Deploying Avaya Contact Center Select on Microsoft Azure

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Chapter 1: Introduction

This document describes how to deploy, commission, and test Avaya Contact Center Select using an ISO image on Microsoft Azure Cloud.

This document does not describe IP Office basic configuration for system settings, licensing, or networking. This document describes only how to integrate a working IP Office server with Avaya Contact Center Select.

Purpose

This document describes how to install and commission Avaya Contact Center Select on Microsoft Azure Cloud (Azure).

Intended audience

This document is intended for personnel who install Avaya Contact Center Select.

Related resources

The following are some additional Avaya Contact Center Select related resources.

Avaya Contact Center Select Documentation

The following table lists the documents related to Avaya Contact Center Select. Download the documents from the Avaya Support website at http://support.avaya.com.

Title	Use this document to:	Audience
Overview		

Table continues…

Title	Use this document to:	Audience
Avaya Contact Center Select Solution Description	This document provides a technical description of Avaya Contact Center Select. It describes the product features, specifications, licensing, and interoperability with other supported products.	Customers and sales, services, and support personnel
Avaya Contact Center Select Documentation Catalog	This document describes available Avaya Contact Center Select documentation resources and indicates the type of information in each document.	Customers and sales, services, and support personnel
Contact Center Performance Management Data Dictionary	This document contains reference tables that describe the statistics and data in the historical and real-time reports generated in Contact Center.	System administrators and contact center supervisors
Implementing		
Deploying Avaya Contact Center Select DVD	This document contains information about Avaya Contact Center Select DVD installation, initial configuration, and verification. This document contains information about maintaining and troubleshooting the Avaya Contact Center Select server.	Implementation personnel
Deploying Avaya Contact Center Select Software Appliance	This document contains information about Avaya Contact Center Select Software Appliance (VMware) preparation, deployment, initial configuration, and verification. This document contains information about maintaining and troubleshooting the software appliance.	Implementation personnel
Deploying Avaya Contact Center Select Hardware Appliance	This document contains information about Avaya Contact Center Select Hardware Appliance (physical server) installation, initial configuration, and verification. This document contains information about maintaining and troubleshooting the hardware appliance.	Implementation personnel
Deploying Avaya Contact Center Select on Microsoft Azure	This document contains information about deploying Avaya Contact Center Select using an ISO image on Microsoft Azure.	Implementation personnel
Avaya Contact Center Select Business Continuity	This document contains information about deploying Avaya Contact Center Select Business Continuity.	Implementation personnel

Table continues…

Title	Use this document to:	Audience
Upgrading and patching Avaya Contact Center Select	This document contains information about upgrading and patching Avaya Contact Center Select.	Implementation personnel and system administrators
Administering		
Administering Avaya Contact Center Select	This document contains information and procedures to configure the users, skillsets, and contact center configuration data. This document contains information about creating Avaya Contact Center Select real-time and historical reports.	System administrators and contact center supervisors
Avaya Contact Center Select Advanced Administration	This document contains information about managing the Avaya Contact Center Select server, licensing, and multimedia configuration.	System administrators
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		
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		
Using Agent Desktop for Avaya Contact Center Select	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 the Agent Browser application to log on to Contact Center and perform basic tasks.	Contact center agents
Using Avaya Workspaces for AACC and ACCS	This document describes the tasks that Contact Center agents can perform using Avaya Workspaces.	Contact center agents and supervisors

Finding documents on the Avaya Support website

Procedure

1. Go to https://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 the appropriate release number.

   The **Choose Release** field is not available if there is only one release for the product.
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 only displays the documents for 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.

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  - In **Search**, type the product name. On the Search Results page, click **Clear All** and select **Video** in the **Content Type**.

    The **Video** content type is displayed only when videos are available for that product.

  In the right pane, the page displays a list of available videos.
- To find the Avaya Mentor videos on YouTube, go to www.youtube.com/AvayaMentor and do one of the following:
  - Enter a key word or key words in the **Search Channel** to search for a specific product or topic.
  - Scroll down Playlists, and click a topic name to see the list of videos available for the topic. For example, Contact Centers.

Note:

Videos are not available for all products.

Support

Go to the Avaya Support website at https://support.avaya.com 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.

Microsoft Azure documentation

For information about the Microsoft Azure functionality, go to the Microsoft documentation website at https://docs.microsoft.com/en-us/azure/.

Chapter 2: Overview

The Avaya Contact Center Select software provides a context-sensitive, collaborative, voice and multimedia customer experience solution. Avaya Contact Center Select allows small and midsize enterprises to anticipate, accelerate, and enhance customer interactions. Avaya Contact Center Select uses the Avaya IP Office telephone system to provide a real-time telephony platform. IP Office is a flexible and scalable phone system designed specifically for small and midsize enterprises. It supports a wide range of phones and devices for use in contact centers.

The Avaya Contact Center Select DVD deployment option supports Platform Vendor Independence (PVI). Avaya Contact Center Select provides the flexibility to purchase a server that meets the PVI server specification and conforms to your corporate standards.

To use the Avaya Contact Center Select on Microsoft Azure, provide the following:

- The Microsoft Azure subscription applicable to all Avaya Contact Center Select components
- A sever that meets the Avaya Contact Center Select PVI specification
- Microsoft Windows Server 2012 R2 or Windows Server 2016 operating system and license

Note:

Windows Server 2019 does not support Avaya Contact Center Select on Microsoft Azure.

The following diagram shows the topology of a typical Avaya Contact Center Select on Microsoft Azure solution:

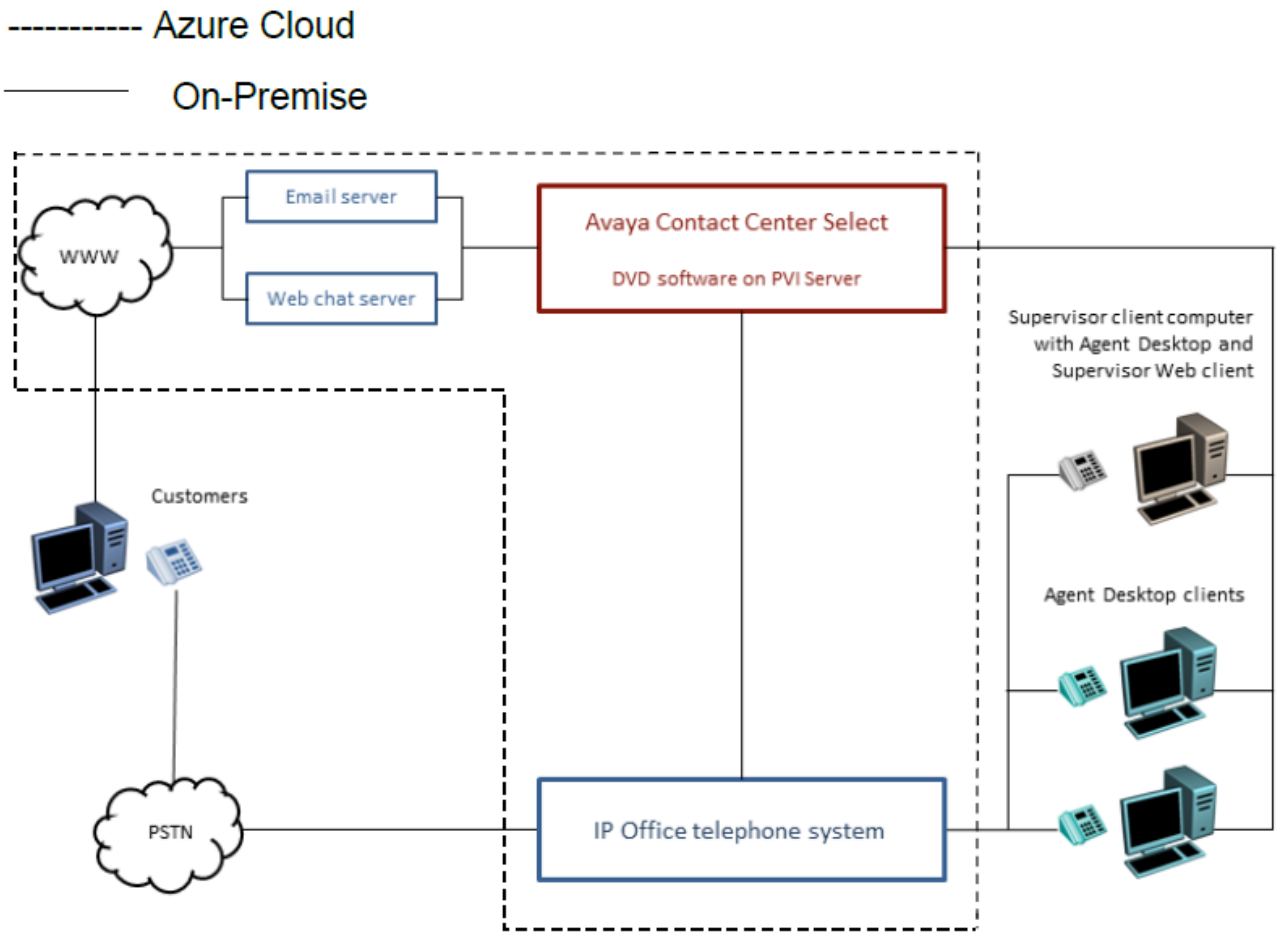


Figure 1: Avaya Contact Center Select on Azure solution topology

Avaya Contact Center Select is preloaded with sample users, skillsets, and contact center parameters. You can use this sample data to commission the solution and make the first routed call and email contact. Avaya Contact Center Select delivers quick and simplified contact center deployment. After the basic telephony features start working, you can configure multimedia contacts, multiplicity, custom prompts, and other enhanced features and functions to improve your customer's experience.

The Avaya Contact Center Select ISO image contains the following software components:

- Contact Center Manager Server (CCMS)
- Contact Center Manager Administration (CCMA)
- Communication Control Toolkit (CCT)
- Contact Center License Manager (LM)
- Contact Center Manager Server Utility (SU)
- Avaya Orchestration Designer (OD)

- Contact Center Multimedia (CCMM)
- Avaya Contact Center Select Firewall policy
- Default Avaya Contact Center Select configuration data
- An Ignition Wizard configuration utility

The Avaya Contact Center Select server is supported in a work group or in a Windows domain. After you deploy Avaya Contact Center Select, you can add the server to a Windows domain.

Avaya Contact Center Select on Microsoft Azure architecture

The following diagram shows the Avaya Contact Center Select on Microsoft Azure architecture:

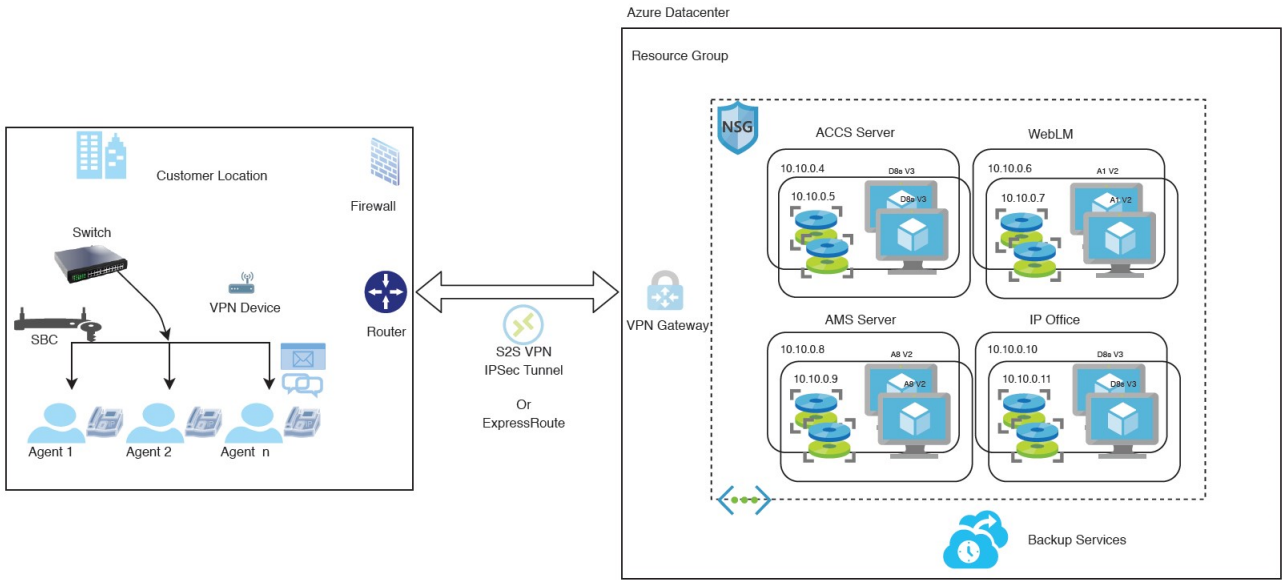


Figure 2: Avaya Contact Center Select on Microsoft Azure architecture

Chapter 3: Prerequisite procedures

Prerequisites

To deploy Avaya Contact Center Select on Microsoft Azure, you need the following knowledge, skills, tools, and components.

Knowledge

- Microsoft Azure setup
- Windows Operating System
- Linux® Operating System

Skills

Ability to administer Microsoft Azure, IP Office, and Avaya Contact Center Select.

Configuration tools and utilities

- A browser for accessing the Microsoft Azure Management Console
- PuTTY, PuTTYgen, WinSCP, and WinZip

Components

- Microsoft Azure subscription with owner or contributor privilege
- Avaya IP Office, Avaya Aura® Media Server, Avaya Contact Center Select, and Avaya WebLM ISO images to use on Microsoft Azure
- On-Premise firewall device for the Virtual Private Network (VPN) connection

  For more information on how to create a site-to-site connection in the Microsoft Azure portal, see https://docs.microsoft.com/en-us/azure/vpn-gateway/tutorial-site-to-site-portal
- License files for all components in Avaya Contact Center Select

Deployment process

To deploy Avaya Contact Center Select on Microsoft Azure you need to perform the following procedures:

1. On Microsoft Azure, create a resource group for the following components:
   - Avaya IP Office

- Avaya Aura® Media Server
- Avaya WebLM
- Avaya Contact Center Select server

2. In the resource group, create a virtual network (VNet).
3. Deploy and configure IP Office on Microsoft Azure.
4. Deploy and configure Avaya Aura® Media Server on Microsoft Azure.
5. Deploy and configure Avaya WebLM on Microsoft Azure.
6. Deploy and configure Avaya Contact Center Select on Microsoft Azure.

