pagefile System cryptography: Force strong key protection for user k System oryptography: Use FIPS compliant algorithms for en System objects: Require case insensitivity for non-Windows System objects: Strengthen default permissions of internal s System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executabl User Account Control: Admin Approval Mode for the Built-i User Account Control: Behavior of the elevation prompt for User Account Control: Behavior of the elevation prompt for User Account Control: Only elevate executables that are sign User Account Control: Only elevate executables that are sign User Account Control: Nu all administrators in Admin Appr Were Account Control: Nu all administrators in Admin Appr	Security Setting Not Defined Not Defined Disabled Disabled Disabled Disabled Disabled Enabled Disabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Disabled Enabled Enabled Enabled Enabled Enabled Enabled					
< III >			~				

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.



8. From the File menu, select Exit.

Installing the Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see *Avaya Aura*[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice Contact Server software on the server.

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click **Setup.exe**.

3. Click **Accept** to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

Avaya Aura®- SIP Avaya Communication Server 1000 - AML Select Server Installation Option	
Avaya Communication Server 1000 - AML Select Server Installation Option	
Select Server Installation Option	
◯ Voice and Multimedia Contact Server without Avaya Aura® Media Server	
O Voice Contact Server Only	
O Multimedia Contact Server Only	
O Network Control Center Server Only	

- 7. In the Select Server Installation Option section, select Voice Contact Server Only.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- Under Voice Contact Server Database Drive, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.
- 11. In the Service Packs section, browse to and select the Service Pack.

AVAYA	Avaya Aura® Contact Center 7.0
Selection Destination Drives	
Journal Database Drive	
Voice Contact Server Databas	se Drive
Multimedia Contact Server Da	tabase Drive
~	
Service Packs	
Select the source location for	service packs

- 12. Click Install.
- 13. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 14. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click **Print**.
- 15. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 16. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
 - To print the license terms, click Print.

- 17. The **Progress** window appears and displays the installation progress.
- 18. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring the standby Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see *Avaya Aura*[®] *Contact Center and Avaya Communication Server 1000 Integration*.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the standby Contact Center Voice Contact Server software to provide a resilient solution.

- 1. Log on to the standby Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.

- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.
- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the **Core** tab, and configure the server details.

			Avaya Co	ontact Center
Cor	nfigur	atio	n Data	AVAYA
Enter ti Core	he required	configura	ation data. Security Configuration	
Site	e Name te Name C7SIP			System Account Configuration Enter a password for the Contact Center administration Windows account.
Rea IP 23	al-Time Stat Address 34.5.6.10	istics Mul	ticast IP Address	Password Confirm Password
-Net CL	twork Confi AN IP Addre	guration ss	ELAN IP Address	
Click Ne	ext to Conti	nue		
				< Back Next > Cancel

- 7. In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters. The Site Name of the standby server must be the same as the Site Name of the primary server.
- In the Real-Time Statistics Multicast IP Address box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The IP Address must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- 9. In the **Network Configuration** section, in the **ELAN IP Address** box, type the IP Address of the embedded local area network. The embedded local area network (ELAN) is a dedicated Ethernet LAN that connects Contact Center to the PABX.

- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.
- 12. In the **Confirm Password** box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the CS1000 tab.

			Avaya Co	ontact Center
Cor	n figur	ation	n Data	AVAYA
Core	Licensing	CS1000	Security Configuration	
	1000 Switch I vitch Name vitch IP Addr vitch Custom witch Serial N ternative Swi ternative Swi ternative Swi	Data ess er Number itch IP Add itch Custor itch Serial	ress mer Number Number	Voice Services Setup Voice Connection Type None Avaya Aura Experience Portal CallPilot CallPilot Configuration ELAN IP Address CPHA Managed CLAN IP Address CLAN IP Address

- 20. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.
- 21. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 22. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 23. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.
- 24. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 25. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 26. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 27. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 28. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 29. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 30. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

	Avaya Contact Center			
Configuration Data		AVAYA		
Core Licensing CS1000 Security	/ Configuration			
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level SHA256 V Key Size 2048 V Security Store Password Confirm Store Password	Name of Organizational unit Name of Organization City or Locality State or Province Two letter country code	Subject Alternative Name Type DNS Value Add Remove		
Skip Security Configuration		Create Store		
Click Next to Continue				
		< Back Next > Cancel		

 If you do not want to enable security, select the Skip Security Configuration checkbox and skip to <u>step 50</u> on page 210.

Important:

A warning message appears.

32. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 33. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 34. In the **Name of Organization** box, type the company name.
- 35. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 36. In the **State or Province** box, type the state or province in which the contact center is located.

Deploying Avaya Aura[®] Contact Center DVD for Avaya Communication Server 1000 208 Comments on this document? infodev@avaya.com

- 37. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 38. In the **Security Store password** box, type a password for accessing the new security store.
- 39. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 40. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the Type drop-down list, select DNS.
 - b. In the Value field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

41. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 42. Click Create Store.
- 43. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

		Avaya (Contact Center	
Configuration Data		AVAYA		
Inter	the required configu	uration data.		
Core	Licensing CS100	0 Security Configuration		
Imp	oorted Trusted Certi	ficate Authority Root Certific	cate(s)	Status
Cer	tificate Signing Requ	esthle		
				Ensure that a removable or
				network drive is available.
				Request file and save it to a
			Add	removable or network drive.
	Imported Identity Security Certificate			
Imp	orted Identity Secu	nty Certificate		Alternatively, to defer Security Configuration and continue
Imp	orted Identity Secu	nty Certificate	Add	Alternatively, to defer Security Configuration and continue with the Japitien Wizard Reset
Imp Click N	ext to Continue		Add	Alternatively, to defer Security Configuration and continue with the Ignition Wizard Reset

- 44. Click Create CSR File.
- 45. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 46. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 47. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 48. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 49. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 50. Click Next.
- 51. Review and verify the summary information, and click **Configure**.
- 52. After the installation is complete, click **Finish**.
- 53. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.

•	Task Scheduler				
File Action View Help					
 SpacePort Storage Tiers Management Task Manager TaskScheduler 	^	Name Idle Maintenance Maintenance Con Manual Maintena	Status Ready Ready Ready	Triggers When computer is idle Multiple triggers defined	Next Run Time
TextServicesFramework Time Synchronization Time Zone III >		Regular Maintena	Ready	At 2:00 AM every day	10/6/2015 5:06:54

8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 13: RGN Voice Contact Server for CS1000 installation

This chapter describes how to install a Remote Geographic Node (RGN) Voice Contact Server for Avaya Communication Server 1000 (CS1000). A standby Voice Contact Server includes the following server software:

- Contact Center Manager Server (CCMS)
- Contact Center Manager Server Utility
- Contact Center License Manager
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)

You can install a Voice Contact Server and commission it to be the Remote Geographic Node Voice Contact Server in a solution with Disaster Recovery. The Remote Geographic Node (RGN) server shadows the active server. Remote Geographic Node servers do not automatically take over if the active server fails. The standby server, Remote Geographic Node server, and active server must be at the same patch level and have the same hard disk drive partitions.

You can use any account with local administrative rights to install Avaya Aura[®] Contact Center. You can use any account with local administrative rights to upgrade and patch Avaya Aura[®] Contact Center; you do not need to always use the same account to perform these tasks.

Important:

You must disable the Admin Approval Mode security feature on the Contact Center server. This ensures that accounts with local administrative rights get full privileges for running applications on the Contact Center server.

Voice Contact Server supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Voice Contact Server ELAN NIC and ELAN subnet are optional.

You must complete the procedures in this section in sequential order.

Voice Contact Server installation prerequisites

Procedure

- Copy the most recent patches for the Contact Center software.
- Ensure that your new Contact Center license file with a High Availability standby server license is available.



For the system to correctly handle backup and restore SNMP events, you must install Windows SNMP Service before you install Contact Center server software.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- · Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.
- 4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

• Configure all servers for RAID as described in *Avaya Aura[®] Contact Center Overview and Specification*.

- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

The following table lists	the main inputs to	o consider while	installing the o	nerating system
The following lable lists	ine main inputs it		instanting the 0	peraling system.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see Avaya Aura [®] Contact Center Overview and Specification.
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.

- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.
- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I** accept the license terms.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura[®]* Contact Center Overview and Specification.
- 23. Install other required drivers for your hardware configuration.
Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader <i>System Reserved</i> partition.		
Application drive	D:	120 GB NTFS
DVD drive	E:	—
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Database journal	H:	100 GB NTFS

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- 2. Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the geographic node network

About this task

Connect the Contact Center server to the geographic node network. The geographic node network is the network at the remote geographic site.

Procedure

- 1. Locate the slot assigned to the geographic node network interface card for the server. Make a note of the slot.
- 2. Connect the cable from the geographic node network to the geographic node network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the geographic node network.
- 4. Use the ping command to test connectivity with the campus network and servers.

Adding a server to a domain

Before you begin

- Ensure that you have domain administrator privileges, or ask the Domain Administrator to assign you a domain user account for remote access.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).

About this task

Add the server to an existing domain.

😵 Note:

Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.

Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

If your solution is going to use High Availability, ask your System Administrator to add one DNS static entry for each managed name and associated managed IP address. A typical High Availability campus solution with a pair of servers requires three DNS static entries; one DNS static entry for the active server, one DNS static entry for the standby server, and one DNS static entry for the managed name and associated IP address. Avaya Aura[®] Contact Center High Availability solutions do not support Windows Server Dynamic DNS.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** value.

The System Properties dialog box appears.

- 5. In the System Properties dialog box, click the Computer Name tab.
- 6. Click Change.
- 7. In the Member of section, click the Domain option.
- 8. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).
- 9. Click **OK**.
- 10. Type the domain administrator User name and Password.
- 11. Click OK.
- 12. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select Disable.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.

- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling NetBIOS

About this task

If the Contact Center server uses two Network Interface Cards (NICs), disable NetBIOS on the Embedded LAN (ELAN) network interface card (NIC) to avoid NetBIOS conflicts.

Contact Center supports two Network Interface Cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet.
- 3. Click Network and Sharing Center.
- 4. Click Change adapter settings.
- 5. Right-click the ELAN Network Interface Card (NIC).
- 6. Click Properties.
- 7. Select Internet Protocol Version 4 (TCP/IPv4).
- 8. Click Properties.
- 9. Click Advanced.
- 10. Click the WINS tab.
- 11. Select the **Disable NetBIOS over TCP/IP** check box.
- 12. Click OK.

Connecting the Embedded LAN subnet

Before you begin

- · Install two network cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- · Connect the contact center subnet network interface card.

About this task

If your server uses two NICs, connect the Embedded LAN (ELAN) NIC to the ELAN subnet. Contact Center supports two network interface cards (NICs) and two subnets (one contact center subnet and one ELAN subnet). The Contact Center ELAN NIC and ELAN subnet are optional.

Procedure

- 1. Locate the slot assigned to the ELAN network interface card for the server.
- 2. Write the MAC address of the card on a small label. Attach the label to the back of the card or the chassis slot position.
- 3. Connect the ELAN subnet from the Avaya equipment to the Ethernet hub.
- 4. Connect the network cable from the ELAN network interface card in the server to the hub.
- 5. Plug in the power cord for the hub.
- 6. If you have an ELAN subnet network connection, use the ping command to test it.

Configuring the binding order

Before you begin

- Install two network interface cards on the Contact Center server.
- Disable the NetBIOS on the ELAN network interface card.
- Connect the Contact Center server network interface card to the contact center subnet.
- Connect the Contact Center server ELAN network interface card to the ELAN subnet.

About this task

Configure the binding order of the network cards. The contact center subnet network interface card must be bound first and then the ELAN network interface card.

Procedure

- 1. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center.
- 2. Click Change adapter settings.
- 3. In the Network Connections window, press the ALT key.

A hidden menu appears.

- 4. Choose Advanced > Advanced Settings.
- 5. In the **Connections** box, ensure that the contact center subnet connection is listed first. If it is not listed first, adjust the order.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

Procedure

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.
- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click OK.

If prompted, restart the server.

4	Local Security Policy	_ 0	x
File Action View Help			
🗢 🄿 🙍 📰 🗙 🗐 📑 🚺			
 Security Settings Account Policies Local Policies Guser Rights Assignment Guser Rights Assignment Guser Rights Assignment Windows Firewall with Advanced Sect Network List Manager Policies Public Key Policies Software Restriction Policies Software Restriction Policies Application Control Policies Advanced Audit Policy Configuration 	Policy Image: Second Struct Struct NTLM: NTLM authentication in th Image: Struct NTLM: NTLM authentication in th Image: Struct NTLM: NTLM authentication in th Image: Struct NTLM: Outgoing NTLM traffic to Image: Struct NTLM: Outgoing NTLM traffic to Image: Struct NTLM: Outgoing NTLM traffic to Image: Struct NTLM: Struct NTLM: Outgoing NTLM traffic to Image: Struct NTLM: Struct NTLM: Outgoing NTLM traffic to Image: Struct NTLM: NTLM authentication in the struct NTLM: S	Security Setting Not Defined Not Defined Disabled Disabled Disabled Not Defined Disabled Enabled Disabled Disabled Disabled Prompt for consent for Prompt for consent for Prompt for credentials Enabled Disabled Enabled Enabled Enabled Enabled Enabled	

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.

- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.

e	Task Scheduler	- 🗆 X
File Action View Help		
SpacePort Storage Tiers Management Task Manager TaskScheduler	Name Status Triggers Idle Maintenance Disabled When computer is in the compu	Next Run dle fined 10/6/2015
Time Synchronization	Regular Maintenance Disabled At 2:00 AM every da	y 10/6/2015
	p	

8. From the File menu, select Exit.

Installing the Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Install the Contact Center Voice Contact Server software on the server.

Procedure

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click **Setup.exe**.
- 3. Click Accept to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

- 5. The Contact Center software installer platform and server selection screen appears.
- 6. In the Select Voice Platform section, select Avaya Communication Server 1000 AML.

⊖ Avaya Aura® - SIP	
Avaya Communication Server 1000 - AML	
Select Server Installation Option	
◯ Voice and Multimedia Contact Server without Avaya Aura® Media Server	
○ Voice Contact Server Only	
Multimedia Contact Server Only	
Network Control Center Server Only	

- 7. In the Select Server Installation Option section, select Voice Contact Server Only.
- 8. Click Next.
- 9. Under **Journal Database Drive**, select the drive for the database journal. The default drive partition is H:.
- 10. Under **Voice Contact Server Database Drive**, select the drive for the Contact Center Manager Server, Communication Control Toolkit, and Contact Center Manager Administration databases. The default drive partition is F:.
- 11. In the Service Packs section, browse to and select the Service Pack.

AVAYA	Avaya Aura [®] Contact Center 7.0	
Selection Destination Drives		_
Journal Database Drive		
Voice Contact Server Databas	se Drive	
16		
Multimedia Contact Server Dat	itabase Drive	
Service Packs		
Select the source location for	service packs	_

- 12. Click Install.
- 13. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 14. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
 - To print the license terms, click **Print**.
- 15. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 16. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
 - To print the license terms, click Print.

- 17. The **Progress** window appears and displays the installation progress.
- 18. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring the RGN Voice Contact Server software for CS1000

Before you begin

- Ensure the Avaya Communication Server 1000 is configured. For more information see Avaya Aura[®] Contact Center and Avaya Communication Server 1000 Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Download the most recent Contact Center and Common Components patches to the server.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the RGN Contact Center Voice Contact Server software to provide data resiliency and disaster recovery.

Procedure

- 1. Log on to the RGN Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.

- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.
- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the **Core** tab, and configure the server details.

			Avaya C	ontact Center
Cor	nfigur	atio	n Data	AVAYA
inter ti Core	he required	CS1000	ation data. Security Configuration	
Site	e Name			System Account Configuration Enter a password for the Contact Center administration Windows account.
Rea IP 23	al-Time Stat Address 34.5.6.10	istics Mul	ticast IP Address	Confirm Password
-Net CL	twork Confi AN IP Addre	guration ess	ELAN IP Address	
click Ne	ext to Conti	nue		
				< Back Next > Cancel

- In the Site Name box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore (_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters.
- 8. In the **Real-Time Statistics Multicast IP Address** box, type the Real-time Statistics Multicast IP Address of the server to associate with sending real-time data. The **IP Address** must be from 224.0.1.0 to 239.255.255.255. The default is 234.5.6.10.
- 9. In the **Network Configuration** section, in the **ELAN IP Address** box, type the IP Address of the embedded local area network. The embedded local area network (ELAN) is a dedicated Ethernet LAN that connects Contact Center to the PABX.

- 10. In the **CLAN IP Address** box, type the IP Address of the Contact Center server. This is the Contact Center server IP address on the subnet that connects to the other servers and agent client computers in the contact center solution.
- 11. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is checked against the server security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.
- 12. In the Confirm Password box, type the password.
- 13. Select the Licensing tab, and configure the licensing details.
- 14. From the License Type list, select Standard KRS.
- 15. Click **Browse** to locate and load your license file.
- 16. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal Enterprise** for single-site contact centers.
- 17. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 18. Select the **Open Queue** check box.
- 19. Select the CS1000 tab.

			Avaya Co	ontact Center
Cor	n figur	ation	n Data	AVAYA
Core	Licensing	CS1000	Security Configuration	
	1000 Switch I vitch Name vitch IP Addr vitch Custom witch Serial N ternative Swi ternative Swi ternative Swi	Data ess er Number itch IP Add itch Custor itch Serial	ress mer Number Number	Voice Services Setup Voice Connection Type None Avaya Aura Experience Portal CallPilot CallPilot Configuration ELAN IP Address CPHA Managed CLAN IP Address CLAN IP Address

- 20. In the **Switch Name** box, type the name of the AML Avaya Communication Server 1000 telephone switch. Valid characters for Avaya Communication Server 1000 names are A–Z, a–z, 0–9, underscore (_), and period (.). Names must begin with an alphabetical character and cannot contain spaces. The last character must not be an underscore or a period. Names must not exceed 80 characters in length.
- 21. In the **Switch IP Address** box, type the IP address of the Avaya Communication Server 1000.
- 22. In the **Switch Customer Number** box, type the customer number for the Avaya Communication Server 1000.
- 23. In the **Alternative Switch IP Address** box, type the IP address of an alternate Avaya Communication Server 1000, if you have one.
- 24. In the **Alternative Switch Customer Number** box, type the customer number of the alternate Avaya Communication Server 1000, if you have one.
- 25. In the **Alternative Switch Serial ID** box, type the serial number of the alternate Avaya Communication Server 1000, if you have one.
- 26. In the **Voice Connection Type** section, select the method used to connect to the PABX. Select **None**, **Avaya Aura Experience Portal**, or **CallPilot**.
- 27. If you are using an Avaya CallPilot[®] server, enter the Avaya CallPilot[®] server **ELAN IP Address** and then configure the **Port** to 10008.
- 28. If you are using Avaya CallPilot[®] High Availability, in the **CPHA Managed CLAN IP Address** box, type the Avaya CallPilot[®] Managed CLAN IP address.
- 29. If you are using an Avaya CallPilot[®] server, in the **CLAN IP Address** box, type the CLAN IP address of the Avaya CallPilot[®] server.
- 30. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

	Avaya Contact Center	
Configuration Da	ta	AVAYA
Core Licensing CS1000 Security	a. Configuration	
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level SHA256 v Key Size 2048 v Security Store Password Confirm Store Password	Name of Organizational unit Name of Organization City or Locality State or Province Two letter country code	Subject Alternative Name Type DNS Value Add Remove
Skip Security Configuration		Create Store
Click Next to Continue		
		< Back Next > Cancel

31. If you do not want to enable security, select the **Skip Security Configuration** checkbox and skip to <u>step 50</u> on page 234.

Important:

A warning message appears.

32. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 33. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 34. In the Name of Organization box, type the company name.
- 35. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
- 36. In the **State or Province** box, type the state or province in which the contact center is located.

Deploying Avaya Aura[®] Contact Center DVD for Avaya Communication Server 1000 232 Comments on this document? infodev@avaya.com

- 37. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 38. In the **Security Store password** box, type a password for accessing the new security store.
- 39. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 40. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the Type drop-down list, select DNS.
 - b. In the **Value** field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

41. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 42. Click Create Store.
- 43. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya Contact Center	
Configuration Data	AVAYA
Core Licensing CS1000 Security Configuration	
Create CSR File Imported Trusted Certificate Authority Root Certificate(s)	Status
Add	Instruction of the control of the
Imported Identity Security Certificate	Alternatively, to defer Security Configuration and continue
Add	Reset
Click Next to Continue	
	< Back Next > Cancel

- 44. Click Create CSR File.
- 45. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 46. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 47. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 48. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 49. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 50. Click Next.
- 51. Review and verify the summary information, and click **Configure**.
- 52. After the installation is complete, click **Finish**.
- 53. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.

e		Task Scheduler			_ 🗆 X
File Action View Help					
SpacePort Storage Tiers Management Task Manager TaskScheduler	^	Name B Idle Maintenance Maintenance Con Manual Maintena	Status Ready Ready Ready	Triggers When computer is idle Multiple triggers defined	Next Run Time
TextServicesFramework Time Synchronization Time Zone III >	~	Regular Maintena	Ready	At 2:00 AM every day	10/6/2015 5:06:54
		, 			

8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Chapter 14: Multimedia Contact Server software installation

This chapter describes how to install the Multimedia Contact Server software that enables your contact center to handle multimedia contacts. Contact Center Multimedia (CCMM) software enables routing of email (including voice mail, SMS, faxes, and scanned documents), outbound, and Web communication contacts to appropriate agents based on subject, contact type, or the time that the contact arrives.

This section describes how to install Multimedia Contact Server software in Avaya Communication Server 1000 based solutions.

In some small contact center environments, you can install a Voice and Multimedia Contact Server to process both voice and multimedia contacts. But in large contact center environments, you must install the Multimedia Contact Server software on a standalone server. Separate servers are also required for email (MS Exchange for example), Web communication, and some outbound call processing.

You can use any account with local administrative rights to install Avaya Aura[®] Contact Center. You can use any account with local administrative rights to upgrade and patch Avaya Aura[®] Contact Center; you do not need to always use the same account to perform these tasks.

Important:

You must disable the Admin Approval Mode security feature on the Contact Center server. This ensures that accounts with local administrative rights get full privileges for running applications on the Contact Center server.

You must complete all the procedures in this section in sequential order.

Standby Multimedia Contact Server - High Availability note

Avaya Aura[®] Contact Center Multimedia Contact Server supports High Availability. To install a standby Multimedia Contact Server, first use the procedures in this chapter to install a primary active Multimedia Contact Server, then repeat the procedures in this chapter to install a standby Multimedia Contact Server.

You can use the procedures in this chapter to install the following:

- · Primary active Multimedia Contact Server
- (Optional) Standby Multimedia Contact Server
- (Optional) Remote Geographic Node Multimedia Contact Server

You can install a Multimedia Contact Server and commission it to be the standby Multimedia Contact Server in a campus High Availability solution. The standby server takes over multimedia contact processing and becomes the active server if the existing active Multimedia Contact Server fails. The standby server provides High Availability redundancy and resiliency. The standby and active servers must be at the same patch level and have the same hard disk drive partitions.

You can install another standby Multimedia Contact Server and commission it to be the Remote Geographic Node Multimedia Contact Server in a solution with Disaster Recovery. The Remote Geographic Node (RGN) server shadows the active server. The Remote Geographic Node server does not automatically take over if the active server fails. The standby server, Remote Geographic Node server, and active server must be at the same patch level and have the same hard disk drive partitions.

The roles and responsibilities of the active, Remote Geographic Node, and standby Multimedia Contact Servers are defined later during commissioning.

Multimedia Contact Server installation prerequisites

Procedure

- Install a Voice Contact Server to provide the core functionality for this Multimedia Contact Server.
- If you use email in your contact center, install and configure an inbound email server and an outbound email server in your network.
- If you use Web communications in your contact center, install and configure a Web server in your network.
- Ensure that your new Contact Center license file is available.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.

4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura[®] Contact Center Overview and Specification*.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

The following table lists the main inputs to consider while installing the operating system.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> .
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.

Table continues...

Name	Description
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select **Keyboard or input method** from the list.
- 6. Click Next.
- 7. Click Install now.
- Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.
- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I accept the license terms**.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader System Reserved partition.		
Application drive	D:	120 GB NTFS
DVD drive	E:	—
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Multimedia Contact Server database drive	G:	300 GB NTFS
Database journal	H:	100 GB NTFS

Navigating the Microsoft Windows Server 2012 R2 User Interface

This section describes how to navigate between the main user interface screens of the Windows Server 2012 R2 operating system.

The following table describes some of the main Microsoft Windows Server 2012 R2 user interface screens.

Screen name	Description
Start	The Start screen contains shortcuts to the main administration interfaces of the server. If you have an application that you access on a regular basis, you can add it to the Start screen so that it's more immediately accessible. The Start screen displays the currently logged on user and provides some basic server log out and locking functions. This is the operating system default screen.
Apps	The Apps screen contains shortcuts to the applications and utilities installed on the server. The server applications and utilities are grouped into categories. Third-party vendors and applications can also add custom, vendor or product specific, categories to the Apps screen.
Desktop	The Desktop screen contains the Windows start button, the Windows Taskbar, Recycle Bin, and shortcuts to the Windows Explorer utility, among others. The Taskbar displays the Windows Notification Area and System Tray. The notification area is located on the right portion of the Taskbar next to the time.

Navigation tips:

- Use the up 1 and down 1 arrow icons to navigate between the **Start** and **Apps** screens.
- To display the Start screen, on the Desktop screen, click the Windows start button.
- To display the **Desktop** screen, on the **Start** screen select the **Desktop** tile.
- To display the **Desktop** screen, on the **Apps** screen select the **Desktop** tile.
- To switch between the **Start** screen and the **Desktop** screen press the Windows start button on your keyboard.
- To access the Control Panel, on the Apps or Start screen click on the Control Panel tile.
- To access the Administration Tools, on the **Apps** or **Start** screen click on the **Administrative Tools** tile.