Signing in to the Microsoft Azure portal

About this task

Sign in to your Microsoft Azure account.

Before you begin

Create a Microsoft Azure account and obtain a Microsoft Azure subscription with the Owner or Contributor privilege.

Procedure

1. In your web browser, enter `https://portal.azure.com/`

   The web browser displays the Microsoft Azure Sign-in page.
2. In the **Email, phone, Skype** field, type the registered email ID.
3. In the **Password** field, type your password.
4. Click **Sign in**.

Result

The web browser displays the Microsoft Azure portal.

Creating a resource group

About this task

A resource group is used to contain sets of related servers.

Create a resource group and use it for the following components:

- IP Office
- Avaya Aura® Media Server

- Avaya WebLM
- Avaya Contact Center Select

Note:

Microsoft might periodically update the Microsoft Azure instructions. For the latest and most accurate information, see https://docs.microsoft.com/en-us/azure/..

Procedure

1. Log in to the Microsoft Azure portal: https://portal.azure.com/.
2. In the **Search** field, type `resource groups`.
3. In the Services list, select **Resource groups**.
4. In the Resource groups window, click **Create**.
5. On the Basics tab, fill in all the required fields.
6. Click **Review + Create**.
7. Click **Create**.

Result

The created resource group appears in the list of resource groups.

Creating a virtual network in a resource group

About this task

After you create a resource group, you must create a virtual network within that resource group. Microsoft Azure Virtual Network (VNet) is the basic element of your Microsoft Azure network. VNet ensures that all Microsoft Azure resources securely communicate with each other, the internet, and on-premises networks.

Create a virtual network and use it for the following components:

- IP Office
- Avaya Aura® Media Server
- Avaya WebLM
- Avaya Contact Center Select

Before you begin

Ensure that the resource group that you created is available.

Procedure

1. Log in to the Microsoft Azure portal: https://portal.azure.com/.
2. In the **Search** field, type `virtual networks`.

3. In the Services list, select **Virtual networks**.
4. In the Virtual networks window, click **Create**.
5. On the **Basics** tab, fill in all the required fields.
6. Click **Next: IP Addresses**.
7. On the **IP address** tab, add the required IP addresses.
8. Click **Next: Security**.
9. On the **Security** tab, leave the default security settings.
10. Click **Review + Create**.
11. Click **Create**.

    The Microsoft Azure portal displays the Overview page with the details about the created virtual network.
12. In the portal menu pane, select **Virtual networks**.

    The list of available virtual networks appears.
13. From the list, click the name of the required network.
14. Under Settings, click **Subnets**.

    The Subnets page appears.
15. Click **+ Subnet**.
16. In the Add subnet pane, perform the following:
    a. In the **Name** field, type the name of the subnet.
    b. In the **Subnet address range** field, type the IP address range of the subnet.

       These IP addresses are used to assign to virtual machines.
    c. Click **Save**.

Chapter 4: IP Office configuration

IP Office servers are supported as virtual machines within the Microsoft Azure environment. Configure IP Office to integrate with Avaya Contact Center Select. This chapter does not describe IP Office deployment on Microsoft Azure, as well as basic configuration for system settings, licensing, or networking. This section describes only how to integrate a working IP Office virtual server with Avaya Contact Center Select. For more information about deployment and basic configuration of IP Office on Microsoft Azure, see Deploying Avaya IP Office Servers as Virtual Machines.

The procedures in this section use examples to describe how to configure IP Office to integrate with Avaya Contact Center Select. The IP Office configuration values used in the following procedures match the default values used by Avaya Contact Center Select. These values might not be suitable for your solution. If you use different IP Office configuration values, remember to enter the different values when installing and commissioning Avaya Contact Center Select.

Avaya recommends that you configure IP Office before installing Avaya Contact Center Select.

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

IP Office supported versions

Each Avaya Contact Center Select connects to a single IP Office Server Edition Primary server. Avaya Contact Center Select Business Continuity-enabled solutions support connecting to an IP Office Secondary server. A Small Community Network (SCN) is a system of networked IP Office telephone systems that can share extension numbers and user names. Each IP Office SCN supports a single connected Avaya Contact Center Select. The Avaya Contact Center Select server and the connected IP Office server must be located at the same campus location.

To support an IP Office SCN, Avaya Contact Center Select must connect to an IP Office Server Edition Primary server in that SCN network.

Avaya Contact Center Select supports only the following versions of IP Office:

- IP Office Server Edition Release 10.1, or 11.x
- IP Office 500V2, Release 10.1, or 11.x software, Standard Mode, Advanced Edition license

Avaya Contact Center Select does not support other versions of IP Office. For more information about the supported IP Office versions, refer to the Avaya Contact Center Select Release Notes.

Avaya Contact Center Select does not support IP Office 500V2 Basic mode.

Using IP Office Manager

Before you begin

- Install the IP Office Manager software on a client computer.
- Ensure the client computer can communicate with the IP Office server.

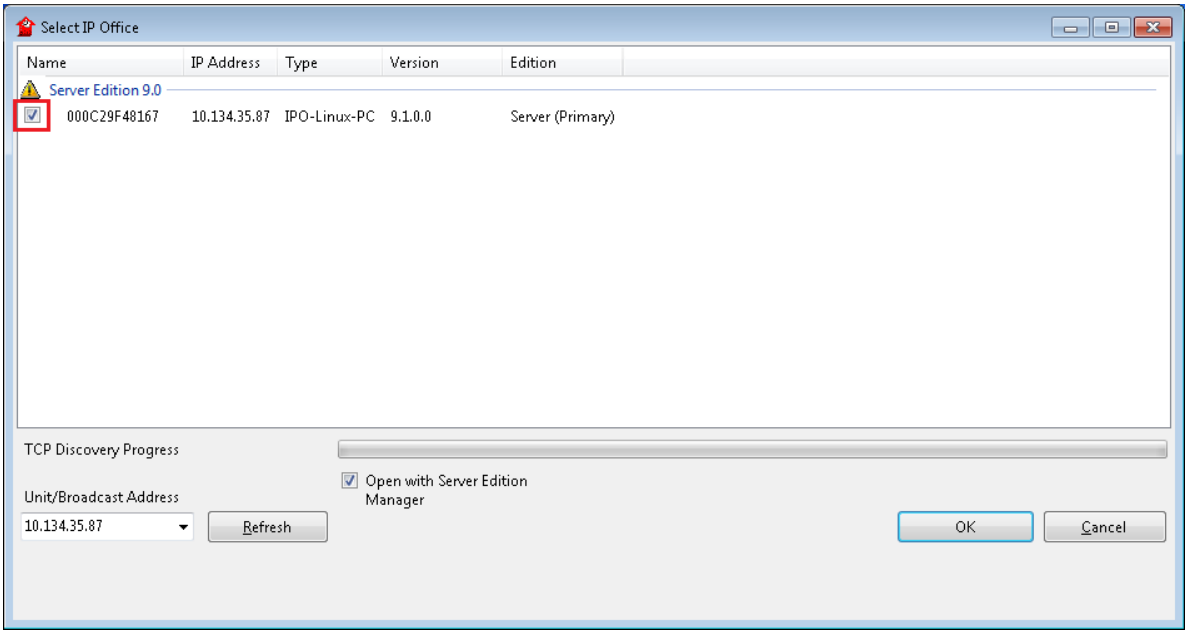
About this task

IP Office Manager is a component of the IP Office administration suite of applications. You use IP Office Manager to configure IP Office. IP Office Manager runs on a Windows computer and connects to the IP Office system using an Ethernet LAN connection.

IP Office Manager is an off-line editor. Use IP Office Manager to connect to your IP Office server and retrieve a local copy of the IP Office current configuration settings. You can then edit the local copy of the IP Office configuration and when you are ready, save your updated configuration data back to the IP Office server.

Procedure

1. On the client computer, select **Start** > **All Programs** > **IP Office** > **Manager**.
2. On the **Configuration Service User Login** message box, in the **Service User Name** box, type the user name. The default name is Administrator.
3. In the **Service User Password** box, type the user password. The default password is Administrator.
4. From the menu, select **File** > **Close Configuration**. This closes any open and potentially out-of-date configurations.
5. To retrieve the current (most recent) IP Office configuration settings, from the menu, select **File** > **Open Configuration**.
6. In the **Select IP Office** window:
   - If the required IP Office server is listed, use the check box to select your IP Office server from the list of available servers.
   - If the required IP Office server is not listed, in the **Unit/Broadcast Address** box type the IP address for your IP Office server. Click **Refresh** to perform a new search. The IP Office server then appears in the list of available servers. Use the check box to select your IP Office server from the list of available servers.



7. Click **OK**.
8. On the **Configuration Service User Login** message box, in the **Service User Name** box, type the user name. The default name is Administrator.
9. In the **Service User Password** box, type the user password. The default password is Administrator.
10. IP Office Manager opens and displays the current configuration data for your IP Office server.

Configuring the data synchronization user account

About this task

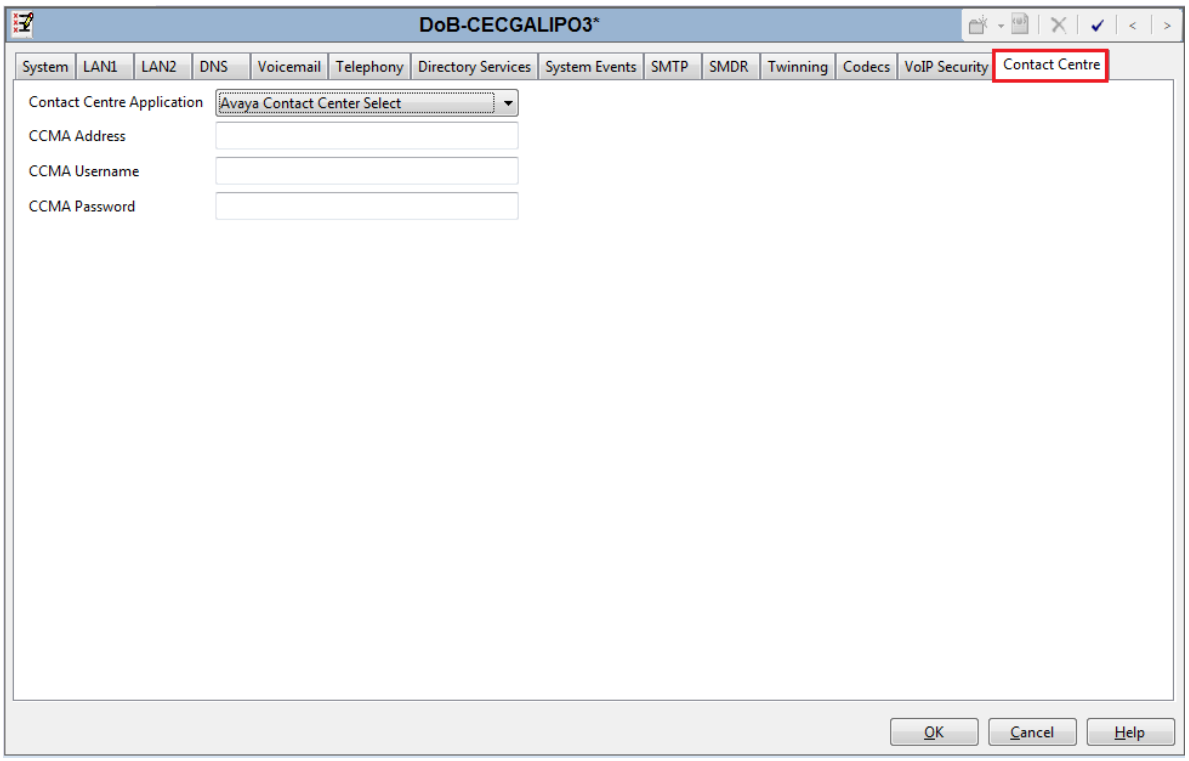
Configure the user account used by IP Office to maintain data synchronization with Avaya Contact Center Select.

For user data synchronization, IP Office connects to Avaya Contact Center Select using the Contact Center Manager Administration “accssync” user account details.

Procedure

1. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
2. In the **Configuration** pane, under the IP Office server, select **System**.

3. Select the **Contact Center** tab.



4. From the **Contact Center Application** list, select Avaya Contact Center Select.
5. In the **CCMA Address** box, type the IP address of the Avaya Contact Center Select server. For example, type `http://1.2.3.4`

   Note:

   If security is enabled on the Avaya Contact Center Select server, use HTTPS.

6. In the **CCMA Username** box, type the name of the Avaya Contact Center Select data synchronization user account. The default user name is `accssync`.
7. In the **CCMA Password** box, type the password of the Avaya Contact Center Select data synchronization user account. The default user password is `accssync`.
8. Click **OK**.

Configuring an IP Office service user for data synchronization

About this task

Create and configure an IP Office service user to support data synchronization with Avaya Contact Center Select.

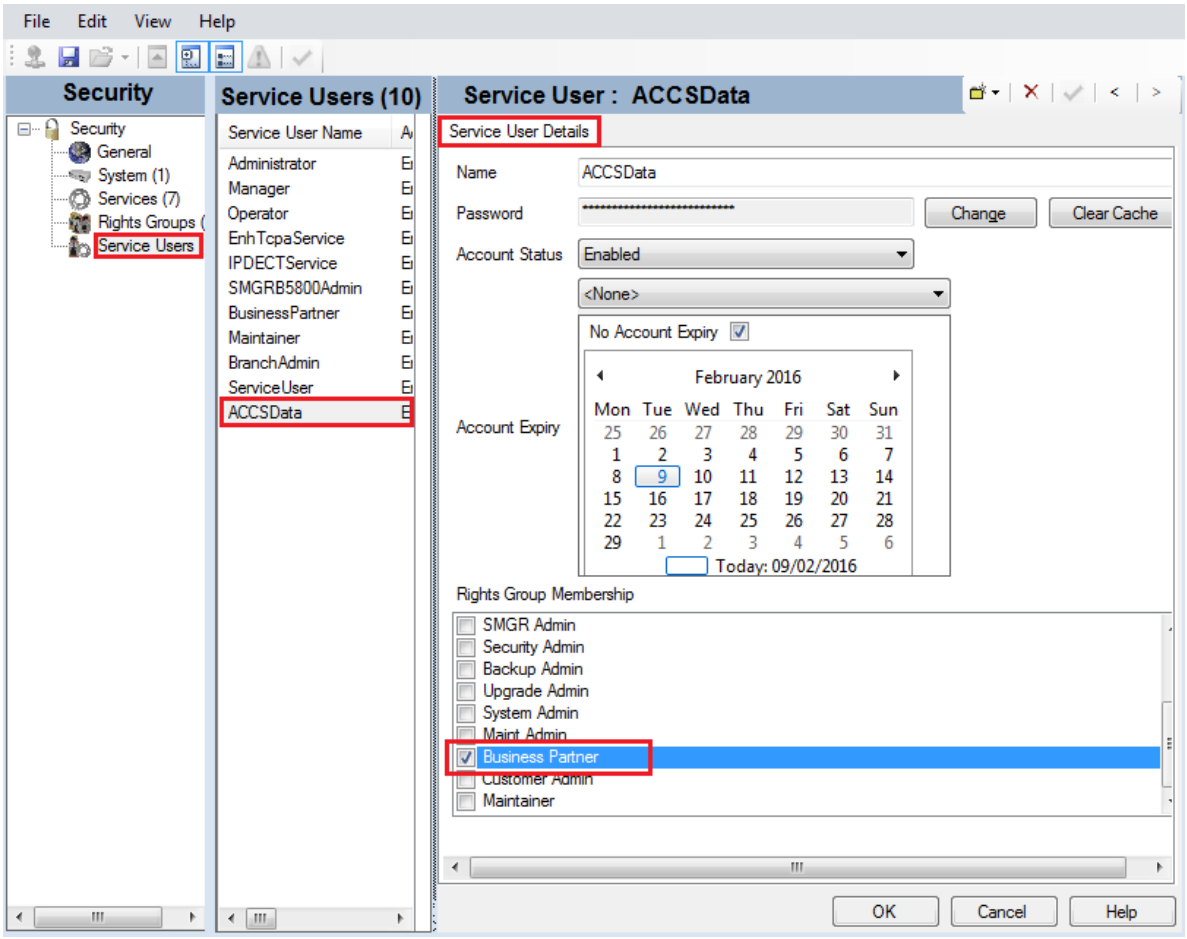
Avaya Contact Center Select uses this IP Office service user account to synchronize agent and supervisor data between Avaya Contact Center Select and the IP Office platform.

Procedure

1. Log in to IP Office Manager with Administrator privileges.
2. Select **File** > **Advanced** > **Security Settings**.
3. On the **Service Users** list pane, right-click and select **New**.
4. On the **New Service User Details** screen, in the **New User Name** box, type the name for the new service user.

   For example, `ACCSData`.
5. In the **New User Password** box, type the password for the new service user.
6. In the **Re-enter New User Password** box, re-type the password for the new service user.
7. Click **OK**.
8. On the **Service Users** list pane, select the new service user.

9. On the **Service User Details** pane, from the **Rights Group Membership** list, select **Business Partner**.



10. Click **OK**.
11. Select **File** > **Save Security Settings**.

Verifying the IP Route configuration

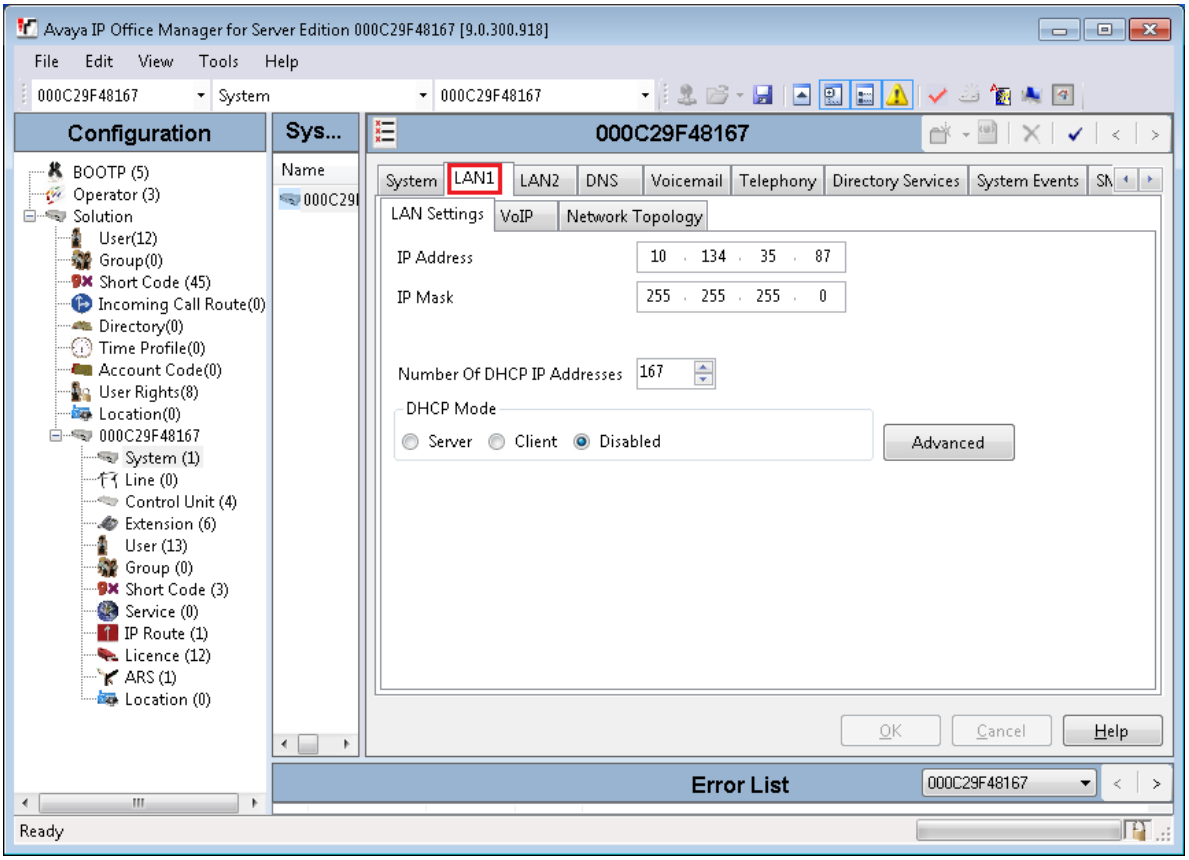
About this task

Verify the Local Area Network (LAN) Ethernet and IP Route configuration details to ensure IP Office can communicate with IP Office Manager, Avaya Contact Center Select, and agent telephones.

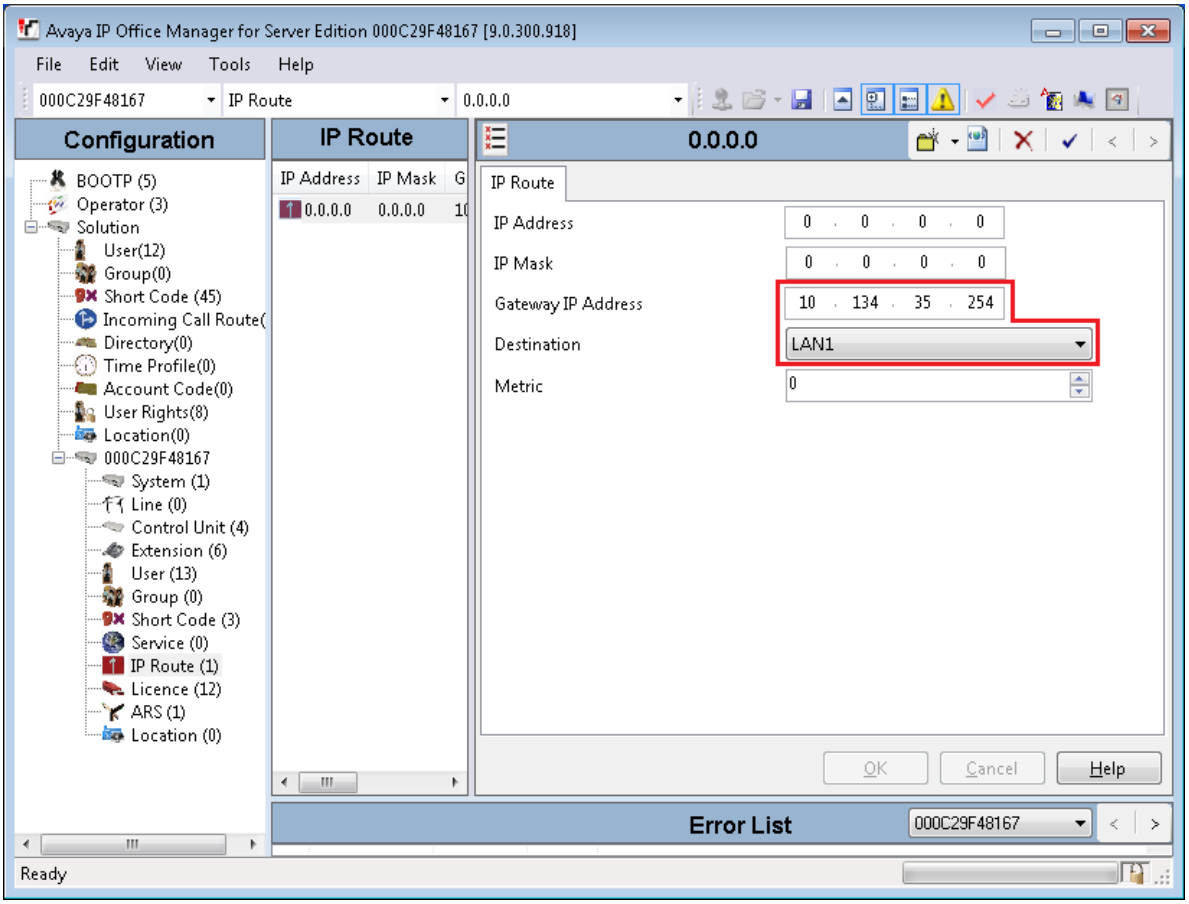
Procedure

1. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
2. In the **Configuration** pane, under the IP Office server, select **System**.

3. Note the IP Office network settings. Note which network interface IP Office is using for local communications. For Avaya Contact Center Select deployments, IP Office must use LAN1 for local communications.



4. In the **Configuration** pane, under the IP Office server, select **IP Route**. If there are no existing IP Routes, right-click **IP Route** and select **New**.
5. On the **IP Route** tab, in the **IP Address** box, type `0.0.0.0`.
6. In the **IP Mask** box, type `0.0.0.0`.
7. In the **Gateway IP Address** box, type the IP address of your gateway.
8. From the **Destination** list, select the network interface that IP Office uses for local communication. For example, select LAN1.



9. Click **OK**.

Configuring the SIP domain name

About this task

Configure the IP Office SIP domain name. A SIP domain is a logical space where SIP-enabled devices exist, authenticate, register, and communicate.

In a SIP network a destination address consists of both a user and a domain. This is referred to as a Uniform Resource Identifier (URI). The user portion of the URI is the destination that is being communicated to and the domain portion is the logical grouping that the destination belongs to.

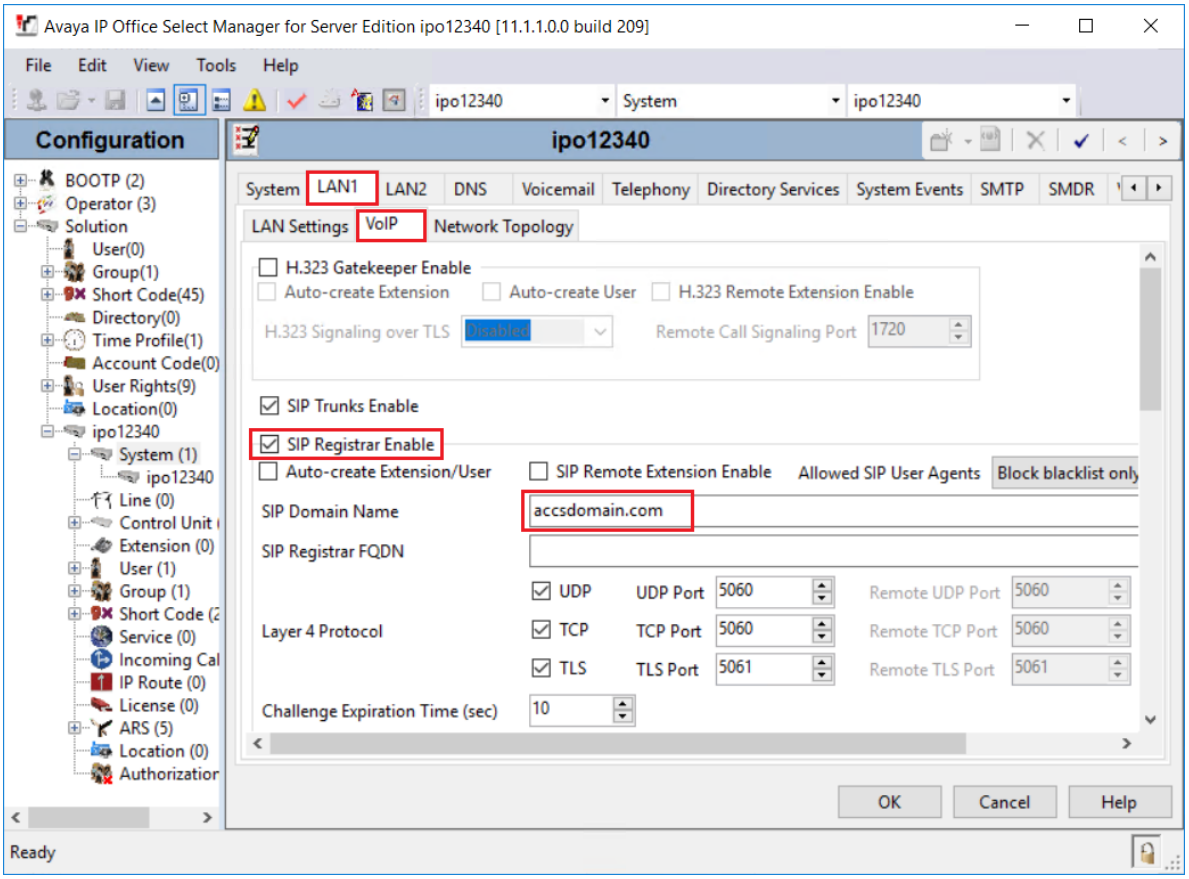
Important:

If you add or change the domain name of an active IP Office server, the IP Office server restarts.