These screen navigation methods work when you are using the server's keyboard and mouse directly, or when you are using Remote Desktop to access the server.



Figure 14: Example of the Start screen, with the down arrow icon highlighted in a red box.

Desktop	Administrative Tools	Services	Remote Desktop Connection	Pelp and Supp
Internet Explorer	Component Services	System Configuration	Steps Recorder	Run
	Computer Management	System Information	Windows Server Backup	Task Manager
	Defragment and Optimize Drives	Task Scheduler	WordPad	This PC
	Event Viewer	Windows Firewall with Advanced	Windows Ease of Access	Windows PowerShell
	iSCSI Initiator	Windows Memory Diagnostic	Magnifier	
	Local Security Policy	Windows PowerShell (x86)	Narrator	
	ODBC Data Sources (32-bit)	Windows PowerShell ISE	On-Screen Keyboard	
	ODBC Data Sources (64-bit)	Windows PowerShell ISE	Windows System	
	Performance Monitor	Windows Accessories	Administrative Tools	
	Resource Monitor	Calculator	Command Prompt	
	Security Configuration	Notepad	Control Panel	
	Server Manager	Paint	File Explorer	

Figure 15: Example of the Apps screen, with the up arrow icon highlighted in a red box.



Figure 16: Example of the Desktop screen, with the Windows start button highlighted in a red box.

lcon	Name	Description
	Windows start button	Use the Windows start button to navigate to the Start screen. Use this button to switch between the Start screen and the Desktop screen.
F-	Server Manager	Use this button to access the Server Manager to configure the roles and features to the server.
	PowerShell	Use the PowerShell button to start the Windows PowerShell console. Windows PowerShell is a command-line shell that provides cmdlets (pronounced command-lets) for server configuration and management. PowerShell also provides scripting functions for task automation.
	This PC	Use this button to start the This PC Windows Explorer. Use this to access and navigate the folders, files, and storage devices on the server.

The following table describes some of the Taskbar sections of the **Desktop** screen.

The contents of your screens can vary depending on the roles, features, and applications installed on your server.

For more information about the Windows Server 2012 R2 operating system, refer to the Microsoft support website and Microsoft product documentation.

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- 2. Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.

- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding the server to a domain or workgroup

About this task

Add the server to a domain or workgroup. Avaya recommends that you add the server to the domain or workgroup before installing Contact Center software.

If you are using a domain:

- Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).
- Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** or **Workgroup** value.

The System Properties dialog box appears.

- 5. In the System Properties dialog box, click the Computer Name tab.
- 6. Click Change.
- 7. To add the server to a workgroup, skip to step 9.
- 8. To add the server to a domain, in the Member of dialog box, click the **Domain** option.
 - a. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).
 - b. Click OK.
 - c. Type the domain administrator **User name** and **Password**.
 - d. Click OK.
 - e. Skip to step 10.

- 9. To add the server to a workgroup, in the **Member of** dialog box, click the **Workgroup** option.
 - a. Type the workgroup name.
 - b. Click OK.
 - c. Type the workgroup administrator **User name** and **Password**.
 - d. Click OK.
- 10. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the

applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😒 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

Procedure

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.
- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click OK.

If prompted, restart the server.

1	Local Security Policy		x
File Action View Help			
🗢 🏟 🖄 📰 🗙 🗐 🗟 🚺 🖬			
 Security Settings Account Policies Local Policies Audit Policy Audit Policy User Rights Assignment Security Options Windows Firewall with Advanced Security Policies Public Key Policies Software Restriction Policies Application Control Policies IP Security Policies on Local Compute Advanced Audit Policy Configuration 	Policy • Image: Second Seco	Security Setting Not Defined Not Defined Disabled Disabled Disabled Disabled Not Defined Disabled Enabled Disabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Disabled Disabled Disabled Disabled Disabled Enabled Disabled Enabled Disabled Enabled Disabled Enabled	
< III >	🖏 User Account Control: Virtualize file and registry write failure	Enabled	~

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the real-time requirements for Contact Center deployment and configuration. You must therefore temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.

File Action View Help Image: SpaceDat Image: SpaceDat Image: SpaceDat	
SpacePort Name Status Triggers Next Storage Tiers Management Idle Maintenance Disabled When computer is idle Task Manager Maintenance Configurator Ready Multiple triggers defined 10/6 TextServicesFramework Ready Name Status 10/6	Run 1 /2015
Time Synchronization Image: Construction Time Zone Image: Construction TPM Image: Construction TPM Image: Construction	>

8. From the File menu, select Exit.

Installing the Multimedia Contact Server software

Before you begin

• Download the most recent Contact Center Multimedia and common component patches to the server.

• Empty all temporary folders on the server. To determine the specific temporary folders for a server, access the DOS prompt and type set. Note the values listed for TEMP and TMP, and delete all files in those locations.

About this task

Install the Multimedia Contact Server software to provide inbound and outbound voice, email (including voice mail, SMS, faxes and scanned documents), and Web communications contact types in your contact center. Multimedia Contact Server also supports Instant Messaging in SIP-enabled contact centers.

Procedure

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click **Setup.exe**.
- 3. Click Accept to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

5. The Contact Center software installer platform and server selection screen appears.
| AVAYA Avaya Aura® Contac | t Center 7.0 |
|---|--|
| Select Voice Platform
Avaya Aura® - SIP
Avaya Communication Server 1000 - AML | Integrate Contact Center with a SIP-enabled Avaya Aura Unified Communications
platform that includes an Avaya Aura Communication Manager (CM), an Avaya Aura
Session Manager (SM), and Avaya Aura® Application Enablement Services (AES). This
integration gives Contact Center access to and control of Avaya Aura phones and
includes Contact Center in the solution's dial plans. |
| Select Server Installation Option | |
| \bigcirc Voice and Multimedia Contact Server with Avaya Aura® Media Server | |
| \bigcirc Voice and Multimedia Contact Server without Avaya Aura® Media Server | |
| O Voice Contact Server Only | |
| O Multimedia Contact Server Only | |
| O Network Control Center Server Only | |
| | |
| | |
| | Cancel |
| | |

6. Select the type of multimedia server to install:

In an Avaya Communication Server 1000 (CS1000) based solution, in the **Select Voice Platform** section, select **Avaya Communication Server 1000 - AML**.

In a SIP-enabled solution, in the Select Voice Platform section, select Avaya Aura - SIP.

- 7. In the Select Server Installation Option section, select Multimedia Contact Server Only.
- 8. Click Next.
- 9. Under Journal Database Drive, select the drive for the database journal.
- 10. Under **Multimedia Contact Server Database Drive**, select the drive for the Contact Center Multimedia database.
- 11. In the Service Packs section, browse to and select the Service Pack.

AVAYA	Avaya Aura [®] Contact Center 7.0
Selection Destination Drives	
Journal Database Drive	
Voice Contact Server Databas	se Drive
Multimedia Contact Server Dat	tabase Drive
Service Packs	
Select the source location for s	service packs

- 12. Click Install.
- 13. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 14. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.
 - To print the license terms, click **Print**.
- 15. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 16. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
 - To print the license terms, click Print.

- 17. The **Progress** window appears and displays the installation progress.
- 18. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedure.

Configuring the Multimedia Contact Server software

Before you begin

- Ensure the Avaya Aura[®] Unified Communications platform is configured. For more information see *Avaya Aura[®] Contact Center and Avaya Aura[®] Unified Communications Integration*.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.
- Read the Contact Center Release Notes for the most recent instructions.

About this task

Configure the Contact Center Multimedia Contact Server software to provide inbound and outbound voice, email (including voice mail, SMS, faxes and scanned documents), and Web communications contact types in your contact center.

Procedure

- 1. Log on to the Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.
- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.

- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the Multimedia tab, and configure the Contact Center Multimedia details.

	Avaya Contact Center	r	
Configuration	Data	AVA	ŊА
Multimedia Voice Server Se	curity Configuration		
⊂ Incoming Mail Server			
Host Name	Protocol POP3 V		
Outgoing Mail Server Host Name	Protocol SMTP		
Click Next to Continue			
		< Back Next >	Cancel

- 7. In the **Incoming Mail Server** box, type the name of the server on which email messages are received in your network.
- 8. From the **Protocol** list, select the communication protocol for the inbound email server. Select **POP3** or **IMAP**. The default protocol is POP3.
- 9. In the **Outgoing Mail Server** box, type the name of the server from on which email messages are sent. Your inbound and outbound mail servers can have the same name.
- 10. Select the Voice Server tab.

		Ava	aya Contact Cen	ter			
Confi	guratio	n Data					ŊΑ
Multimedia	Voice Server	Security Configuration					
	ress						
Click Next to	o Continue						
				< E	lack	Next >	Cancel

- 11. In the IP Address box, type the IP address for the Contact Center Voice Contact Server.
- 12. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

Configuration Da	ta	Αναγ
Enter the required configuration dat Multimedia Voice Server Security	ca. Configuration	
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level SHA256 V Key Size 2048 V Security Store Password Confirm Store Password	Name of Organizational unit Name of Organization City or Locality State or Province Two letter country code	Subject Alternative Name Type DNS Value Add Remove
Skip Security Configuration		Create Store

13. If you do not want to enable security, select the **Skip Security Configuration** checkbox and skip to <u>step 32</u> on page 260.

Important:

A warning message appears. If you proceed without enabling security, you cannot fully commission your solution. For example, in SIP-enabled contact centers that use Voice, the SIP CTI link is disabled until you configure Contact Center TLS certificates to communicate securely with Application Enablement Services.

14. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 15. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 16. In the Name of Organization box, type the company name.
- 17. In the **City or Locality** box, type the name of the city or district in which the contact center is located.

- 18. In the **State or Province** box, type the state or province in which the contact center is located.
- 19. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 20. In the **Security Store password** box, type a password for accessing the new security store.
- 21. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 22. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the Type drop-down list, select DNS.
 - b. In the Value field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

23. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 24. Click Create Store.
- 25. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya Contact Cente	r
Configuration Data	AVAYA
Enter the required configuration data.	
Multimedia Voice Server Security Configuration	
Imported Trusted Certificate Authority Root Certificate(e)	Status
Imported Trusted Certificate Authority Root Certificate(s)	Status Ensure that a removable or network drive is available. Create the Certificate Signing
Add	Request file and save it to a removable or network drive.
Imported Identity Security Certificate	Alternatively, to defer Security Configuration and continue
Add	Reset
Click Next to Continue	

- 26. Click Create CSR File.
- 27. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 28. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 29. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 30. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 31. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 32. Click Next.
- 33. Review and verify the summary information, and click **Configure**.
- 34. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.

e		Task Scheduler			_ 🗆 X
File Action View Help					
SpacePort Storage Tiers Management Task Manager TaskScheduler	^	Name B Idle Maintenance Maintenance Con Manual Maintena	Status Ready Ready Ready	Triggers When computer is idle Multiple triggers defined	Next Run Time
TextServicesFramework Time Synchronization Time Zone III >	~	Regular Maintena	Ready	At 2:00 AM every day	10/6/2015 5:06:54
		,			

8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.

Installing the external Web communication server software

Before you begin

• Install Contact Center Multimedia software.

About this task

If you use Web communications in your contact center, you can use the Sample Customer Interface (CI) website implementation to help you develop pages for your corporate website. The Web services architecture is a platform-independent interface that customers can access from both Microsoft .NET and Java applications. Customer websites or third-party applications use the open interface for integration with the Contact Center Multimedia system.

The Customer Interface Web services provide a range of methods to perform the following functions:

- · Register new customers in the Contact Center Multimedia database
- · Log on or log off existing customers
- Update customer logon credentials
- Create customer contacts
- Update customer details
- Read customer information
- Review a customer contact history
- Request immediate or scheduled callback requests
- · Read a contact
- Create and maintain a Web communications chat session

To integrate Web Communications with the Contact Center Multimedia system, download the Avaya Aura[®] Contact Center Web Communications SDK package and Reference Implementation from <u>www.avaya.com/devconnect</u>. The Web Communications Reference Implementation contains information about customizing the Web communication application to your solution.

Important:

Do not install the Web Communications Reference Implementation on an Avaya Aura[®] Contact Center server. Install the Web Communications Reference Implementation on your own server in the contact center solution.

Procedure

- 1. Locate and download the Web Communications Reference Implementation software from www.avaya.com/devconnect.
- 2. Copy the Web Communications Reference Implementation software to the external Web server.
- 3. Follow the Reference Implementation instructions to install and commission the Web Communications server.

Commissioning the Contact Center server

About this task

Commission the installed Contact Center software.

Procedure

Commission the installed Contact Center software.

For information about commissioning the installed server software, see Avaya Aura[®] Contact Center Commissioning for Avaya Communication Server 1000.

Part 2: Network Control Center Server

Chapter 15: Network Control Center Server software installation

This chapter describes how to install the Network Control Center Server software on a network. The Network Control Center (NCC) server is required when servers in multiple Contact Center Manager Server sites are networked and operate as a single distributed contact center.

A Network Control Center Server includes the following server software:

- Contact Center Manager Server Network Control Center (NCC)
- Contact Center License Manager (LM)
- Contact Center Manager Administration (CCMA)

Install this server to add networking, network skill-based routing, and consolidated reporting support for a number of Voice and Multimedia Contact Servers operating as a single distributed contact center. Use this server to configure contact routing between the Voice and Multimedia Contact Server nodes of a distributed contact center solution.

Avaya Aura[®] Contact Center supports networked calls between AML-based and SIP-enabled nodes. The Network Control Center (NCC) software must be the most recent release, relative to the other nodes on the network. For example, in a network with Avaya Aura[®] Contact Center Release 7.0 and Release 6.4 nodes, the NCC must be Release 7.0. All nodes in the network must be Avaya Aura[®] Contact Center Release 6.4 or more recent.

All nodes in an Avaya Aura[®] Contact Center networking deployment, including the Network Control Center server, must be installed on operating systems from the same language family. Contact Center Manager Administration does not support displaying names from two different languages families. For example, a single Contact Center Manager Administration does not support one node with French and another node with Russian.

You must complete all the procedures in this section in sequential order.

Network Control Center Server software installation prerequisites

Procedure

Ensure that your new Contact Center license file is available.

Downloading the most recent documentation

Before you begin

- Download the most recent version of Acrobat Reader.
- Access the Avaya website at http://support.avaya.com.

About this task

Download the most recent documentation to ensure you have the most recent updates. Updates in the documentation accurately reflect the most recent changes in the software.

Procedure

- 1. Log on to the Avaya website.
- 2. Compare the versions of the documentation on the site with the versions you have.
- 3. If the version number on http://support.avaya.com is higher than your version, download the latest version of the document.
- 4. Review the Avaya website for release notes and readme files.

Installing Microsoft Windows Server 2012 R2

Before you begin

• Ensure that you have a newly formatted server that meets the specifications in *Avaya Aura*[®] *Contact Center Overview and Specification* on which to install Microsoft Windows Server 2012 R2.

Do not upgrade your operating system from a previous release. Contact Center is not supported on an upgraded operating system.

- Configure all servers for RAID as described in *Avaya Aura[®] Contact Center Overview and Specification*.
- Ensure that you have a DVD for Microsoft Windows Server 2012 R2 *Standard* or *Data Center*. Ensure that your DVD is the R2 version of Windows Server 2012 *Standard* or *Data Center*.
- Ensure that you have a Microsoft Windows Server 2012 R2 operating system product key.
- Know the IP addresses for the contact center subnet.

About this task

Install the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* operating system and configure it to support Contact Center server software.

The following table lists the main inputs to consider while installing the operating system.

Name	Description
Computer name	Do not use spaces or underscores or exceed 15 characters. The name must start with an alphabetic character. Server names must adhere to RFC1123. Avaya recommends that you configure the server final production name before installing Contact Center software.
	The computer name must match (including case sensitivity) the DNS name.
Disk drives	Format the partitions as required for the server. For more information, see Avaya Aura [®] Contact Center Overview and Specification.
Domain name	Configure as required for your site.
	You must check to ensure the DNS Domain name (including case) matches the server name if the server is added to a domain after configuration.
Licensing modes	Select Per server licensing mode.
	Accept the default five concurrent connections.
Network components	Configure IP Address, WINS, DNS for one or two network cards as per configuration. Contact Center does not support IPv6.
Network connections	If the server has more than one NIC/adapter, ensure contact center subnet appears first in the network adapter binding order.
Hard Disk Partitions	Configure C: drive to be a primary drive. Configure the other drives on your server to meet the requirements according to <i>Avaya Aura</i> [®] <i>Contact Center Overview and Specification</i> for the server.

Perform this procedure on each server before you install Contact Center server software on the server.

Procedure

- 1. Insert the Microsoft Windows Server 2012 R2 *Standard* or *Data Center* DVD into the DVD drive.
- 2. Turn on the power to the server.

The server begins to boot up.

- 3. On the Windows Setup screen, select a Language to install from the list.
- 4. Select a Time and currency format from the list.
- 5. Select Keyboard or input method from the list.
- 6. Click Next.
- 7. Click Install now.
- 8. Depending on the DVD image that you use, you might need to select an operating system from a list. Select a version of Windows Server 2012 R2 *Standard* or *Data Center* that includes a Graphical User Interface (GUI). Install a version that includes "(Server with a GUI)".
- 9. Click Next.

- 10. On the **Enter the product key to activate Windows** window, enter the operating system product key.
- 11. Click Next.
- 12. On the **Windows Setup** screen, read the terms of the license agreement and select **I** accept the license terms.
- 13. Click Next.
- 14. Select **Custom: Install Windows only (advanced)** to install a clean new installation of the operating system.
- 15. Select the disk partition on which you want to install Windows Server 2012 R2.

Important:

You can use the partition management options to configure the partitions on your server.

16. Click Next.

The installation proceeds and automatically restarts the server several times.

- 17. After completing the installation, log on to the server as Administrator. Enter and confirm the Administrator password.
- 18. Select **Set time zone** and complete the information as required for your system.
- 19. Select **Configure Networking** and complete the information for your Network Interface Card (NIC) with the server IP address.
- 20. Select **Provide computer name and domain** and complete the information for your server name and network settings.
- 21. Change the DVD drive letter to E: to ensure the correct drive letters are free for the Contact Center application and database hard disk drives and partitions.
- 22. Configure the hard disk drives and partitions for this server using the Windows Server 2012 R2 Computer Management Disk Management utility. For more information about hard disk drives and partitions, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- 23. Install other required drivers for your hardware configuration.

Job aid: Hard disk drive partitions

Configure the hard disk drives and partitions. These are the minimum hard disk partition sizes. For more information about hard disk requirements, including the recommended partition sizes, see *Avaya Aura[®] Contact Center Overview and Specification*.

For each partition, specify a volume size in MBs that when formatted results in a disk partition that is equal to or greater than the required minimum partition size.

Hard disk drive	Drive letter	Minimum size partition
Operating System drive	C:	80 GB NTFS
Including the 350 MB Windows boot loader System Reserved partition.		
Application drive	D:	120 GB NTFS
DVD drive	E:	_
For continuity and consistency, Avaya recommends using Drive letter E: for the DVD drive. However, Contact Center supports any DVD Drive letter, other than the Drive letters listed here for the hard disk partitions.		
Voice Contact Server database drive	F:	200 GB NTFS
Database journal	H:	100 GB NTFS

Navigating the Microsoft Windows Server 2012 R2 User Interface

This section describes how to navigate between the main user interface screens of the Windows Server 2012 R2 operating system.

The following table describes some of the main Microsoft Windows Server 2012 R2 user interface screens.

Screen name	Description
Start	The Start screen contains shortcuts to the main administration interfaces of the server. If you have an application that you access on a regular basis, you can add it to the Start screen so that it's more immediately accessible. The Start screen displays the currently logged on user and provides some basic server log out and locking functions. This is the operating system default screen.
Apps	The Apps screen contains shortcuts to the applications and utilities installed on the server. The server applications and utilities are grouped into categories. Third-party vendors and applications can also add custom, vendor or product specific, categories to the Apps screen.
Desktop	The Desktop screen contains the Windows start button, the Windows Taskbar, Recycle Bin, and shortcuts to the Windows Explorer utility, among others. The Taskbar displays the Windows Notification Area and System Tray. The notification area is located on the right portion of the Taskbar next to the time.

Navigation tips:

- Use the up o and down arrow icons to navigate between the **Start** and **Apps** screens.
- To display the Start screen, on the Desktop screen, click the Windows start button.

- To display the **Desktop** screen, on the **Start** screen select the **Desktop** tile.
- To display the **Desktop** screen, on the **Apps** screen select the **Desktop** tile.
- To switch between the **Start** screen and the **Desktop** screen press the Windows start button on your keyboard.
- To access the Control Panel, on the Apps or Start screen click on the Control Panel tile.
- To access the Administration Tools, on the **Apps** or **Start** screen click on the **Administrative Tools** tile.

These screen navigation methods work when you are using the server's keyboard and mouse directly, or when you are using Remote Desktop to access the server.



Figure 17: Example of the Start screen, with the down arrow icon highlighted in a red box.

Desktop	Administrative Tools	Services	Remote Desktop Connection	? Help and Suppo
Internet Explorer	Component Services	System Configuration	Steps Recorder	Run
	Computer Management	System Information	Windows Server Backup	Task Manager
	Defragment and Optimize Drives	Task Scheduler	WordPad	This PC
	Event Viewer	Windows Firewall with Advanced	Windows Ease of Access	Windows PowerShell
	iSCSI Initiator	Windows Memory Diagnostic	Magnifier	
	Local Security Policy	Windows PowerShell (x86)	Narrator	
	ODBC Data Sources (32-bit)	Windows PowerShell ISE	On-Screen Keyboard	
	ODBC Data Sources (64-bit)	Windows PowerShell ISE	Windows System	
	Performance Monitor	Windows Accessories	Administrative Tools	
	Resource Monitor	Calculator	Command Prompt	
	Security Configuration	Notepad	Control Panel	
	Server Manager	Paint	File Explorer	

Figure 18: Example of the Apps screen, with the up arrow icon highlighted in a red box.



Figure 19: Example of the Desktop screen, with the Windows start button highlighted in a red box.

lcon	Name	Description
	Windows start button	Use the Windows start button to navigate to the Start screen. Use this button to switch between the Start screen and the Desktop screen.
P	Server Manager	Use this button to access the Server Manager to configure the roles and features to the server.
2	PowerShell	Use the PowerShell button to start the Windows PowerShell console. Windows PowerShell is a command-line shell that provides cmdlets (pronounced command-lets) for server configuration and management. PowerShell also provides scripting functions for task automation.
	This PC	Use this button to start the This PC Windows Explorer. Use this to access and navigate the folders, files, and storage devices on the server.

The following table describes some of the Taskbar sections of the **Desktop** screen.

The contents of your screens can vary depending on the roles, features, and applications installed on your server.

For more information about the Windows Server 2012 R2 operating system, refer to the Microsoft support website and Microsoft product documentation.

Installing the most recent supported operating system service packs

Before you begin

- Access the Avaya hotfixes list on the website http://support.avaya.com.
- Install and configure Microsoft Windows Server 2012 R2 on your server.
- Review the specifications on operating system service updates in *Avaya Aura[®] Contact Center Overview and Specification.*

About this task

Avaya recommends that you install the most recent supported operating system service packs. You must download the supported operating system service pack from the Avaya hotfixes list to ensure your Contact Center server software functions correctly with the supported operating system patches.

Procedure

- 1. Review the Contact Center Service Packs Compatibility and Security Hotfixes Applicability List to determine the most recent Avaya Aura[®] Contact Center supported patches or service packs.
- Download the appropriate Microsoft Windows Server 2012 R2 patches for the Avaya Aura[®] Contact Center software installed on this server.
- 3. Install the most recent Windows Server 2012 R2 service pack that is validated with Avaya Aura[®] Contact Center by following the Microsoft Installation instructions.

Connecting to the contact center subnet

About this task

Connect the Contact Center server to the contact center subnet. The contact center subnet is the network on which the server software applications work together to route contacts and generate reports.

Procedure

1. Locate the slot assigned to the contact center subnet network interface card for the server. Make a note of the slot.

- 2. Connect the cable from the contact center subnet to the contact center subnet network interface card in the server in accordance with customer site networking guidelines.
- 3. Use the ping command to test the contact center subnet.

Adding a server to a domain

Before you begin

- Ensure that you have domain administrator privileges, or ask the Domain Administrator to assign you a domain user account for remote access.
- On the server, configure a preferred Domain Name System (DNS) server on the Network Interface Card (NIC).

About this task

Add the server to an existing domain.

Note:

Add the server to a Windows domain before installing Contact Center software. When joining the domain, ensure the server time and domain controller time are synchronized to the same time.

Ask your System Administrator to add a Domain Name System (DNS) static entry for this server. Each Contact Center server in a domain requires a DNS static entry.

If your solution is going to use High Availability, ask your System Administrator to add one DNS static entry for each managed name and associated managed IP address. A typical High Availability campus solution with a pair of servers requires three DNS static entries; one DNS static entry for the active server, one DNS static entry for the standby server, and one DNS static entry for the managed name and associated IP address. Avaya Aura[®] Contact Center High Availability solutions do not support Windows Server Dynamic DNS.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Administrative Tools > Server Manager.
- 3. In the left pane, select Local Server.
- 4. In the right pane, in the **Properties** section, double-click on the **Domain** value.

The System Properties dialog box appears.

- 5. In the **System Properties** dialog box, click the **Computer Name** tab.
- 6. Click Change.
- 7. In the **Member of** section, click the **Domain** option.
- 8. Type the domain name (you must provide the fully qualified domain name, which includes the prefix and suffix).

- 9. Click **OK**.
- 10. Type the domain administrator **User name** and **Password**.
- 11. Click **OK**.
- 12. Restart the server when you are prompted to do so.

Downloading the most recent Contact Center patches to the server

Before you begin

- Download and install the most recent and supported updates for Microsoft Windows Server 2012 R2.
- Know the location at which you plan to install each Contact Center server software package.
- Ensure that you use one administrator account on your server to un-install and install software updates.