The Avaya Contact Center Select SIP domain name must match the IP Office SIP domain name.

Procedure

1. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
2. In the **Configuration** pane, under the IP Office server, select **System**.
3. In the right pane, select the **LAN1** tab.
4. Select the **VoIP** tab.
5. Enable **SIP Registrar Enable**.
6. In the **Domain Name** box, type the name of the SIP domain to be used with Avaya Contact Center Select.



7. Click **OK**.

Configuring the SIP User Extension number

About this task

Configure an IP Office SIP User Extension number for desk phones and softphones. Avaya Contact Center Select uses this SIP User Extension number and Telephony Supervisor *Login Code* password to register for CTI call control and SIP session messaging.

Procedure

1. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
2. In the **Configuration** pane, under the IP Office server, select **User**.
3. Right-click on **User**, and select **New**.
4. In the right pane, select the new **User** tab.
5. In the **Name** box, type a descriptive name for the user.
6. In the **Password** box, type a password for the user.

   The password can be up to 31 alphanumeric characters long. Password complexity rules are set through the General security settings.
7. In the **Confirm Password** box, re-type a password for the user.
8. In the **Extension** box, type the extension number of the user. For example, type 6000.

   For desk phones, the Extension value must match the Base Extension value of a phone. For more information, see Configuring IP Office extensions on page 34.
9. Select the **Telephony** tab.
10. On the **Telephony** tab, on the **Supervisor Settings** sub-tab, in the **Login Code** box, type a password for Avaya Contact Center Select registration. For example, type 123456. This password must be a number.
11. Click **OK**.
12. On the **Would you like a new VoIP extension created with this number** message box, select **SIP Extension** and click **OK**.

Configuring a short code for Contact Center Route Points

About this task

Configure a solution short code to map an IP Office telephone number to the Avaya Contact Center Select SIP User Extension Number. A short code configures IP Office to perform an action if a specific number is dialed.

For example:

- 3000 is configured in Avaya Contact Center Select as a CDN (Route Point).

- 6000 is configured in IP Office as the Avaya Contact Center Select SIP User Extension Number.

Create a short code 6000|>>3000. All customer calls to telephone number 3000 are forwarded to extension 6000 and from there to Avaya Contact Center Select. Avaya Contact Center Select can then treat the customer call and route it to a contact center agent.

This task describes a basic IP Office short code used to route calls to Avaya Contact Center Select. For information about implementing production grade short codes, refer to your IP Office documentation.

A CDN (Route Point) is a logical address used by Contact Center to accept incoming contacts or as a point to which contacts are routed. A Route Point is an address that enables incoming voice contacts (phone calls) to be treated by Contact Center.

You can add multiple short codes and configure each one to map to an Avaya Contact Center Select CDN (Route Point) number. If you create additional short codes to map IP Office calls to Avaya Contact Center Select, you must add the corresponding CDN (Route Point) number in Contact Center Manager Administration on the Avaya Contact Center Select server.

Procedure

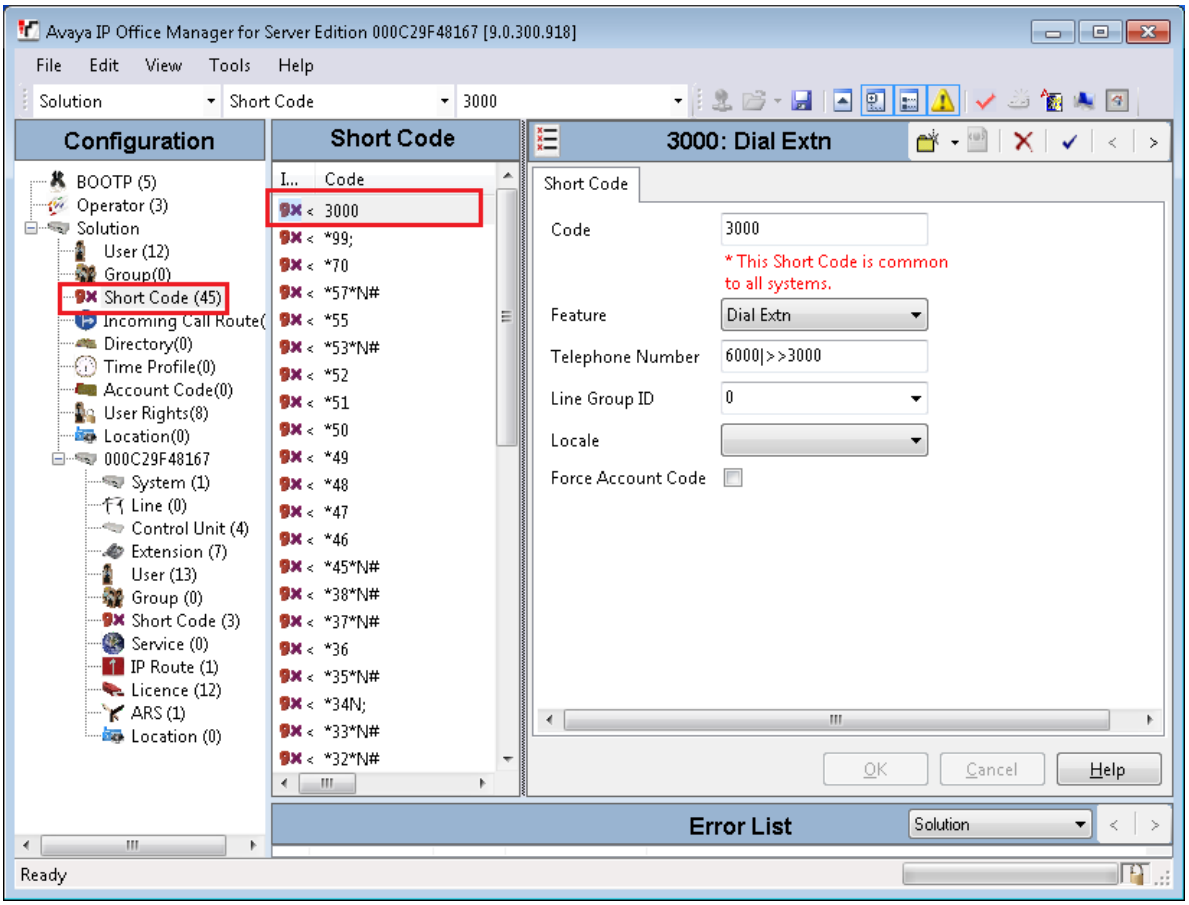
1. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
2. In the **Configuration** pane, under the **Solution** node, select **Short Code**, right-click and select **New**.
3. In the right pane, in the **Code** box, type a CDN (Route Point) number. When this number is matched, the other short code fields activate. For example, type 3000, where 3000 is an Avaya Contact Center Select CDN (Route Point).
4. From the **Feature** list, select **Dial Extn**. If you do not see the **Dial Extn** option, ensure that you have selected the **Short Code** menu item under **Solution**, and not the local **Short Code** menu item for your IP Office. The Solution Short Code is common to all systems.
5. In the **Telephone Number** box, type the number output by the short code. For example, type the following: `6000|>>3000`

   - Where 3000 is configured in Avaya Contact Center Select as a CDN (Route Point).
   - Where 6000 is the Avaya Contact Center Select SIP User Extension Number.

   Note: Ensure there are no spaces in the **Telephone Number** box.

   If a customer dials 3000, then 3000 is sent to telephone number 6000 and Avaya Contact Center Select.

6. Click **OK**.



Configuring Contact Recording

Before you begin

- Ensure the Media Manager application is installed, configured, and working on your IP Office.

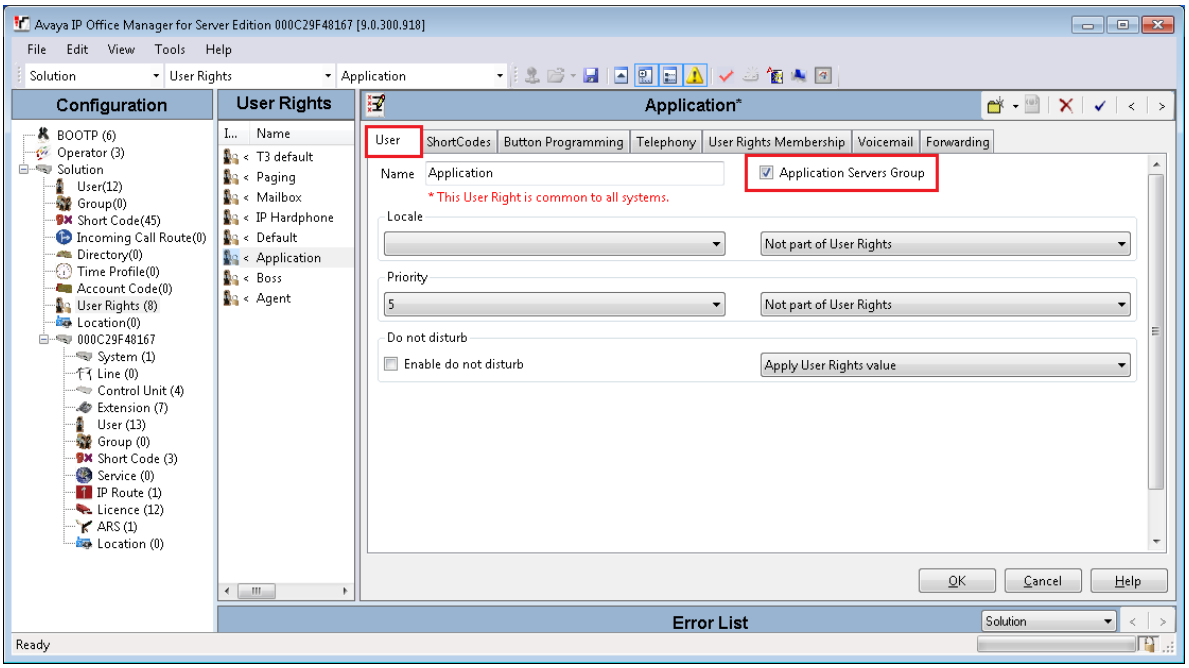
About this task

Configure the User and User Rights settings to enable Contact Recording for Avaya Contact Center Select agents and agent supervisors using IP Office.

Procedure

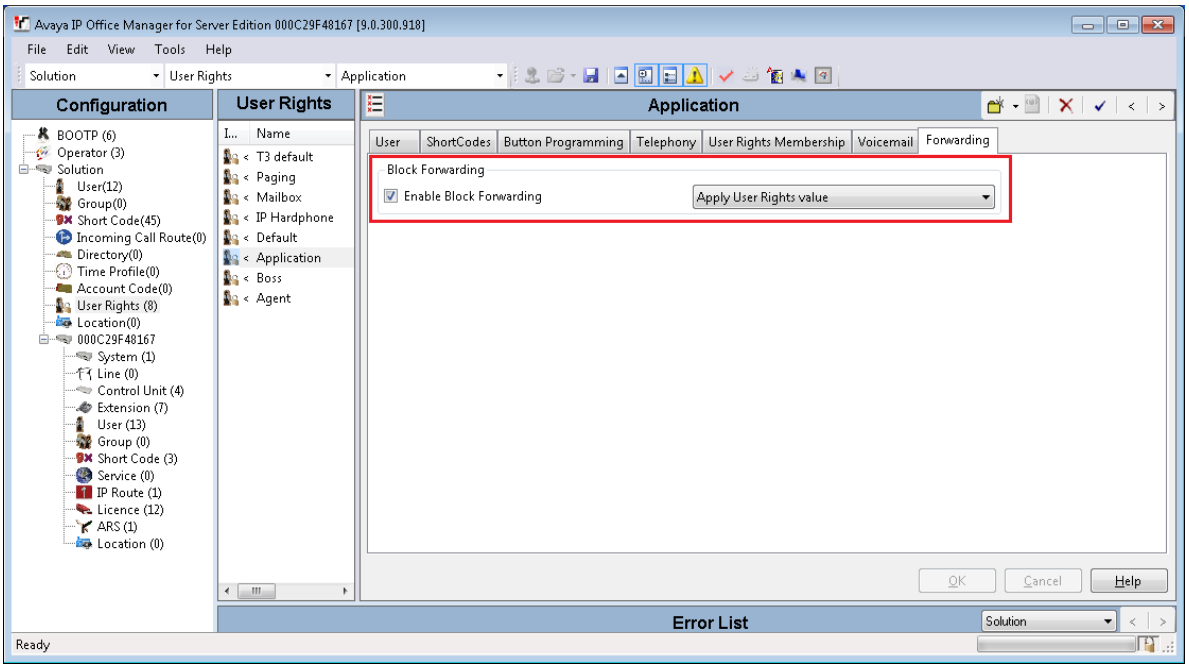
1. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
2. In the **Configuration** pane, under the **Solution** node, select **User Rights**.
3. In the middle pane, select **Application**.
4. In the right **Application** pane, select the **User** tab.