About this task

To ensure that you have the most current software, download the most recent Contact Center patches from <u>http://support.avaya.com</u> to the server you plan to install.

Procedure

- 1. Log on to the server using the administrator account.
- 2. Create a folder <Drive>:\Avaya-ProductUpdates\ to save the software updates. Where <Drive> is the drive letter on which you want to save the Contact Center software updates.
- 3. Download the most recent service pack file. Save and unzip the file on the Contact Center server in the Avaya-ProductUpdates folder.
- 4. If new patches are available for the latest service pack, download and save the patches on the Contact Center server in the Avaya-ProductUpdates folder.
- 5. Read the Contact Center Release Notes for the most recent instructions.

Disabling unused Network Adapters

About this task

Disable all unused Network Adapters or Network Interface Cards (NICs) to improve network communications and prevent the erroneous configuration of unused NICs during Contact Center server commissioning.

Procedure

- 1. Log on to the server.
- 2. On the Start screen, select Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings.
- 3. Right-click on the unused Network Adapter, and select **Disable**.
- 4. Repeat this procedure for all unused Network Adapters.

Enabling Microsoft Remote Desktop connection

About this task

Enable Microsoft Remote Desktop connection as your remote access tool. Microsoft Remote Desktop provides remote access for support on the server.

Procedure

- 1. Log on to the server with administrator privileges.
- 2. On the Start screen, select Control Panel > System and Security.
- 3. In the System section, select Allow remote access.
- 4. Click the **Remote** tab.
- 5. Select Allow remote connections to this computer.
- 6. Click Apply.
- 7. Click OK.

Disabling Admin Approval Mode for Windows Server administrators

About this task

Windows Server 2012 implements a security feature known as User Account Control (UAC). By default, this feature causes applications run by local non built-in administrators to behave as if the applications had been run by standard users. Perform this procedure to ensure that local administrators get full privileges for running applications.

😮 Note:

This procedure describes how to disable Admin Approval Mode on the Contact Center server using one method only; there are additional methods available. For example, you can also administer User Account Control settings for the Contact Center server using a group policy.

Procedure

- 1. On the Start screen, select Administrative Tools > Local Security Policy.
- 2. Under Security Settings, expand Local Policies.
- 3. Select Security Options.
- 4. In the policy pane on the right, double-click on User Account Control: Run all administrators in Admin Approval Mode.
- 5. Click the Local Security Setting tab, and select Disabled.
- 6. Click OK.

If prompted, restart the server.

1	Local Security Policy	_ □	x
File Action View Help			
🗢 🔿 🙍 📰 🗙 🗐 🗟 📑			
 Security Settings Account Policies Local Policies Audit Policy Gurrer Rights Assignment Security Options Windows Firewall with Advanced Security Opticies Public Key Policies Software Restriction Policies Application Control Policies Rescurity Policies on Local Compute Advanced Audit Policy Configuration 	Policy • Image: Second Seco	Security Setting Not Defined Not Defined Disabled Disabled Disabled Disabled Enabled Disabled Disabled Disabled Disabled Prompt for consent for Prompt for credentials Enabled Disabled Disabled Enabled Enabled Enabled Enabled Enabled	
<			~

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while installing Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the real-time requirements for Contact Center deployment and configuration. You must therefore

temporarily disable Automatic Maintenance to install and configure Contact Center software. You re-enable Automatic Maintenance after deploying and configuring Contact Center.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.



8. From the File menu, select Exit.

Installing the Network Control Center Server software

Before you begin

- If you install Network Control Center server software with an AML Avaya Communication Server 1000, ensure the PABX is configured. See Avaya Aura® Contact Center and Avaya Communication Server 1000 Integration.
- If you install Network Control Center server software with an Avaya Aura[®] Unified Communications platform, ensure the platform is configured. See Avaya Aura[®] Contact Center and Avaya Aura[®] Unified Communications Integration.
- Download the most recent Network Control Center patches to the server.

About this task

Install the Network Control Center server software to enable your contact center to route contacts to available agents with the correct skills.

Procedure

- 1. Insert the Contact Center DVD into the DVD drive of your server.
- 2. If the installation does not automatically start, double-click **Setup.exe**.
- 3. Click Accept to install the Microsoft .NET Framework on the server.

If you are prompted to accept the Microsoft .NET Framework license agreement, click **Accept**. If you are prompted to restart the server, click **Yes** and repeat step 2.

4. Contact Center software installer runs Operating System and hardware checks on the server. If the installer returns a Fail, the software installation cannot proceed until you correct the problem. Review any failures returned by the System Readiness Check and consult Avaya Aura[®] Contact Center Overview and Specification to determine the actions to resolve the issue.

You can ignore warnings if the potential impact to the operation of the contact center is understood and not applicable.

5. The Contact Center software installer platform and server selection screen appears.

Select Voice Platform Avaya Aura® - SIP Avaya Communication Server 1000 - AML	Integrate Contact Center with a SIP-enabled Avaya Aura Unified Communications platform that includes an Avaya Aura Communication Manager (CM), an Avaya Aura Session Manager (SM), and Avaya Aura® Application Enablement Services (AES). Th integration gives Contact Center access to and control of Avaya Aura phones and includes Contact Center in the solution's dial plans.
Select Server Installation Option	
○ Voice and Multimedia Contact Server with Avaya Aura® Media Server	
\bigcirc Voice and Multimedia Contact Server without Avaya Aura® Media Server	
O Voice Contact Server Only	
O Multimedia Contact Server Only	
Network Control Center Server Only	

6. Select the type of Network Control Center server to install:

In an Avaya Communication Server 1000 (CS1000) based solution, in the **Select Voice Platform** section, select **Avaya Communication Server 1000 - AML**. In a SIP-enabled solution, in the Select Voice Platform section, select Avaya Aura - SIP.

- 7. In the Select Server Installation Option section, select Network Control Center Server Only.
- 8. Click Next.
- 9. Under Journal Database Drive, select the drive for the database journal.
- 10. Under Voice Contact Server Database Drive, select the drive for the database.
- 11. In the Service Packs section, browse to and select the Service Pack.

AVAYA	Avaya Aura [®] Contact Center 7.0
election Destination Drives –	
Journal Database Drive	
Voice Contact Server Databa	ase Drive
*	
Multimedia Contact Server Da	atabase Drive
ervice Packs Select the source location for	r service packs

- 12. Click Install.
- 13. The AVAYA GLOBAL SOFTWARE LICENSE TERMS window appears.
- 14. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click I DECLINE THE LICENSE TERMS. The installation returns to the Select Destination Drive screen. Click Cancel to stop the install.

- To print the license terms, click **Print**.
- 15. The MICROSOFT SOFTWARE LICENSE TERMS window appears.
- 16. Read the terms of the license.
 - If you accept the terms, click I ACCEPT THE LICENSE TERMS. The installation continues.
 - If you do not accept the terms, click **I DECLINE THE LICENSE TERMS**. *The installation returns to the Select Destination Drive screen*. Click **Cancel** to stop the install.
 - To print the license terms, click **Print**.
- 17. The **Progress** window appears and displays the installation progress.
- 18. When the software is installed, you have the following options.
 - To continue configuring the server installation data:
 - a. Select Launch Avaya Aura Contact Center Ignition Wizard.
 - b. Click **Configure**. This starts the Avaya Aura[®] Contact Center Ignition Wizard.
 - To defer configuring the server installation data:
 - a. Clear Launch Avaya Aura Contact Center Ignition Wizard.
 - b. On the message box, click Yes.
 - c. On the main installer screen, click **Close**.
 - d. Follow the on-screen instructions and shut down the Contact Center server.

You must use the Ignition Wizard to initialize Avaya Aura[®] Contact Center, otherwise Avaya Aura[®] Contact Center is not operational. For more information about the Ignition Wizard, see the following procedures.

Configuring the Network Control Center Server software

Before you begin

- If you install Network Control Center server software with an AML Avaya Communication Server 1000, ensure the PABX is configured. See Avaya Aura® Contact Center and Avaya Communication Server 1000 Integration.
- If you install Network Control Center server software with an Avaya Aura[®] Unified Communications platform, ensure the platform is configured. See Avaya Aura[®] Contact Center and Avaya Aura[®] Unified Communications Integration.
- You must configure the required language and locale of the Contact Center server operating system, if it is not a Latin-1 language, before configuring the Contact Center server using the Contact Center Ignition Wizard. For more information about configuring language and locale settings on the Contact Center server, see *Avaya Aura*[®] *Contact Center Server Administration*.

• Download the most recent Network Control Center patches to the server.

About this task

Configure the Network Control Center server software to enable your contact center to route contacts to available agents with the correct skills.

Procedure

- 1. Log on to the Contact Center server using the Administrator account details.
- 2. On the Contact Center Ignition Wizard screen, click **Next**. If the Contact Center Ignition Wizard is not visible, click the Ignition Wizard shortcut on the desktop.
- On the End-User License Agreement screen, read the license agreement. Optionally, click Print to generate a local soft copy (in OpenXPS Document format) of the license agreement.
- 4. Select I Accept the Terms of the End-User License Agreement and click Next.
- 5. On the **Configuration Data** window, type the configuration details for each tab.
- 6. Select the **Core** tab, and configure the server details.

			Avaya Contact Center
Cor Enter t	figur	ation Data	AVAYA
Core	Licensing	Security Configuration	
	e Name e Name 27SIP		System Account Configuration Enter a password for the Contact Center administration Windows account. Password Confirm Password
Click Ne	ext to Conti	inue	
			< Back Next > Cancel

7. In the **Site Name** box, type the site name for the Contact Center server. The site name must not contain spaces or non-alphabetical characters except hyphen (-) and underscore

(_). The first character must be a letter. The site name must be unique and can consist of 6 to 15 characters.

- 8. In the **System Account Configuration** section, in the **Password** box, type a password for the Contact Center administration account. The password is not checked against the server security policy for minimum password requirements. Avaya recommends that you enter a password that conforms to your corporate password policy.
- 9. In the **Confirm Password** box, type the password.
- 10. Select the Licensing tab, and configure the licensing details.

Configuration Data Enter the required configuration data. Core Licensing Standard KRS License File License File Browse Skip System HostID (MAC Address) Signed Address) D0:50:56:8D:48:8D				Avaya Conta	ct Center		
Core Licensing Security Configuration License Type License Manager Package Standard KRS V License File Nodal NCC License File Location Universal Networking Browse Skip System HostID (MAC Address) 00:50:56:8D:48:8D	Con	figur	ation Data				YA
License Type Standard KRS License File Nodal NCC License File Location Browse Skip System HostID (MAC Address) 00:50:56:8D:48:8D	Core I	Licensing	Security Configuration				
	Licen Licen Licer Syst	ndard KRS nse File nse File Loo Browse tem HostID 50:56:8D	MAC Address)	Skip	License Mai Package Nodal NCC Features	al Networking	~

- 11. From the License Type drop-down list, select Standard KRS.
- 12. Click **Browse** to locate and load your license file.
- 13. From the **Licensing Package** list, select the license type that you have purchased. Select **Nodal NCC** for single-site contact centers. Select **Corporate NCC** for multi-site contact centers.
- 14. From the list of **Optional Packages**, enable the licensed features that you have purchased.
- 15. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.

	Avaya Contact Center	
Configuration Da	ta	AVAYA
Core Licensing Security Configura	ation	
Security Store Details Full Computer Name (FQDN) CC7SIP.aaccdomain.com Encryption Algorithm Level SHA256 V Key Size 2048 V Security Store Password Confirm Store Password	Name of Organizational unit Name of Organization City or Locality State or Province Two letter country code	Subject Alternative Name Type DNS Value Add Remove
Skip Security Configuration		Create Store
Click Next to Continue		
		Sack Next > Cancel

 If you do not want to enable security, select the Skip Security Configuration checkbox and skip to <u>step 35</u> on page 286.

Important:

A warning message appears. If you proceed without enabling security, you cannot fully commission your solution. For example, in SIP-enabled contact centers that use Voice, the SIP CTI link is disabled until you configure Contact Center TLS certificates to communicate securely with Application Enablement Services.

17. In the **Full Computer Name (FQDN)** box, type the full FQDN of the server on which you are creating the security store.

Important:

The FQDN must be the full machine name of the server that the Security Store resides on. The FQDN name is case-sensitive.

- 18. In the **Name of Organizational unit** box, type the name of the department or division within the company.
- 19. In the Name of Organization box, type the company name.
- 20. In the **City or Locality** box, type the name of the city or district in which the contact center is located.

- 21. In the **State or Province** box, type the state or province in which the contact center is located.
- 22. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
- 23. In the **Security Store password** box, type a password for accessing the new security store.
- 24. In the **Confirm Store password** box, confirm the password for accessing the new security store.

Important:

Ensure you remember this password, because you need it when you log on to Security Manager after install. If you forget the password, you cannot access Security Manager.

- 25. If you are implementing High Availability in the contact center, generate the security store using Subject Alternative Names (SANs). In the **Subject Alternative Name** section, for each SAN you want to add:
 - a. From the Type drop-down list, select DNS.
 - b. In the Value field, type the FQDN for the server.
 - c. Click Add.

For a High Availability system, add the current server FQDN and the Managed name for the HA pair.

26. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

The default value for **Encryption Algorithm** is SHA256 and the default value for **Key Size** is 2048.

Contact Center displays a warning message if you select SHA1 or 1024. Contact Center includes these values for backward-compatibility only, because these settings do not meet the industry-recommended level of encryption.

- 27. Click Create Store.
- 28. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.

Avaya Contact Cent	ter
Configuration Data	Αναγα
Enter the required configuration data.	
Core Licensing Security Configuration	
Create CSR File Imported Trusted Certificate Authority Root Certificate(s)	Status
Add	Ensure that a removable or network drive is available. Create the Certificate Signing Request file and save it to a removable or network drive.
Imported Identity Security Certificate Add	Alternatively, to defer Security Configuration and continue with the Ignition Wizard Reset
Imported Identity Security Certificate Add Click Next to Continue	Alternatively, to defer Security Configuration and continue with the Japition Wizard Reset

- 29. Click Create CSR File.
- 30. From the **Save In** drop-down list, select a shared location in which to save the CSR file and click **Save**.

You must now send the Certificate Signing Request file to a Certificate Authority and receive a signed certificate and root certificate to import to the security store.

- 31. In the **Imported Trusted Certificate Authority Root Certificate(s)** section, click **Add** to import the Certificate Authority root certificate.
- 32. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 33. In the **Imported Identity Security Certificate** section, click **Add** to import the Certificate Authority signed certificate.
- 34. In the **Open** dialog box, browse to the location of the certificate and click **Open**.
- 35. Click Next.
- 36. Review and verify the summary information, and click **Configure**.
- 37. After the installation is complete, click **Finish**.
- 38. If prompted, restart the server.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after deploying and configuring Contact Center software.

Procedure

- 1. Log on to the Contact Center server as Administrator.
- 2. On the Desktop screen, right-click Start and select Run.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.
- 7. In the Name column, right-click Regular Maintenance and select Enable.

•		Task Scheduler			_ 🗆 X
File Action View Help					
SpacePort Storage Tiers Management Task Manager TaskScheduler	^	Name Idle Maintenance Maintenance Con Manual Maintena	Status Ready Ready Ready	Triggers When computer is idle Multiple triggers defined	Next Run Time
TextServicesFramework Time Synchronization Time Zone III	~	Regular Maintena	Ready	At 2:00 AM every day	10/6/2015 5:06:54

8. From the File menu, select Exit.

Securing the Windows server

About this task

Apply optional security measures to your operating system to further secure your server.

Important:

Scanning software can degrade the performance and decrease the reliability of the system. Install virus scanning software only if the system connects to an exposed network or to the Internet.

Important:

To maintain server performance, you must schedule virus scans during maintenance periods or low usage hours only.

Procedure

- 1. Harden the operating system using defined site procedures.
- 2. Install antivirus software. If you install antivirus software, Avaya recommends that you exclude some contact center files and folders from real-time and scheduled scans. For more information, and for a list of files and folders to exclude, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
Part 3: Client Software installation

Chapter 16: Agent Desktop client software installation

This chapter describes how to install the Agent Desktop client software on each client computer in your contact center. The Agent Desktop enables agents to handle contacts of all media types enabled in your contact center from the start to the end of a contact. The Agent Desktop is part of the Avaya Aura[®] Contact Center solution.

You install the Agent Desktop client application on the client computers. Download the client software from the server by accessing a Web location on the server.

You must complete the procedures in this section in sequential order.

Agent Desktop client software installation prerequisites Procedure

- Install Voice and Multimedia Contact Server software or Multimedia Contact Server software.
- Install one of the supported operating systems for Agent Desktop on the client computer.
- Install Internet Explorer.

Installing the Agent Desktop software prerequisites

About this task

Install the prerequisites for Agent Desktop client software. You must have administrator privileges to install Agent Desktop prerequisites.

Procedure

- 1. Log on to the client computer using administrator privileges.
- 2. On the client computer, start Internet Explorer.
- 3. In the Address box, type http://<servername>/agentdesktop.

Where servername is the name of the server on which the Contact Center Multimedia server software is installed.

4. On the Agent Desktop page, click Install Prerequisites.

The client downloads the .NET Framework and C++ software from the server and installs the application on the client.

😵 Note:

Different client PC operating systems use different versions of MSI installer. Information about the different versions of MSI is available at <u>http://</u>www.microsoft.com/en-us/download/details.aspx?id=8483.

Installing the Agent Desktop client software

Before you begin

• Ensure that you have installed the prerequisites required for the Agent Desktop client software. For more information, see <u>Installing the Agent Desktop software prerequisites</u> on page 290.

About this task

Install the Agent Desktop client software on each client computer for which an agent logs on to handle contacts using the softphone and multimedia toolbar.

Procedure

- 1. On the client computer, start Internet Explorer.
- 2. In the Address box, type http://<servername>/agentdesktop.

Where servername is the name of the server on which the Contact Center Multimedia server software is installed.

Note:

The Agent Desktop installer does not use a secure HTTPS connection, even if Web Services security is turned on.

- 3. Click Launch.
- 4. On the Application Install Security Warning message box, click Install.

Chapter 17: Agent Desktop client software silent installation

This chapter describes how to install the Avaya Agent Desktop client software silently on each client computer in your contact center. Contact Center agents use Agent Desktop software to handle customer voice and multimedia contacts.

😵 Note:

The Agent Desktop MSI installation package includes an integrated softphone. SIP-enabled Contact Center supports this Agent Desktop integrated softphone. AML-based Contact Center does not support this Agent Desktop integrated softphone. For AML-based solutions, when installing Agent Desktop using the MSI file, disable the softphone option.

Agents can use Avaya one-X[®] Communicator coresident with Agent Desktop if you disable the integrated softphone. If you plan for all agents to use Avaya one-X[®] Communicator, disable the softphone option.

Installing software prerequisites for an Agent Desktop silent install

Before you begin

Download the most recent Service Pack and patches from the Avaya support website, <u>http://support.avaya.com</u>.

About this task

Install the software prerequisites for Avaya Agent Desktop, so that you can install Agent Desktop silently.

You can use the Windows Add\Remove programs utility to uninstall the Agent Desktop software prerequisites.

- 1. Log on to the Contact Center server using administrator privileges.
- 2. Browse to <Drive>:\Avaya-ProductUpdates\Install Software\CCMM \AvayaCC_CCMM_<XXX>\AAAD Prerequisites, where <Drive> is the drive containing

the most recent Service Pack, and <XXX> is the version number of the latest Service Pack.

3. Copy the prerequisites folder to a location from which you can copy it to the client computer.

For example, copy the AAAD Prerequisites folder to a USB memory stick or network location.

- 4. Log on to the client computer using administrator privileges.
- 5. Copy the prerequisites folder to the client computer.
- 6. Install Microsoft .NET Framework 4.5.2. When you install Microsoft .NET Framework 4.5.2, you also get .NET Framework 4.0 and 4.5.
- 7. Install Windows Installer 4.5 Redistributable.
- 8. Install Microsoft Visual C++ 2005 SP1 Redistributable Package ATL Security Update.
- 9. Install Microsoft Visual C++ 2008 SP1 Redistributable Package x86.

Installing Agent Desktop client software silently

Before you begin

• Download the most recent Service Pack and patches from the Avaya support website, <u>http://</u><u>support.avaya.com</u>.

About this task

Install Avaya Agent Desktop client software silently to install the software as a desktop application with an All Users profile. This allows all agents that can log on to the client computer to run Agent Desktop software. By default, the Agent Desktop software installs in the Program Files folder.

😵 Note:

The Agent Desktop MSI installation package includes an integrated softphone. SIP-enabled Contact Center supports this Agent Desktop integrated softphone. AML-based Contact Center does not support this Agent Desktop integrated softphone. For AML-based solutions, when installing Agent Desktop using the MSI file, disable the softphone option.

Agents can use Avaya one-X[®] Communicator coresident with Agent Desktop if you disable the integrated softphone. If you plan for all agents to use Avaya one-X[®] Communicator, disable the softphone option.

You can use the Windows Add\Remove programs utility to uninstall the Agent Desktop software.

Procedure

1. Log on to the Contact Center server using administrator privileges.

- 2. Browse to <Application Drive>:\Avaya\Contact Center\Multimedia Server \Agent Desktop\Client\, where <Application Drive> is the drive on which you installed the Contact Center software. By default, this is the D: drive.
- 3. Copy the AvayaAgentDesktopClient.msi installation file to a USB memory stick or network location.
- 4. Log on to the client computer using administrator privileges.
- 5. Copy the AvayaAgentDesktopClient.msi installation file to the client computer.
- Open a command prompt by clicking Start > All Programs > Run. Type cmd and press Enter.
- 7. Use the Microsoft Windows Installer program (msiexec.exe) to install the software. For example:

C:\AAAD>msiexec.exe /package AvayaAgentDesktopClient.msi / quiet /log "products.log" AAADSOFTPHONE=0 MMSERVERNAME=MyCCMMServer AAADUSEHTTPS=FALSE

Where:

- AAADSOFTPHONE This parameter enables or disables the Agent Desktop integrated softphone installation. For AML-based solutions, set this parameter to 0. For SIP-enabled solutions, set this parameter to 1 to install the integrated softphone, or 0 not to install the integrated softphone.
- MMSERVERNAME This parameter configures the name of the Contact Center Multimedia (CCMM) server that the Agent Desktop application communicates with. This parameter can be an IP Address or a server name.
- AAADUSEHTTPS This binary parameter (TRUE or FALSE) configures Agent Desktop to communicate with the CCMM server using Hypertext Transfer Protocol Secure (HTTPS). The default value is FALSE, do not use HTTPS.

The Agent Desktop software installs silently.

8. Close the command prompt window.

Chapter 18: Agent Desktop client software installation using Remote Desktop Services

This chapter describes how to use Remote Desktop Services on a Windows Server 2012 R2 server to host and publish Agent Desktop.

Agent Desktop client software installation using Remote Desktop Services prerequisites

Procedure

- Install the required Contact Center server software.
- Install and commission one or more Agent Desktop clients to confirm Agent Desktop functionality.
- Deploy and integrate Windows Server 2012 Remote Desktop Services servers in your solution. Deploy a RD Connection Broker, a RD Web Access, and a RD Session Host corresident or standalone.
- Install Agent Desktop software on the RD Session Host server, using the Agent Desktop MSI installation package. Ensure that you disable the softphone option. For more information about installing Agent Desktop using MSI installation package, see <u>Agent Desktop client</u> <u>software silent installation</u> on page 292.
- Review the Agent Desktop client requirements for deployment using Remote Desktop Services. See Avaya Aura[®] Contact Center Overview and Specification.

Publishing Agent Desktop client software using Remote Desktop Services

About this task

Remote Desktop Services, formerly known as Terminal Services, allows a server to host multiple simultaneous client sessions. In the Remote Desktop Services (RDS) environment, an application

runs entirely on the Remote Desktop Session Host (RD Session Host) server. The RDS client performs no local processing of application software.

Follow the procedure below to publish Agent Desktop client software using Remote Desktop Services.

Procedure

- 1. Configure CCMM to support Agent Desktop on a Windows 2012 R2 operating system:
 - a. Log on to CCMA.
 - b. On the Launchpad, click Multimedia.
 - c. In the left pane, select the server to which you want to log on.
 - d. Click Launch Multimedia Client.
 - e. In the left column, select Agent Desktop Configuration.
 - f. Click User Settings.
 - g. Select Suppress OS not supported popup.
 - h. Click Save.
- 2. Log on to the RDS Session Host server with administrative privileges.
- 3. Using the Server Manager Remote Desktop Services utility, select Collections > QuickSessioncollection.
- 4. In the **REMOTEAPP PROGRAMS** section, from the **TASKS** drop-down list, select **Publish RemoteApp Programs**.
- 5. From the RemoteApp Programs list, select Avaya Agent Desktop 7.0.
- 6. Click Next.
- 7. Click Publish.
- 8. From the **REMOTEAPP PROGRAMS** list, right-click **Agent Desktop** and select **Properties**.
- 9. Configure the agent, user, and user group accounts to access the Agent Desktop RemoteApp.
- 10. Log on to an agent client computer.
- 11. Use Internet Explorer to access the RD Web Access Interface. For example, access the RD Web Access Interface using the following URL:

```
https://<RDS Server FQDN>/RDWeb
```

12. On the **Work Resources** page, enter the Windows domain account details for the agent and click **Sign in**.

The web interface lists the RemoteApps available to the agent.

- 13. In the Current folder section, double-click Agent Desktop.
- 14. Log on to Agent Desktop and Go Ready.

15. Verify that the Agent Desktop RemoteApp can handle routed customer calls, and continue to verify the features your solution requires.

Next steps

Using the Server Manager Performance and Best Practice Analyzer, continue to monitor all the resources of the RDS host servers, focusing on CPU, memory, and disk drive resources. Capture the initial CPU and memory usage as baseline performance metrics.