5. Select **Application Servers Group**.



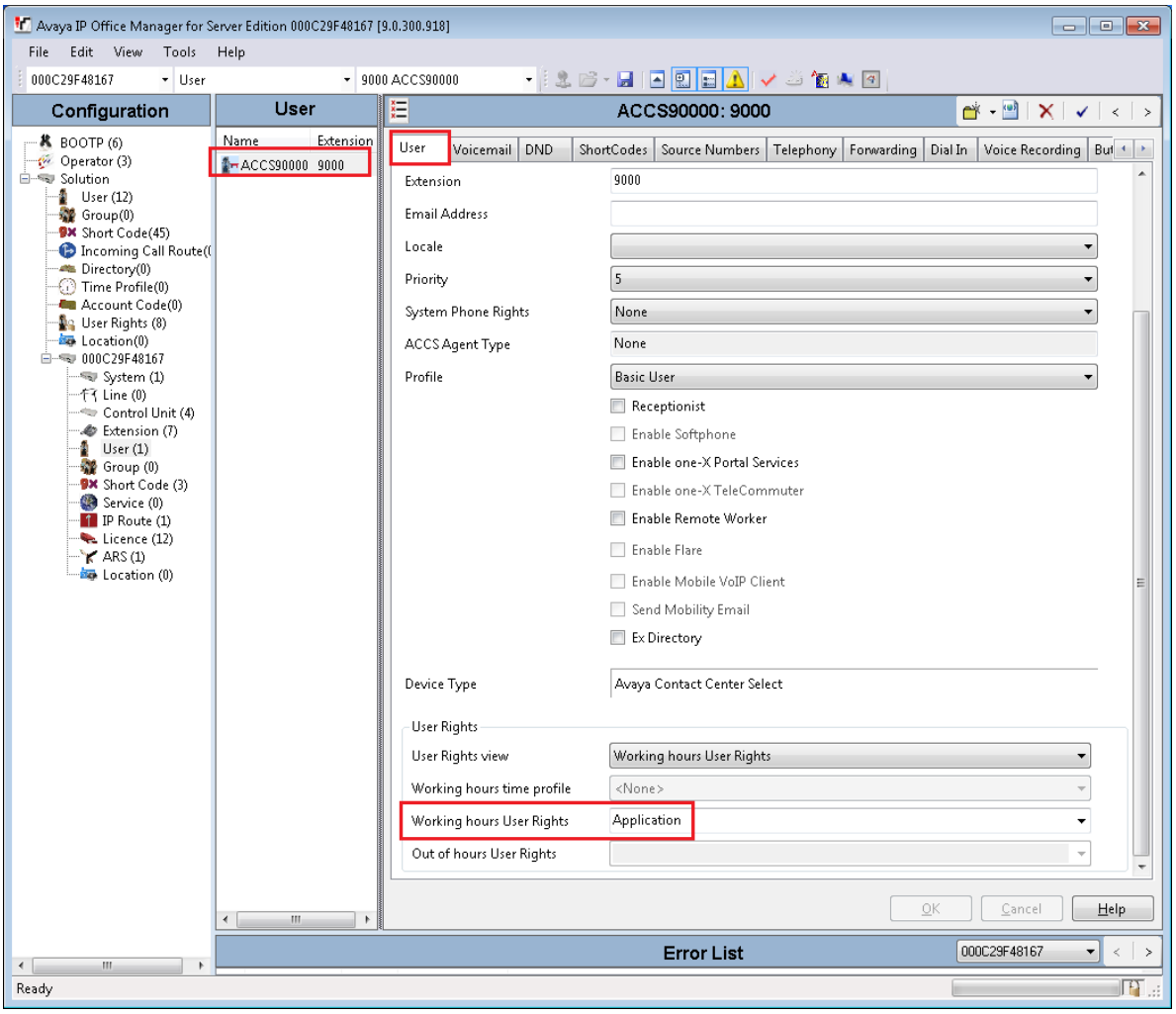
6. Click **OK**.
7. In the right **Application** pane, select the **Forwarding** tab.
8. Select **Enable Block Forward**.
9. From the list, select **Apply User Rights value**.

10. Click **OK**.



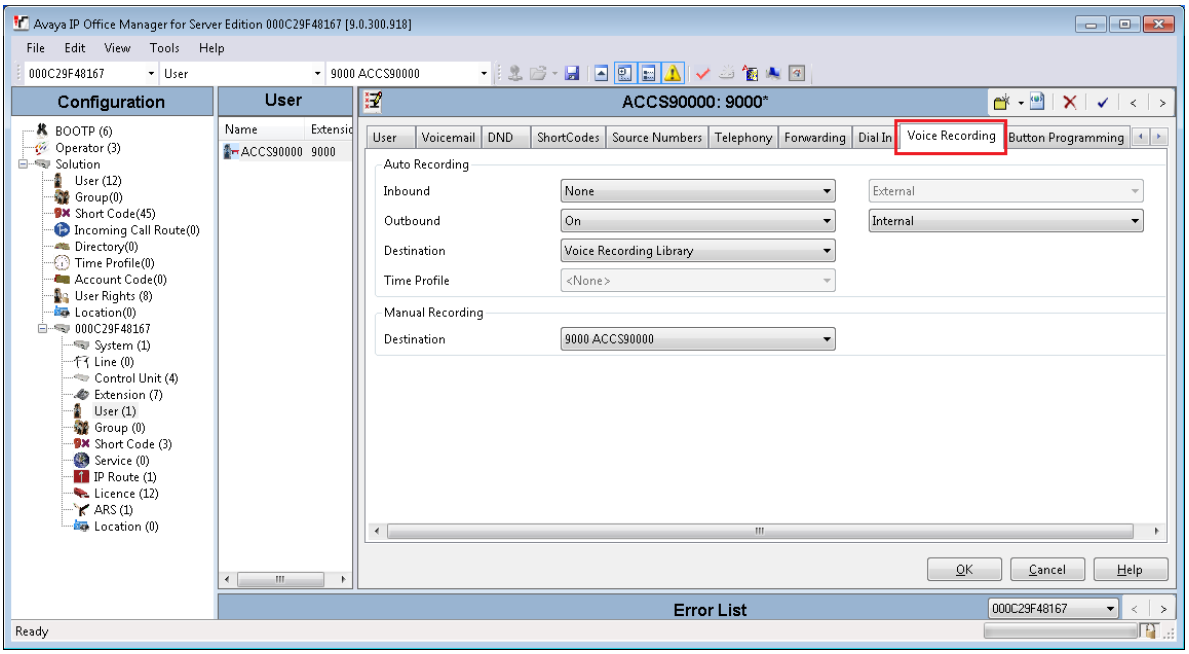
11. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
12. In the **Configuration** pane, under the IP Office server, select **User**.
13. In the middle pane, select the Avaya Contact Center Select SIP User Extension.
14. In the right pane, select the **User** tab.
15. From the **Working hours Users Rights** list, select **Application**.

16. Click **OK**.



17. On the Avaya Contact Center Select SIP User Extension user, select the **Voice Recording** tab.
18. From the **Inbound** list, select **None**.
19. From the **Outbound** list, select **On**, and **Internal**.

20. From the **Destination** list, select **Voice Recording Library**.



21. Click **OK**.

Configuring IP Office extensions

About this task

Use this procedure to configure an IP Office extension for Avaya Contact Center Select agents using SIP and H.323 physical desk phones.

Important:

Use this procedure for desk phones only. Ignore this procedure if your Avaya Contact Center Select agents use Avaya Communicator or Avaya Workplace Attendant softphones for Windows with IP Office. Avaya Contact Center Select prevents creating an IP Office extension for an extension used by a softphone and prohibits using the same extension for a physical desk phone and a softphone.

When you create an agent in Avaya Contact Center Select, data synchronization ensures that a corresponding user is created in IP Office. For Avaya Contact Center Select agents using SIP and H.323 physical desk phones, IP Office must have an extension for every IP Office user. You can reuse existing IP Office extensions for this purpose. Alternatively, you must create one new IP Office extension for each IP Office user that corresponds to an Avaya Contact Center Select agent. Avaya Contact Center Select agents can then use these IP Office users and extensions to handle customer calls when they log on.

There are many different ways of providing a H.323 or SIP IP Office extension for each Avaya Contact Center Select agent, the following procedure describes one method. Some IP Office

Extension settings cannot be merged. Changes to these settings might require a reboot of the IP Office system.

Important:

If your Avaya Contact Center Select agents are using Avaya Communicator for Windows with IP Office, do not create an extension for the corresponding IP Office users.

Procedure

1. Using IP Office Manager, select the IP Office server in the **Configuration** pane.
2. In the **Configuration** pane, under the IP Office server, select **Extension**.
3. Right-click and select **New** > **H323 Extension** or select **New** > **SIP Extension**.
4. On the **Extn** tab, in the **Extension Id** box, type an extension number.

   The Extension ID is the physical ID of the extension port. IP Office Manager prepopulates the default value.
5. On the **Extn** tab, in the **Base Extension** box, type a base extension number.

   The Base Extension is the extension number associated with the phone, that is the internal number you must dial to reach a user.

   The Base Extension value must match the Extension value of a user. For more information, see Configuring the SIP User Extension number on page 28.
6. In the **Phone Password** box, type a password.

   The password is only required for the H.323 extensions if you enable Media Security. For more information, refer to the IP Office documentation.
7. In the **Confirm Phone Password** box, retype the password.
8. Click **OK**.
9. Ensure the IP Office server has an extension, with a configured base extension number, for every IP Office user that corresponds to an Avaya Contact Center Select agent.

Saving the IP Office configuration data

Before you begin

- Install the IP Office Manager software on a client computer that can communicate with the IP Office server.

About this task

Use IP Office Manager to save your configuration changes to the IP Office server.

Procedure

1. In IP Office Manager, in the **Configuration** pane, select your IP Office server.

2. From the main IP Office Manager menu, select **File** > **Save Configuration**.
3. On the **Send Multiple Configurations** window, use the check box to select your IP Office server from the list.
4. Click **OK**.

   IP Office Manager saves the offline configuration file to your IP Office server.

Chapter 5: Deploying Avaya Aura® Media Server on Microsoft Azure

Create a Linux server image on Microsoft Azure and deploy a standalone Avaya Aura® Media Server as a software application. Use the Avaya Aura® MS software installer to install and configure the media server application.

Avaya Aura® Media Server on Microsoft Azure supports only Red Hat Enterprise Linux (RHEL) Release 7.6.

Avaya Aura® Media Server virtual machine requirements for Microsoft Azure

To deploy Avaya Aura® Media Server on Microsoft Azure, ensure that your virtual machine meets the following specification:

AMS virtual machine requirements for Microsoft Azure			
Component	**Minimum**	**Typical**	**High Capacity**
VM Size*	StandardB2s	StandardF4sv2	StandardA4
VM Generation	V1		
RHEL version	Red Hat Enterprise Linux (RHEL) Release 7.6		
Disk type	Standard HDD		
Disk size (GB)	80		

Note:

The VM size depends on the CPU core and RAM combination. Avaya recommends that you select higher configuration on Microsoft Azure.

Creating a virtual Linux server

About this task

Create a virtual machine with the Linux server to install the Avaya Aura® Media Server.

Avaya Aura® Media Server on Microsoft Azure supports only Red Hat Enterprise Linux (RHEL) Release 7.6.

Procedure

1. In the Microsoft Azure portal, click **Virtual machines**.
2. On the Virtual machines screen, click **Create** > **Virtual machine**.
3. On the Basics tab, do the following:
   a. From the **Resource group** list, select the resource group you have created for your solution.
   b. From the **Image** list, select the **RHEL 7.6** server.

      Tip:

      If you cannot find the required server name in the list, click **See all images** and use the **Search the Marketplace** box to find the server.

   c. Under **Administrator account**, select **Password** as an authentication type and configure a username and a password.
   d. Fill in the other required fields.
4. Click **Review + create**.
5. Click **Create**.
6. When the deployment process is finished, on the virtual machine Overview screen, click **Stop** to shut down the created Linux server.
7. In the left pane, under Settings, click **Disks**.
8. Under OS disk, click the OS disk name.

   The OS disk Overview screen opens.
9. In the left pane, under Settings, click **Size + performance**.
10. In the **Custom disk size (GiB)** box, type `80`.
11. Click **Resize**.
12. On the virtual machine Overview screen, click **Start** to launch the Linux server.

Configuring the disk partitions

About this task

Configure the disk partitions of your virtual Linux server.

Before you begin

Ensure that you are connected to VPN.