Chapter 19: Client software installation in a Citrix deployment

This chapter describes how to configure and publish Avaya Aura[®] Contact Center software applications in a Citrix deployment.

Client software installation prerequisites

Procedure

- Install the required Contact Center server software.
- Ensure that you have administrative privileges on the client.
- Install one of the supported operating systems on the client computer.
- Install Internet Explorer.
- If the contact center PABX is not an Avaya Communication Server 1000, on the contact center domain create a Windows OU that contains all the agents' desktop computers.

Publishing Agent Desktop client software on a Citrix server

Before you begin

Using the Agent Desktop MSI installer, install Agent Desktop on the Citrix server. For more
information about the MSI installer, see <u>Agent Desktop client software silent installation</u> on
page 292.

About this task

You can launch Agent Desktop client software on a client computer using a Citrix server. You must configure your Citrix server to publish Agent Desktop as a published application before you can launch Agent Desktop software on client computers. Publish Agent Desktop client software on a Citrix Server by following the procedure below.

😵 Note:

The following example uses Citrix XenApp 6.5.

- 1. On your Citrix server, open Citrix AppCenter.
- 2. In the left pane, right-click **Applications** and click **Publish Application**.
- 3. On the **Name** window, in the **Display name** box, type a name for the new published application. For example, type Agent Desktop.
- 4. In the **Application description** box, type a description for the new published application.
- 5. Click Next.
- 6. On the Type window, under Application type, select Accessed from a server.

aaad - Publish Application	x (4/8)
CITRIX Type View the application by	pe. To change the type, use the Change application type task.
Steps Velcome Basic Name Location Servers Users Shortcut presentation Publish immediately	Choose the type of application to publish. Content Content Application Application Application type Accessed from a server Streamed if possible, otherwise accessed from a server Server application type: Installed application Streamed to client Note: To change the application type after publishing it, you must use the Change Application Type task. Quick Help Grants users access to a single application already installed on your servers.
	<back next=""> Cancel</back>

- 7. Click Next.
- 8. On the Location window, click Browse.
- 9. Navigate to the location on the Citrix server where the Agent Desktop client folder is installed.
- 10. Select the CCAD.exe file and click **OK**.

aaad - Publish Application	(4/8)
CİTRIX '	
Location Select and configure the	e resource being published.
Steps Velcome Basic Sanc Type Location Servers Users Shortout presentation Publish immediately	Enter the application location Enter the command line for the application you want to publish. You can also specify a default working directory for users. <u>Mare</u> Command line: ["C:\Chrix apps\TB216\client\CCAD.eve" Browse Working directory: [C:\Chrix apps\TB216\client Browse
	< Back Next > Cancel

- 11. Click Next.
- 12. On the Servers window, click Add.
- 13. On the **Select Servers** dialog box, select the Citrix server used to run the Agent Desktop application and click **Add**.
- 14. Click **OK**.
- 15. Click Next.
- 16. On the Users window, click Add.
- 17. On the **Select Users or Groups** dialog box, select the users allowed to run the published application. For example, select your Contact Center agents and click **Add**.

Configure the users who	o may access the application.
Steps Welcome Basic Name Type Location Servers Users Shortcut percentation Publish immediately	Specify the users who can access this application. To add users, choose a directory type at the bottom and select Add. <u>More</u> Select Users or Groups Add List of Names Look in: Add List of Names Look in: AACDCS3HA_Agent1 AACDCS3HA_Agent2 AACDCS3HA_Agent3 AACDCS3HA_Agent5 Configured Accounts Configured Accounts

- 18. Click **OK**.
- 19. Click Next.
- 20. On the **Shortcut presentation** window you can select from a number of shortcut options for display on the browser.

😵 Note:

The Agent Desktop icon appears by default as an icon. You can also choose to create a client application folder on each client computer that contains all published applications, or add shortcuts to the client's Start menu or desktop.

aaad - Publish Application	(7/8) 🗙
Shortcut presentation	
Steps Velcome Basic Name Location Servers Users Shortcut presentation Publish immediately	Configure the appearance and location of the application shortout. These settings function differently on different clients. <u>More</u> Application icon Corr A Change icon Client application folder: Application shortout placement Add to the client's Start menu Start menu folder (Citix XenApp plugin only): Add shortout to the client's desktop
	< Back Next> Cancel

- 21. Click Next.
- 22. On the **Publish immediately** window, select **Configure advanced application settings now** and click **Next**.
- 23. Continue clicking Next until the Limits window appears.
- 24. Select Allow only one instance of application for each user.

ż	TRIX'	
Li	nits	
St	eps Velcome Natic Natine Type	Configure the application limits Concurrent instances Limit instances allowed to run in server farm Maximum instances:
	Location Servers Users Shortcut	
	ubish immediately Idvanced	
	Access control Content redirection Limits Client options Appearance	
		< Back Next> Cance

- 25. Click Next.
- 26. Click Finish.
- 27. On the client computer, agents can now launch Agent Desktop using one of the configured shortcuts.

Publishing Contact Center Manager Administration on a Citrix server as content

Before you begin

• Install a Voice and Multimedia Contact Server or Voice Contact Server.

About this task

You can access the Contact Center Manager Administration application on a client computer using a Citrix server. You must configure your Citrix server to publish CCMA as published content.

- 1. On your Citrix server, open Citrix AppCenter.
- 2. In the left pane, right-click **Applications** and click **Publish Application**.
- 3. On the **Name** window, in the **Display name** box, type a name for the new published application. For example, type ccma.

- 4. In the **Application description** box, type a description for the new published application.
- 5. Click Next.
- 6. On the Type window, under Choose the type of application to publish, select Content.
- 7. Click Next.
- 8. On the **Location** window, type the Contact Center Manager Administration URL. For example, type

http://<server name>

where <server name> is the name of the server CCMA is installed on.

- 9. Click Next.
- 10. On the Users window, select Allow only configured users.
- 11. Select Citrix User Selector as the directory type.
- 12. Click Add.

Users Configure the users wh	to may access the application.
Steps Velcome Basic Name Type Location Users Shortcut presentation Publish immediately	Specify the users who can access this application. To add users, choose a directory type at the bottom and select Add. More Allog anonymous users Allow gnly configured users Configured users: Select directory type: Critic User Selector Add Remove

- 13. On the **Select Users or Groups** dialog box, select the users allowed to run the published application. For example, select your Contact Center administrators and click **Add**.
- 14. Click OK.
- 15. Click Next.

- 16. Click Next.
- 17. Click Finish.
- 18. On the client computer, authorized users can now access CCMA using the Citrix client.

Publishing Contact Center Manager Administration on a Citrix server as an installed application

Before you begin

• Install a Voice and Multimedia Contact Server or Voice Contact Server.

About this task

You can access the Contact Center Manager Administration application on a client computer using a Citrix server. You must configure your Citrix server to publish CCMA as an installed application.

- 1. On your Citrix server, open Citrix AppCenter.
- 2. In the left pane, right-click **Applications** and click **Publish Application**.
- 3. On the **Name** window, in the **Display name** box, type a name for the new published application. For example, type ccma.
- 4. In the **Application description** box, type a description for the new published application.
- 5. Click Next.
- 6. On the **Type** window, under **Choose the type of application to publish**, select **Application**.
- 7. Under Application Type, select Accessed from a server.

CITRUX Type View the application type. To change the type, use the Change application type task.			
Steps Veloome Basic Name Location Servers Users Shortout precentation Publish immediately	Choose the type of application to publish.		
	< Back. Next > Cancel		

- 8. Click Next.
- 9. On the Location window, click Browse.
- 10. Navigate to the location on the Citrix server of the Internet Explorer executable. For example, navigate to C:\Program Files (x86)\Internet Explorer\iexplore.exe.
- 11. Ensure the location appears within quotation marks, and type the Contact Center Manager Administration URL after the location. For example, type

```
"C:\Program Files (x86)\Internet Explorer\iexplore.exe" http://
<server name>
```

where <server name> is the name of the server CCMA is installed on.

- 12. Click Next.
- 13. On the Servers window, click Add.
- 14. On the **Select Servers** dialog box, select the Citrix server used to run the CCMA application and click **Add**.
- 15. Click OK.
- 16. Click Next.
- 17. Click Next.
- 18. On the Users window, select Allow only configured users.
- 19. Select Citrix User Selector as the directory type.

20. Click Add.

CİTRIX'	
Users Configure the users who	o may access the application.
Steps Veloome Basic Name Users Shortout presentation Publish immediately	Specify the users who can access this application. To add users, choose a directory type at the bottom and select Add. More Allow gnly configured users <u>Configured users</u> : <u>Select directory type</u> : <u>Add.</u> <u>Add.</u> <u>Remove</u>
	< <u>B</u> ack <u>N</u> ext > Cancel

- 21. On the **Select Users or Groups** dialog box, select the users allowed to run the published application. For example, select your Contact Center administrators and click **Add**.
- 22. Click **OK**.
- 23. Click Next.
- 24. Click Next.
- 25. Click Finish.
- 26. On the client computer, authorized users can now access CCMA using the Citrix client.

Publishing Agent Desktop Displays client software on a Citrix server

Before you begin

• Install Agent Desktop Displays (ADD) client software on the Citrix server. The Agent Desktop Displays client folder is located on the server where CCMA is installed at D: \Avaya \Contact Center\Manager Administration\Apps\ADD. For more information, see Installing Display client software on page 311.

About this task

You can launch Agent Desktop Displays client software on a client computer using a Citrix server. You must configure your Citrix server to publish ADD as a published application before you can launch Agent Desktop Displays software on client computers. Publish Agent Desktop Displays client software on a Citrix Server by following the procedure below.

😵 Note:

The following example uses Citrix XenApp 6.5.

Procedure

- 1. On your Citrix server, open Citrix AppCenter.
- 2. In the left pane, right-click **Applications** and click **Publish Application**.
- 3. On the **Name** window, in the **Display name** box, type a name for the new published application. For example, type ADD.
- 4. In the **Application description** box, type a description for the new published application.
- 5. Click Next.
- 6. On the Type window, under Application type, select Accessed from a server.

CİTRİX.

-			
Type View the application type. To change the type, use the Change application type task.			
Steps Velocme Basic Name Location Servers Users Shortcut presentation Publish immediately	Choose the type of application to publish. Choose the type of application to publish. Content Application Application Application Application type Choese of from a server Server application type: Installed application Streamed to client Note: To change the application type after publishing it, you must use the Change Application Type task. Quick Help Grants users access to a single application already installed on your servers.		
	< Back Next > Cancel		

- 7. Click Next.
- 8. On the Location window, click Browse.

- 9. Navigate to the location on the Citrix server where Agent Desktop Displays is installed, for example C:\Program Files (x86)\Avaya\ADD\.
- 10. Select the ADDTabular.exe file and click **OK**.
- 11. Click Next.
- 12. On the Servers window, click Add.
- 13. On the **Select Servers** dialog box, select the Citrix server used to run the ADD application and click **Add**.
- 14. Click OK.
- 15. Click Next.
- 16. On the **Users** window, click **Add**.
- 17. On the **Select Users or Groups** dialog box, select the users allowed to run the published application. For example, select your Contact Center administrators and click **Add**.
- 18. Click OK.
- 19. Click Next.
- 20. Click Next.
- 21. On the **Publish immediately** window, select **Configure advanced application settings now** and click **Next**.
- 22. Continue clicking Next until the Limits window appears.
- 23. Select Allow only one instance of application for each user.

CITRIX'			
Limits			
Steps Velcome Basic Sance Sance Servers Users Servers Users Shortcut presentation Publish immediately Advanced Advanced Content redirection Limits Client options Appearance	Configure the application limits Concurrent instances Limit instances allowed to run in server farm Maximum instances: Allow only one instance of application for each user		
	< Back Next > Cancel		

Client software installation in a Citrix deployment

- 24. Click Next.
- 25. Click Finish.
- 26. On the client computer, authorized users can now launch Agent Desktop Displays using the Citrix client.

Chapter 20: Agent Desktop Displays software installation

This chapter describes how to prepare and install the Agent Desktop Displays software on each client in your Avaya Aura[®] Contact Center. The Agent Desktop Displays application provides real-time skillset monitoring on agent desktops for supervisors or contact center agents.

Prerequisites to Agent Desktop Displays software installation

Procedure

- Install a Voice and Multimedia Contact Server or a Multimedia Contact Server with a Voice Contact Server.
- · Ensure that you have administrative privileges on the client.
- Ensure that one of the supported operating systems for Agent Desktop Displays is installed on the client. The supported operating systems are as follows:
 - Windows 7
 - Windows 8.1
 - Windows 10

Installing Agent Desktop Display client software

Before you begin

- Configure a shared network directory on the Contact Center Manager Administration server.
- If you install Agent Desktop Displays on a Contact Center Manager Administration server that uses proxy settings for Internet Explorer, for Agent Desktop Displays to function, ensure that the proxy settings exception list includes the full computer name and IP address of the Contact Center Manager Administration server.
- The IP multicast addresses that you select for Real-time Statistics Multicast (RSM) sending and receiving must be within the 224.0.1.0 to 239.255.255.255 range. Ask your network administrator for acceptable IP multicast addresses for your network.

About this task

Install Agent Desktop Display software to provide skillset monitoring to Contact Center Manager Server agents.

You can install both the standard English version and the multilanguage support version of the Agent Desktop Display client software.

Procedure

- 1. Log on to the client PC with administrator privileges.
- 2. Browse to the shared network directory on the Contact Center Manager Administration server at <install directory>: \Avaya\Contact Center\Manager Administration\Apps\ADD\ADD Client.

OR

Insert the Contact Center DVD into the DVD drive of the client PC and browse to Install Software, CCMA, Agent Desktop Displays Client

- 3. Double-click **setup.exe**.
- 4. In the **Agent Desktop Displays InstallShield Wizard** dialog box, from the list, select the language in which to install Agent Desktop Display.
- 5. Click **OK**.
- 6. In the **Welcome to the InstallShield Wizard for Agent Desktop Displays** dialog box, click Next.
- 7. In the **Customer Information** dialog box, in the **User name** box, type a user name.
- 8. In the **Organization** name box, type your company name.
- 9. Select Anyone who uses this computer (all users).
- 10. Click Next.
- 11. In the **Setup Type** dialog box, select **Complete** to install all Agent Desktop Display components in the default directory.
- 12. Click Next.
- 13. In the Ready to Install the Program dialog box, click Install.
- 14. If a Files in Use dialog box appears, click Retry.
- 15. In the Server Configuration dialog box, in Contact Center Manager Administration: Active box, type the IP address or host name of the active Contact Center Manager Administration server.

If Avaya Aura[®] Contact Center is configured for High Availability, enter the Managed IP address for the Avaya Aura[®] Contact Center server with Contact Center Manager Administration software installed.

16. In the **Active Port** box, type the port number for the active Contact Center Manager Administration server.

17. In the **Contact Center Manager Server: Active** box, type the IP address or host name of the active Contact Center Manager Server.

If Avaya Aura[®] Contact Center is configured for High Availability, enter the Managed IP address for the Avaya Aura[®] Contact Center server with Contact Center Manager Server software installed.

 If you install a standby Contact Center Manager Administration server, in the Contact Center Manager Administration: Standby box, type the IP address or host name of the standby Contact Center Manager Administration server.

If Avaya Aura[®] Contact Center is configured for High Availability, enter the Managed IP address for the Avaya Aura[®] Contact Center server with Contact Center Manager Administration software installed.

- 19. In the **Standby Port** box, type the port number for the standby Contact Center Manager Administration server.
- 20. If you install a standby Contact Center Manager Server, in the **Contact Center Manager Server: Standby** box, type the IP address or host name of the standby Contact Center Manager Server.

If Avaya Aura[®] Contact Center is configured for High Availability, enter the Managed IP address for the Avaya Aura[®] Contact Center server with Contact Center Manager Server software installed.

- 21. Select the Active Contact Center Manager Administration server check box.
- 22. Select the Active Contact Center Manager Server server check box.
- 23. Click Save.
- 24. In the InstallShield Wizard Completed dialog box, click Finish.

Chapter 21: Orchestration Designer client software installation

This chapter describes how to install the Orchestration Designer software on a client computer so that you can create flows for routing voice and multimedia contacts in an offline mode to minimize disruption within your Avaya Aura[®] Contact Center.

The Orchestration Designer software is also installed on the Voice and Multimedia Contact Server, or on the Voice Contact Server, and you can use an offline mode to create scripts.

Installing the Orchestration Designer client software

Before you begin

• Ensure that you have enough free disk space on the C drive. See Avaya Aura[®] Contact Center Overview and Specification.

About this task

Install the Orchestration Designer software on a client to allow your administrator to create scripts for routing calls offline. You can then import the new scripts into your contact center when the new scripts are tested and validated.

Procedure

1. From the client computer, log on to Contact Center Manager Administration.

Contact Center Manager Administration (CCMA) displays the date and time of your last login and also the number of failed login attempts before a successful login.

- 2. On the Launchpad, click Scripting.
- 3. Select Orchestration Designer > Launch Orchestration Designer.

Install any additional software, if a window opens with an installation request.

A VBScript window opens.

- 4. Click OK.
- 5. Click Run.

Follow the on-screen instructions to complete the Orchestration Designer client software install.

Chapter 22: Avaya Communication Server 1000 Data Extraction Tool installation

This chapter describes how to install the Avaya Aura[®] Contact Center Avaya Communication Server 1000 Data Extraction Tool software. The CS 1000 Data Extraction Tool is a software application that extracts information about resources such as Terminal Numbers (TNs), voice ports, Controlled Directory Numbers (CDNs), Interactive Voice Response Automatic Call Distribution DNs (IVR ACD-DNs), and routes from an Avaya Communication Server 1000 PABX. The tool saves this information in Excel spreadsheets.

You can install the Avaya Communication Server 1000 Data Extraction Tool on a client PC or on the Contact Center Manager Administration server.

Avaya Communication Server 1000 Data Extraction Tool software installation prerequisites

Procedure

- Ensure that your client computer meet all requirements. For more information, see *Avaya Aura*[®] *Contact Center Overview and Specification*.
- Install Microsoft Excel 97 or later on the client computer.

Installing the Avaya Communication Server 1000 Data Extraction Tool software

About this task

Install the Avaya Communication Server 1000 Data Extraction Tool to allow an administrator to extract information about resources such as Terminal Numbers (TNs), voice ports, Controlled Directory Numbers (CDNs), Interactive Voice Response Automatic Call Distribution DNs (IVR ACD-DNs), and routes from the Avaya Communication Server 1000.

Procedure

- 1. Insert the Contact Center DVD into the DVD drive and browse to **Install Software**, **CCMA**, **CS1000 Data Extraction Tool**.
- 2. Double-click CS1000 Data Extraction Tool.msi.
- 3. On the Welcome dialog box, click Next.
- 4. On the **Destination Folder** dialog box, click **Next** to accept the default folder for the Avaya Communication Server 1000 Data Extraction Tool.

OR

Click **Change** to choose a new location.

- 5. On the **Ready to Install the Program** dialog box, click **Install**.
- 6. On the InstallShield Wizard Completed dialog box, click Finish.

Part 4: Software uninstall

Chapter 23: Server software uninstallation

Remove any Avaya Aura[®] Contact Center server software from your server to prepare to move the software component to another network server.

A Caution:

Before you uninstall an Avaya Aura[®] Contact Center application, backup that application's database. Avaya recommends that you backup application databases to a remote secure network location.

Prerequisites for server software uninstallation

Ensure that you have the uninstaller on the server or that you have the Contact Center server installation DVD in the DVD drive.

Disabling Windows Server 2012 Automatic Maintenance

About this task

Disable Windows Server 2012 R2 Automatic Maintenance while uninstalling Contact Center software. Windows Server 2012 Automatic Maintenance can occasionally interfere with the realtime requirements for Contact Center. You must therefore temporarily disable Automatic Maintenance to uninstall Contact Center software. You re-enable Automatic Maintenance after uninstalling Contact Center.

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click **OK**.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.

- 6. In the Name column, right-click Idle Maintenance and select Disable.
- 7. In the Name column, right-click Regular Maintenance and select Disable.

٩	Task Scheduler	_ D X
File Action View Help		
SpacePort Storage Tiers Management Task Manager TaskScheduler	 Name Status Idle Maintenance Disable Maintenance Configurator Ready Manual Maintenance Ready 	ed When computer is idle Multiple triggers defined 10/6/2015
Time Synchronization	Regular Maintenance Disable	ed At 2:00 AM every day 10/6/2015
	JI	

8. From the File menu, select Exit.

Removing the server software patches

Before you begin

- Ensure that you know the most recent patch.
- Temporarily stop Microsoft Windows Server 2012 Automatic Maintenance. For more information, see <u>Disabling Windows Server 2012 Automatic Maintenance</u> on page 318.

About this task

Remove the most recent patches to ensure that you have your base software remaining to remove.

Procedure

- 1. On the Apps screen, in the Avaya section, select Update Manager.
- 2. On the Avaya Contact Center Update Manager dialog box, click Remove.
- 3. Click Select all.
- 4. Click Remove Patch(es).
- 5. Click Remove.
- 6. Click Close.
- 7. Restart the server.

Next steps

Re-enable Microsoft Windows Server 2012 Automatic Maintenance. For more information, see <u>Enabling Windows Server 2012 Automatic Maintenance</u> on page 321.

Removing the server software

Before you begin

- Remove all patches for the server software you want to remove.
- To maintain the database, ensure that you back up the database to another network location.
- Temporarily stop Microsoft Windows Server 2012 Automatic Maintenance. For more information, see <u>Disabling Windows Server 2012 Automatic Maintenance</u> on page 318.

About this task

Remove all or parts of the server software to remove the software applications and corresponding databases from the server.

You can remove the server software with the un-installer on the server or with the setup.exe file on your Contact Center DVD.

Procedure

- 1. Log on to the Contact Center server.
- 2. Navigate to the following folder:

```
C:\Program Files (x86)\Avaya\UniversalInstaller
```

- 3. Double-click on UniversalInstall.
- 4. On the Select Remove Option window, select Remove All Avaya Contact Center Server Software.
- 5. Click Next.
- 6. Follow the on-screen instructions.
- 7. If you are prompted, restart the server.

Next steps

Re-enable Microsoft Windows Server 2012 Automatic Maintenance. For more information, see <u>Enabling Windows Server 2012 Automatic Maintenance</u> on page 321.

Removing the Multimedia Contact Server software

Before you begin

- To maintain the database, ensure that you back up the database to another network location.
- Temporarily stop Microsoft Windows Server 2012 Automatic Maintenance. For more information, see <u>Disabling Windows Server 2012 Automatic Maintenance</u> on page 318.

About this task

To increase the number of active agents in your contact center solution, backup the Multimedia database and then remove the co-resident Multimedia Contact Server software from this server. If

you remove the co-resident Multimedia Contact Server software, you must install a standalone Multimedia Contact Server Only server in this solution.

Procedure

- 1. Log on to the Contact Center server.
- 2. Navigate to the following folder:

C:\Program Files (x86)\Avaya\UniversalInstaller

- 3. Double-click on UniversalInstall.
- 4. On the Select Remove Option window, select Remove Multimedia Contact Server Software.
- 5. Click Next.
- 6. Follow the on-screen instructions.
- 7. If you are prompted, restart the server.

Next steps

Re-enable Microsoft Windows Server 2012 Automatic Maintenance. For more information, see <u>Enabling Windows Server 2012 Automatic Maintenance</u> on page 321.

Enabling Windows Server 2012 Automatic Maintenance

About this task

Enable Windows Server 2012 R2 Automatic Maintenance after uninstalling Contact Center software.

- 1. Log on to the Contact Center server as Administrator.
- 2. On the **Desktop** screen, right-click **Start** and select **Run**.
- 3. In the Run text box, type Taskschd.msc.
- 4. Click OK.
- 5. On the Task Scheduler window, in the left pane, select Task Scheduler Library > Microsoft > Windows > TaskScheduler.
- 6. In the Name column, right-click Idle Maintenance and select Enable.

7. In the Name column, right-click Regular Maintenance and select Enable.



8. From the File menu, select Exit.

Chapter 24: Client Software uninstallation

Remove any Avaya Aura[®] Contact Center client software from your client computer. In High Availability (HA) solutions, you must uninstall the Agent Desktop client software downloaded directly from the original server. You must then install the Agent Desktop client software from the Managed IP or Managed Name of the Voice and Multimedia Contact Server or the Multimedia Contact Server HA pair.

Removing the Agent Desktop client software

About this task

Remove Agent Desktop client software from a client computer. The software uninstall is completed using the Windows Control Panel.

😵 Note:

This example procedure is performed on a Windows 7 client.

Procedure

- 1. Log on to the Agent Desktop client computer.
- 2. Click the Start icon and select Control Panel.
- 3. Under Programs, click Uninstall a program.
- 4. From the Name list, select Avaya Agent Desktop and click Uninstall/Change.
- 5. On the Avaya Agent Desktop box, ensure Remove the application from this computer is selected and click OK.

Removing the Agent Desktop Displays software

About this task

Remove Agent Desktop Displays software from a client computer. The software uninstall is completed using the Windows Control Panel.

😮 Note:

This example procedure is performed on a Windows 7 client.

Procedure

- 1. Log on to the client computer.
- 2. Click the Start icon and select **Control Panel**.
- 3. Under Programs, click Uninstall a program.
- 4. From the Name list, select Agent Desktop Displays and click Uninstall.
- 5. Click Yes.

Removing the Orchestration Designer client software

About this task

Remove Orchestration Designer software from a client computer. The software uninstall is completed using the Windows Control Panel.

Important:

Local data is preserved in Orchestration Designer after the Orchestration Designer software is removed. If you reinstall Orchestration Designer software on the client computer, your previous local data is available.

😮 Note:

This example procedure is performed on a Windows 7 client.

- 1. Log on to the client computer.
- 2. Click the Start icon and select Control Panel.
- 3. Under Programs, click Uninstall a program.
- 4. From the Name list, select Orchestration Designer Contact Center Client and click Uninstall.
- 5. Click Yes.
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