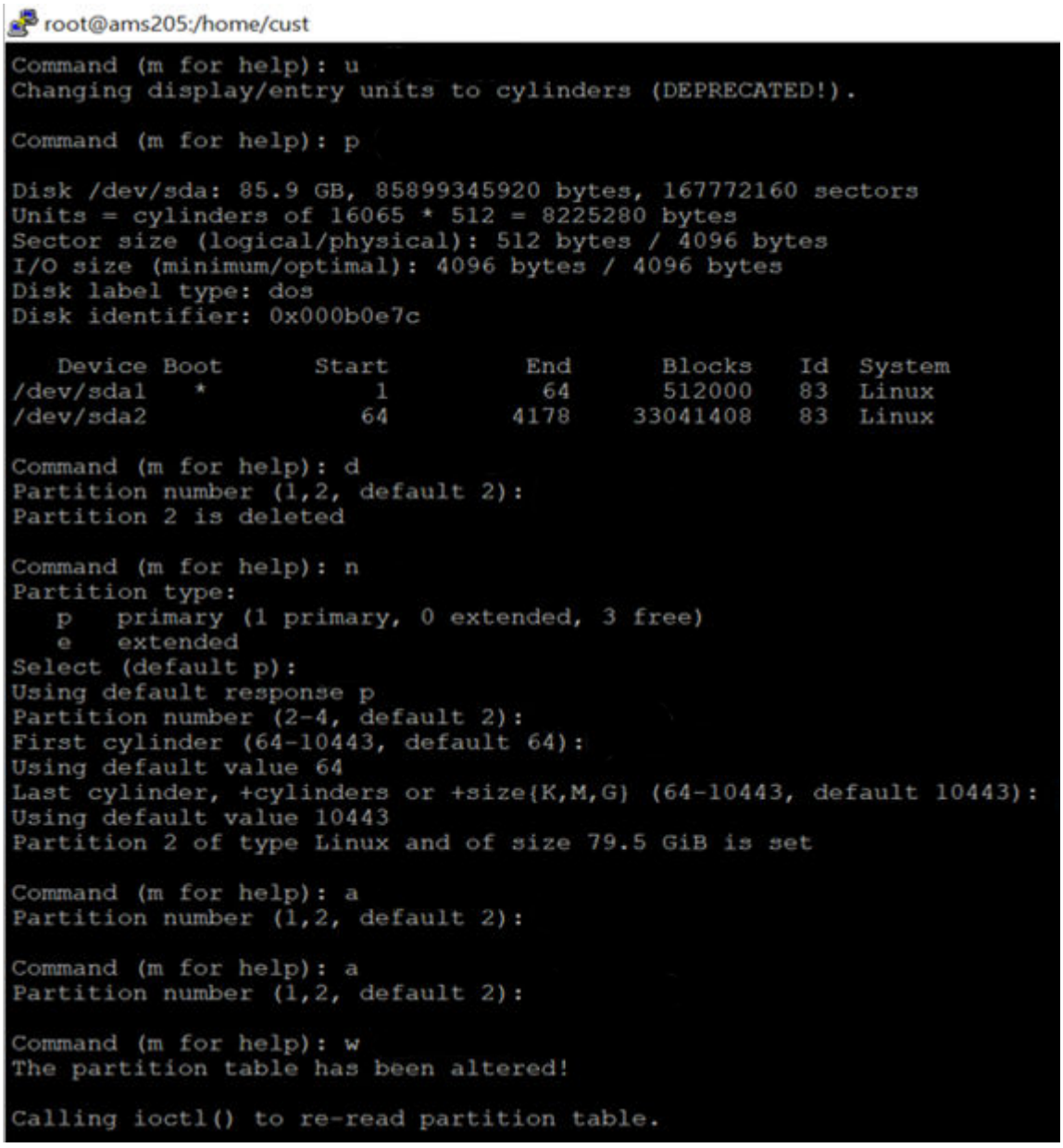
Procedure

1. Connect the Linux server using through SSH using the private IP address of the server.

   You can use PuTTY or other clients.
2. Log in to the Linux server as the root user.
3. To manage the disk partitions, run the following command:**`sudo fdisk/dev/sda`**.
4. To change the display units, run the following command: **`u`**.
5. To display the current partition table, run the following command: **`p`**.

   The table displays that the disk has two partitions.
6. To delete a partition, run the **`d`** command.
7. Press **Enter** to delete the second partition.
8. To add a new partition, run the following command: **`n`**.
9. To select the default partition type, press **Enter**.
10. To select the default partition number, press **Enter**.
11. To select the default first cylinder value, press **Enter**.
12. To select the default last cylinder value, press **Enter**.
13. To set a bootable flag, run the **`a`** command and press **Enter** to select the default value.
14. To save the changes and exit, run the following command: **`w`**.

    See the following screenshot as an output example:



15. When the server is up, run the **`xfs_growfs -d /dev/sdaX`** command, where X is the partition number.

    For example, **`xfs_growfs -d /dev/sda2`**.

Installing the Avaya Aura® Media Server software on the virtual Linux server

About this task

Transfer the Avaya Aura® MS installer from your local machine to the virtual Linux server using WinSCP and install the Avaya Aura® Media Server application using the SSH console.

Before you begin

- Ensure that you are connected to VPN.
- Install WinSCP on your local machine.
- Download the Avaya Aura® MS software from the Avaya Product Licensing and Delivery System (Avaya PLDS) at https://plds.avaya.com.
- Log in to the Linux server using the SSH console.

Procedure

1. Use WinSCP to copy the Avaya Aura® MS software installer to the Linux server on Microsoft Azure.
2. Using the SSH console, change the current directory to the location of the transferred Avaya Aura® MS installer or the drive where the Avaya Aura® MS installation file resides.

   The name of the file is in the following format: `MediaServer_8.0.build_yyyy.mm.dd.bin`.
3. To apply executable permissions to the installer file, run the **`chmod 755 filename`** command, where `filename` is the name of the Avaya Aura® MS installation file.
4. To update all packages, run the following command: **`sudo yum update`**.
5. To confirm the package installation, type `y`.
6. To run the installer, run the following command **`./filename`**, where `filename` is the name of Avaya Aura® Media Server installer.

   For example, **`./MediaServer_8.0.2.93_2020.01.30.bin`**.
7. To confirm the package installation, type `y`.
8. When prompted, press **Enter**.
9. Enable the https port from the server firewall or disable the firewall by doing the following:
   - To know the status of firewall, type **`systemctl status firewalld`**.
   - To disable firewall, type **`systemctl disable firewalld`**.
   - To stop firewall, type **`systemctl stop firewalld`**.

Logging on to Avaya Aura® Media Server Element Manager

About this task

Log in to Avaya Aura® Media Server Element Manager to configure Avaya Aura® Media Server.

Element Manager (EM) is a web-based administration tool that facilitates the Operation, Administration, and Maintenance (OAM) of Avaya Aura® Media Server.

Note:

You must have more than one Avaya Aura® Media Server account managed by separate users. If one account is disabled or lost, another account can perform critical tasks, backups or recovery. For more information, see *Implementing and Administering Avaya Aura® Media Server*.

Procedure

1. On your client computer, start a Web browser.
2. In the address box, enter https://SERVER_IP_ADDRESS:8443/em. Where SERVER_IP_ADDRESS is the IP address of the Avaya Aura® Media Server.
3. In the **User ID** box, type the Avaya Aura® Media Server User ID log in account name. For example, type `Admin`.
4. In the **Password** box, type the account password.
5. Click **Sign In**.

Configuring Avaya Aura® Media Server name resolution

About this task

Configure Avaya Aura® Media Server to resolve the hostname and Fully Qualified Domain Name (FQDN) of the Contact Center Manager Administration server. The Contact Center Manager Administration (CCMA) software is installed on the Contact Center server.

Procedure

1. Log in to Element Manager with administrative privileges.
2. Navigate to **EM** > **System Configuration** > **Network Settings** > **Name Resolution**.
3. Click **Add**.
4. In the **IP Address** box, enter the Contact Center Manager Administration IP address.
5. In the **Hostname** box, enter the Contact Center Manager Administration hostname.
6. Click **Save**.

Adding Contact Center Manager Administration as a SOAP trusted node

About this task

To support Prompt Management in Contact Center Manager Administration (CCMA), you must add CCMA as a SOAP trusted node in Avaya Aura® Media Server Element Manager.

Procedure

1. Log in to Element Manager.
2. In the Element Manager navigation pane, click **System Configuration** > **Network Settings** > **General Settings**.
3. Click **SOAP**.
4. In the **Trusted Nodes** box, enter the IP address of the CCMA server.
5. Select **Enable Trusted SOAP Nodes**.
6. Click **Save**.

Chapter 6: Deploying Avaya WebLM

Avaya provides a Avaya WebLM to manage licenses of one or more Avaya software products for your organization. WebLM facilitates easy tracking of licenses. To track and manage licenses in an organization, WebLM requires a license file from the https://plds.avaya.com website.

To deploy Avaya WebLM on Microsoft Azure, contact the Avaya representative and request to create an Avaya WebLM OS disk on Microsoft Azure. When the disk is available on your subscription, you can create a virtual machine from this disk.

Creating the Avaya WebLM virtual machine on Microsoft Azure

About this task

Create a virtual machine for Avaya WebLM from the Avaya WebLM OS disk.

Before you begin

- Contact Avaya and request to create a managed disk with the Avaya WebLM OS.

Procedure

1. Log in to the Microsoft Azure portal: https://portal.azure.com/.
2. Click **Disks**.
3. From the list, select the Avaya WebLM OS disk.
4. Click **Create VM** and do the following:
    a. In **Resource Group**, select the resource group that you created for IP Office.
    b. In **Virtual machine name**, type the virtual machine name.
    c. In Size, select the required virtual machine size.
    d. In Authentication type, select **Password**.
    e. Verify the network subnets.
    f. Click **Review + Create**.
    g. Click **Create**.

Result

You now can connect the Avaya WebLM virtual server using VPN.

Obtaining the WebLM server Host ID

Before you begin

- Deploy the WebLM OVA on your VMware host server.

About this task

Obtain the WebLM server Host ID so you can use it to obtain or generate a license for use by Contact Center features.

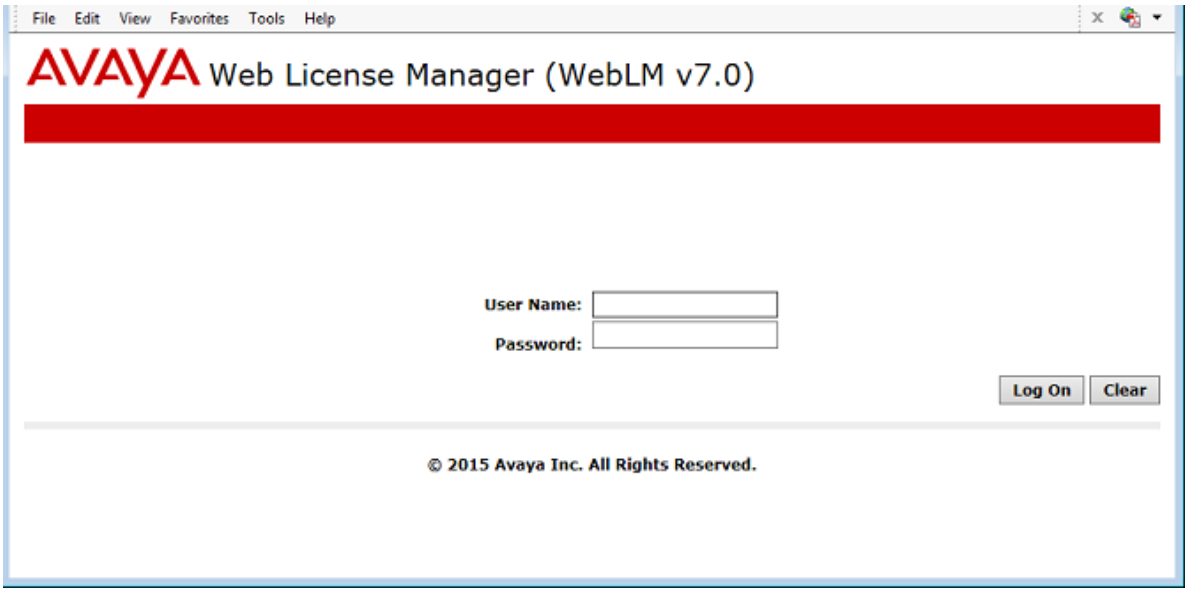
The first time you log in to the WebLM Web interface, you must change the default password.

Procedure

1. Open Internet Explorer and enter the following URL:

   https://<WebLMIPAddress>:52233/WebLM/index.jsp

   Where WebLMIPAddress is the IP address of the WebLM virtual machine.



2. Log in to the Web License Manager user interface using the default settings:

   The default **User Name** is admin.

   The default **Password** is weblmadmin.

3. Click **Log On**.
4. You are forced to change the password and log back on again using the new password.
5. On the left hand pane, select **Server properties**.

6. Record the Server Host ID **Primary Host ID** number.
7. Use the WebLM server Host ID to obtain Contact Center licenses from the Avaya Product Licensing and Delivery System (PLDS).

Installing the WebLM license file

Before you begin

- Use the WebLM server Host ID to obtain Contact Center licenses from the Avaya Product Licensing and Delivery System (PLDS).

About this task

Install the WebLM license file to license Contact Center features and agents.

Procedure

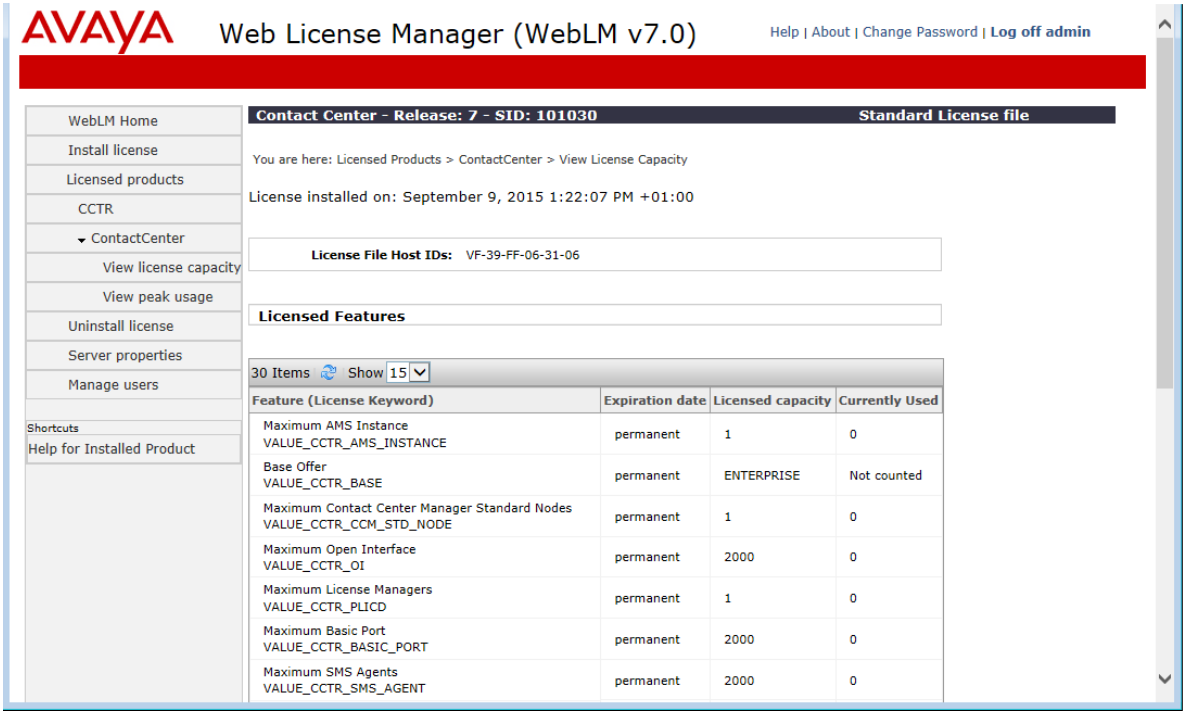
1. Open Internet Explorer and enter the following URL:

   https://<WebLMIPAddress>:52233/WebLM/index.jsp

   Where WebLMIPAddress is the IP address of the WebLM virtual machine.

2. Log in to the Web License Manager user interface using the “admin” **User Name** and your new password.
3. Log in to the WebLM Web interface using your new password.
4. In the left hand pane, click **Install license**.
5. In the **Enter license path** box, enter the license file details. Alternatively, click **Browse** to load the license file.

6. Click **Install**.
7. You can review the Contact Center licensed details by clicking **Licensed products** > **CCTR** > **ContactCenter**.



WebLM licensing is now available for Contact Center.

Chapter 7: Avaya Contact Center Select installation

On the Microsoft Azure portal, create and configure the Microsoft Windows Server virtual machine, install the Avaya Contact Center Select application software from an ISO image, and configure Avaya Contact Center Select using the Ignition Wizard, a simple configuration utility.

Avaya Contact Center Select Release 7.1 is supported only on the Microsoft Windows Server 2012 R2 or Microsoft Windows Server 2016 operating system. The Microsoft Windows Server 2012 R2 or Microsoft Windows Server 2016 operating system and server must meet the requirements specified in *Avaya Contact Center Select Solution Description*. Avaya Contact Center Select supports only Standard or Data Center editions of Microsoft Windows Server 2012 R2 or Microsoft Windows Server 2016.

Creating the Windows Server virtual machine on Microsoft Azure

About this task

Create a Windows Server 2012 R2 or Windows Server 2016 virtual machine on Microsoft Azure to deploy Avaya Contact Center Select.

Before you begin

- Ensure that the resource group and virtual network (VNET) that you created are available.
- Read *Avaya Contact Center Select Solution Description* for the Avaya Contact Center Select server specification requirements.

Procedure

1. In the Microsoft Azure portal, click **Virtual machines**.
2. On the Virtual machines screen, click **Create** > **Virtual machine**.
3. On the Basics tab, do the following:
    a. From the **Resource group** list, select the resource group you have created for your solution.
    b. From the **Image** list, select **Windows Server 2012 R2** or **Windows Server 2016**.

Tip:

If you cannot find the required server name in the list, click **See all images** and use the **Search the Marketplace** box to find the server.

c. Fill in the other required fields.

4. Click **Review + create**.
5. Click **Create**.
6. When the deployment process is complete, stop the virtual machine.
7. Configure the virtual machine size to comply with the Avaya Contact Center Select server specification requirements.

   The server must have minimum 32 GB RAM.
8. Create and attach a new SSD data disk with the size required for your solution.
9. Save the changes and start the virtual machine.

Configuring the Windows Server 2016 virtual machine

About this task

Configure the Windows Server 2016 virtual machine created on Microsoft Azure to deploy Avaya Contact Center Select.

For more information about hard disk partitions, see *Avaya Contact Center Select Solution Description*.

Before you begin

- Ensure that you are connected to the Azure VPN.

Procedure

1. Connect to the Windows virtual machine using the private IP address.
2. In the network settings, assign a static IP address to the server.

   Avaya Contact Center Select servers do not support Dynamic Host Configuration Protocol (DHCP).
3. If the Windows virtual machine uses letter D as the temporary disk name, use the Microsoft Azure instruction to change the drive letter.

   See the instruction at https://docs.microsoft.com/en-us/azure/virtual-machines/windows/change-drive-letter.
4. In the search box, enter `diskmgmt.msc` to access Disk Management.
5. Initialize the data disk and perform the disk partition as required for Avaya Contact Center Select.

Next steps

Mount the Avaya Contact Center Select ISO image and use the Avaya Contact Center Select installer and the Ignition Wizard to install and configure Avaya Contact Center Select.

Installing Avaya Contact Center Select without Avaya Aura® Media Server Release 7.1 DVD software

About this task

Install the Avaya Contact Center Select without Avaya Aura® Media Server software and enable your contact center to route contacts to the agents.

Before you begin

- Download the Avaya Contact Center Select ISO image and patches from the Avaya Product Licensing and Delivery System (Avaya PLDS) at https://plds.avaya.com.
- Download the most recent Avaya Contact Center Select Release Notes.

Procedure

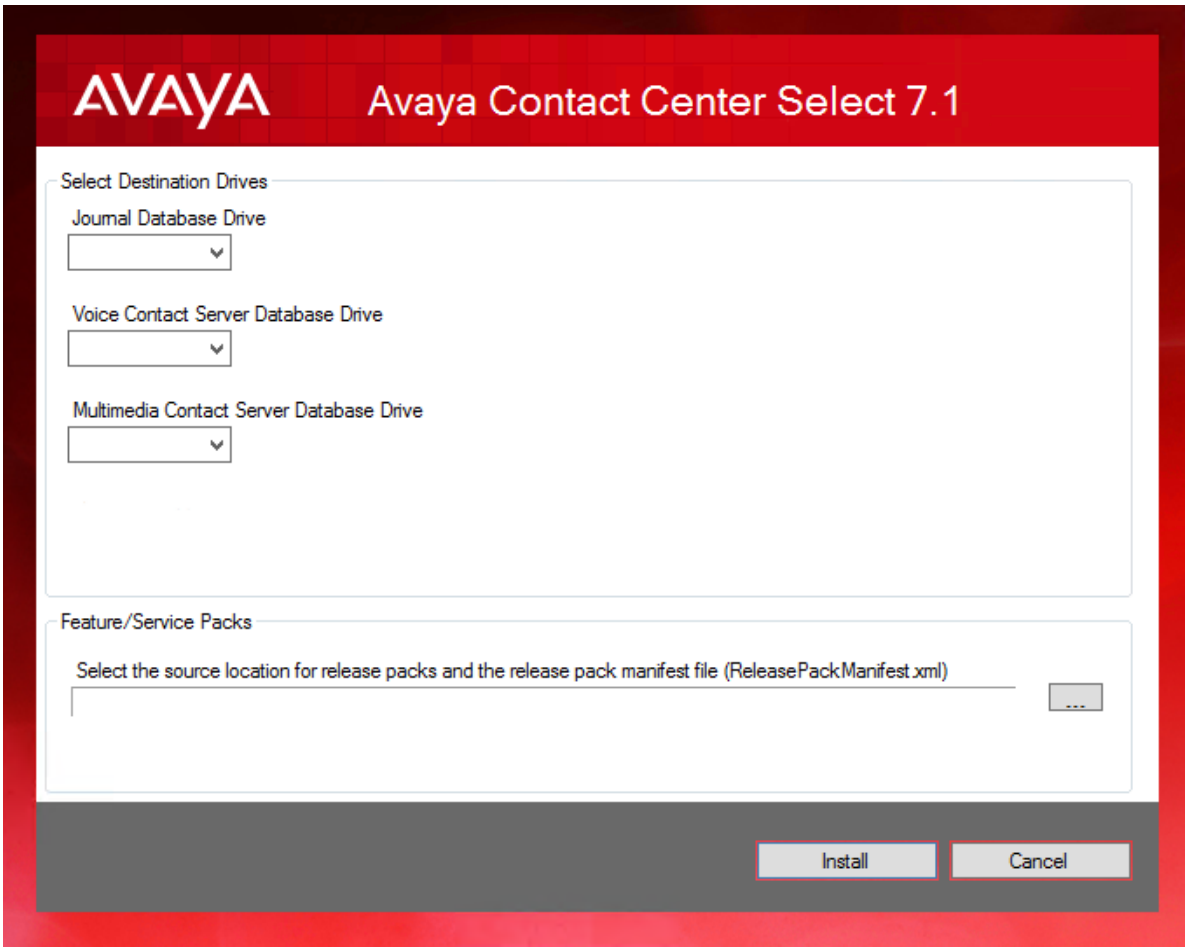
1. Read the Avaya Contact Center Select Release Notes for the most recent instructions.
2. Mount the Avaya Contact Center Select ISO file in your virtual machine so that it is available as a DVD drive.
3. Double click the DVD drive on the virtual server.

   If the installation does not automatically start, access the DVD drive and double-click **Setup.exe.**
4. Click **Install** to install the necessary software libraries 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**.
5. After the prerequisite software and libraries are installed, navigate to the Avaya Contact Center Select DVD and double-click **Setup.exe** to install the application software.
6. The Avaya Contact Center Select installer starts and verifies that the server meets the minimum hardware and Operating System requirements:
   - If the system checker detects server errors, it displays a System information window listing the detected blocking issues. Review the displayed issues, click **Cancel**, and consult *Avaya Contact Center Select Solution Description* to determine the actions to resolve the issue.
   - If the system checker detects non-blocking warnings, it displays a System information window listing the detected issues. Review the displayed issues and consult *Avaya Contact Center Select Solution Description* 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. Click **Ignore** or **Cancel**.

- If the system checker does not detect issues, the System information window is not displayed.

7. On the **Select Deployment Type** screen, select **Avaya Contact Center Select without Avaya Aura® Media Server**.
8. Click **Next**.
9. The **Select Destination Drive** window appears.



10. From the **Journal Database Drives** list, select the drive for the database journal file.
11. From the **Voice Contact Server Database Drive** list, select the drive for the voice databases.
12. From the **Multimedia Contact Server Database Drive** list, select the drive for the Contact Center Multimedia database.
13. In the **Service Packs** section, browse to locate the folder containing the Avaya Contact Center Select product updates.
14. Click **Install**.
15. The **AVAYA GLOBAL 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 **MICROSOFT SOFTWARE LICENSE TERMS** window appears.
18. 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**.
19. The **Progress** window appears and displays the installation progress.
20. After a successful installation, the following window appears.

21. When the software is installed, you have the following options.
    - To continue configuring the server installation data:
      a. Select the **Launch Avaya Contact Center Select Ignition Wizard** check box.
      b. Click **Configure**. This starts the Avaya Contact Center Select Ignition Wizard.
    - To defer configuring the server installation data:
      a. Clear the **Launch Avaya Contact Center Select Ignition Wizard** check box.
      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 Avaya Contact Center Select server.

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

Next steps

Use the Ignition Wizard to configure Avaya Contact Center Select.

Configuring the server installation data

Before you begin

- Know the IP address of the IP Office primary call server.
- Know the IP Office Service User account name and password.
- Know the IP Office System Password. Ask your IP Office Administrator for the System Password.
- Configure an IP Office SIP User Extension Number to be used to register Avaya Contact Center Select.
- Configure an IP Office short code to forward customer calls to an Avaya Contact Center Select CDN (Route Point).
- Install an Avaya WebLM server. Know the IP address and port number of the Avaya WebLM server.
- Install an Avaya Aura® Media Server server. Know the IP address and port number of the Avaya Aura® Media Server server.
- If your Avaya Contact Center Select solution is going to support email contacts, configure the mailbox details on your email server that you use to receive inbound email messages intended for the Avaya Contact Center Select. Know the name and password for this mailbox.
- If your Avaya Contact Center Select solution is going to support email contacts, know the host name of your email host server.

- 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 Contact Center Select Advanced Administration*.

About this task

Configure the Avaya Contact Center Select installation data to enable communication with an IP Office primary call server.

Optionally, if your solution is to support routed email contacts, configure the mailbox details on your email server that you use to receive inbound email messages intended for the Avaya Contact Center Select. Avaya Contact Center Select logs onto this mailbox on your mail server and retrieves email at defined intervals. Email messages are then routed to agents. To route an email, Avaya Contact Center Select requires the mailbox name and password.

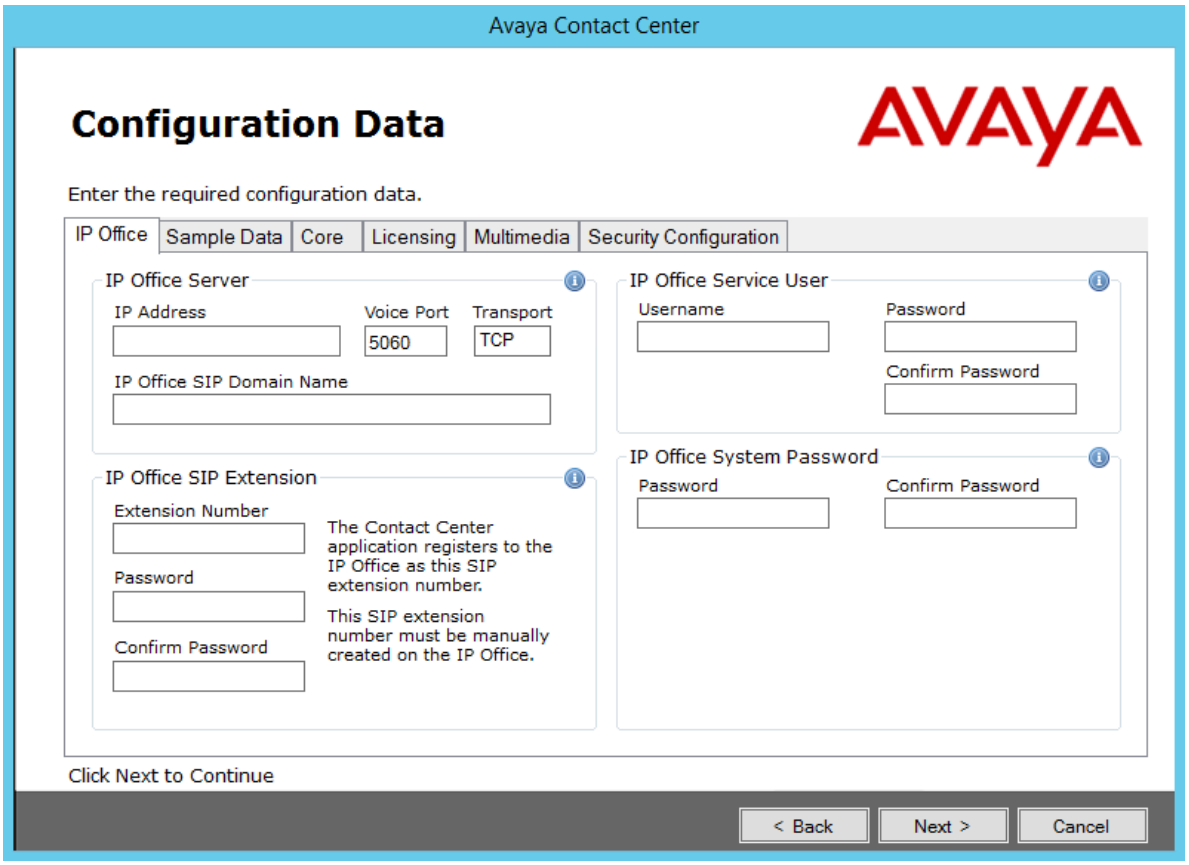
Procedure

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

   The Avaya Contact Center Select Welcome screen appears.

2. Click **Next**.
3. On the license screen, select **I Accept the Terms of the End-User License Agreement**.

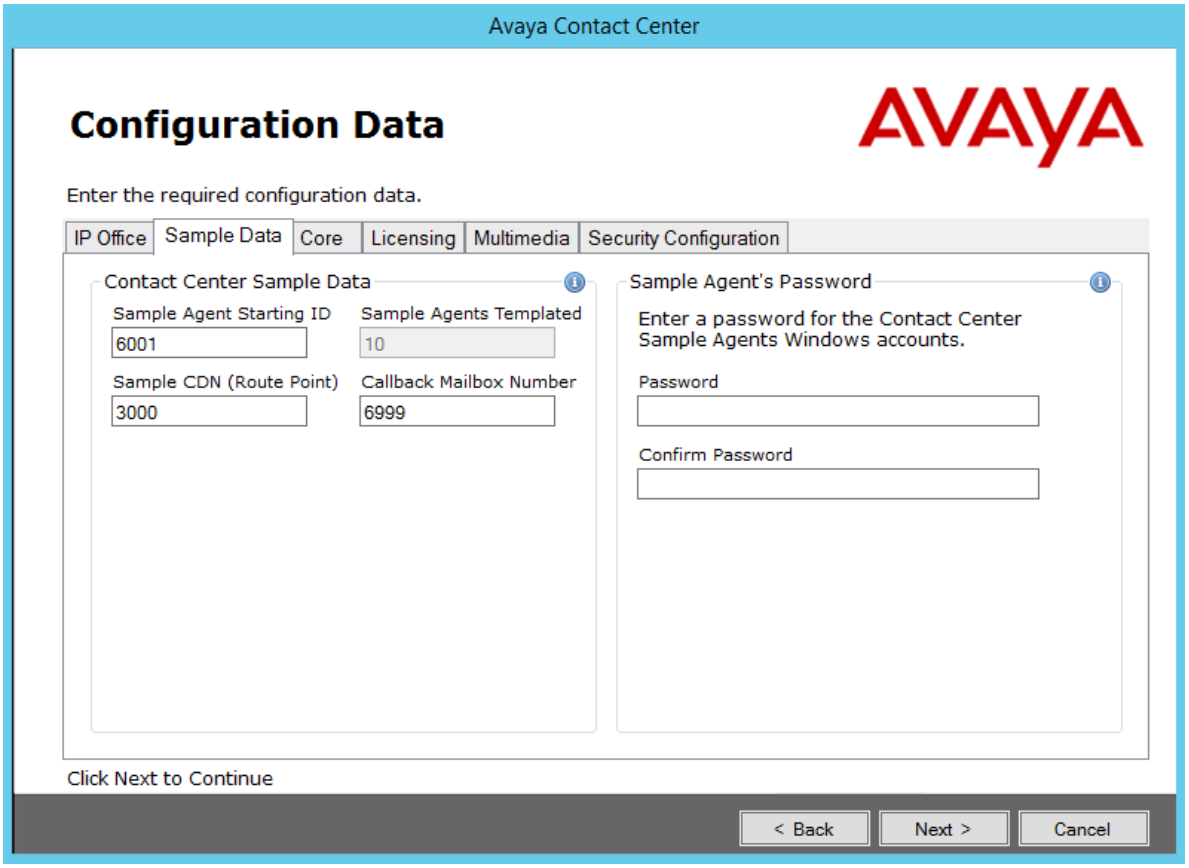
4. Click **Next**.



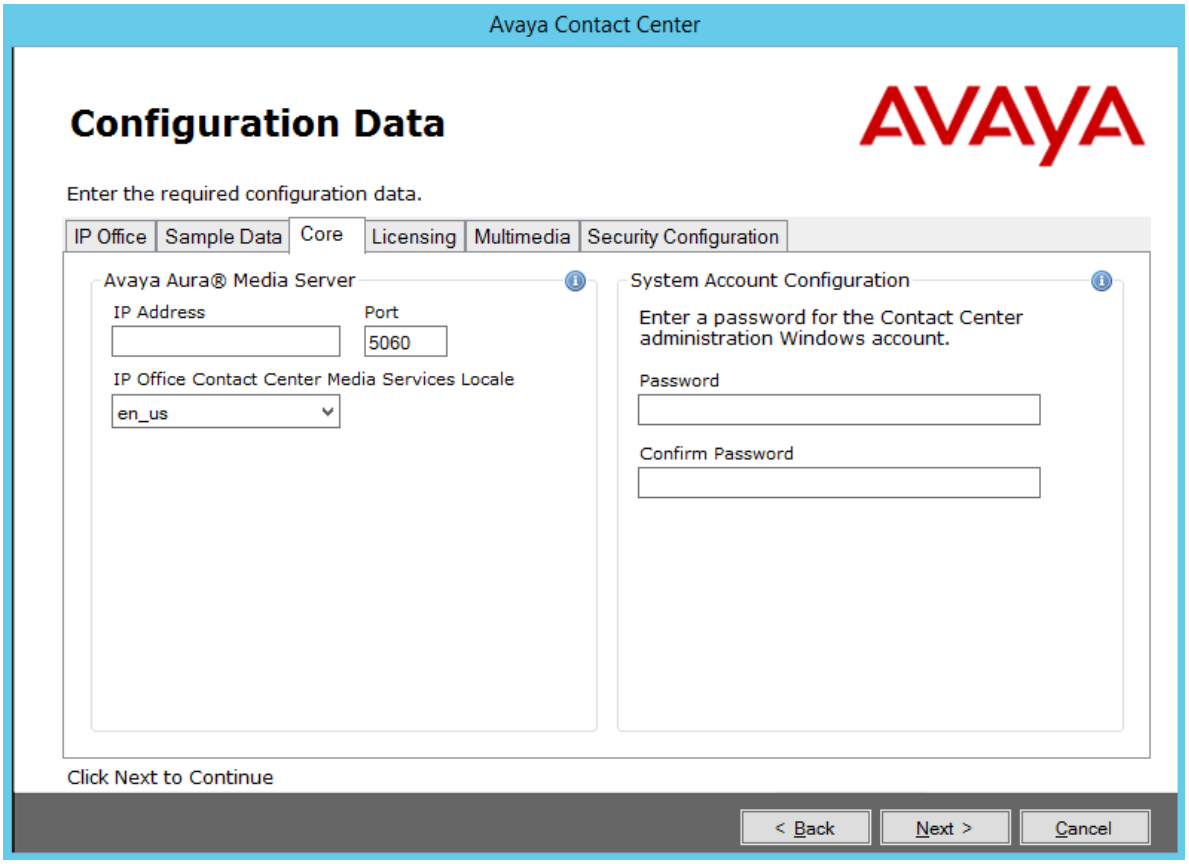
5. On the **Configuration Data** screen, select the **IP Office** tab.
6. In the **IP Office Server** section, in the **IP Address** box, type the IP address of the IP Office primary call server.
7. In the **Voice Port** box, type the port number of the IP Office primary call server. The default port number is 5060.
8. From the **Transport** list, select the network transport communication protocol for the IP Office primary call server. The default protocol is TCP.
9. In the **IP Office SIP Domain Name** box, type the SIP domain name of your IP Office primary call server. The Avaya Contact Center Select SIP domain name must match your IP Office SIP domain name.
10. In the **IP Office SIP Extension** section, in the **Extension Number** box, type the IP Office SIP User Extension Number used to register Avaya Contact Center Select. For more information, see Configuring the SIP User Extension Number on page 28.
11. In the **IP Office SIP Extension** section, in the **Password** box, type the password of the IP Office SIP User Extension Number used to register Avaya Contact Center Select. Enter the number that you configured for the Supervisor Settings - Login Code on the user's

Telephony tab. For more information, see Configuring the SIP User Extension Number on page 28.

12. In the **IP Office SIP Extension** section, in the **Confirm Password** box, re-type the password.
13. In the **IP Office Service User** section, in the **Username** box, type the name of your IP Office data synchronization service user. For more information, see Configuring an IP Office service user for data synchronization on page 23.
14. In the **IP Office Service User** section, in the **Password** box, type the password of your IP Office data synchronization service user.
15. In the **IP Office Service User** section, in the **Confirm Password** box, re-type the password.
16. In the **IP Office System Password** section, in the **Password** box, type the *System Password* for your IP Office call server. Ask your IP Office Administrator for the System Password.
17. In the **IP Office System Password** section, in the **Confirm Password** box, re-type the *System Password* for your IP Office call server.
18. Select the **Sample Data** tab.

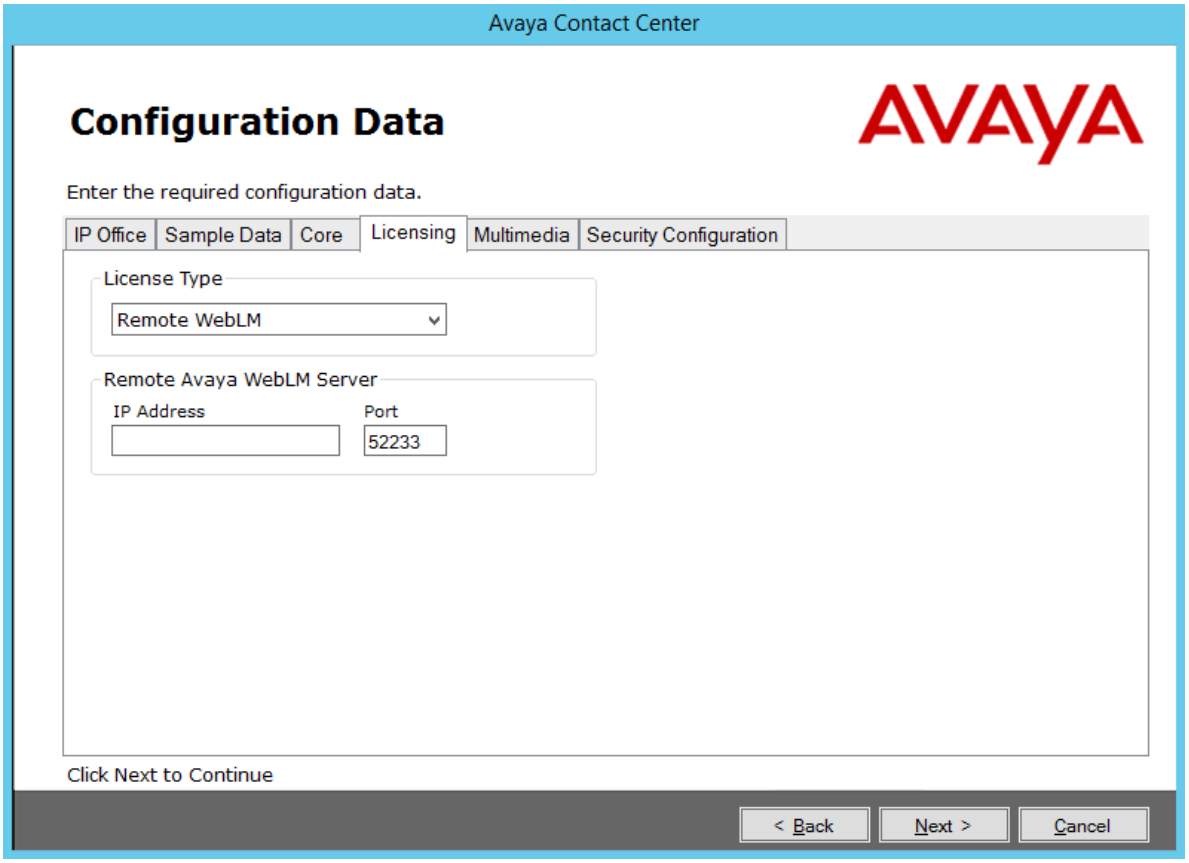


19. In the **Contact Center Sample Data** section, in the **Sample Agent Starting ID** box, type a phone number for the first sample Avaya Contact Center Select agent. Avaya Contact Center Select automatically creates ten sample agents, using this number as the first of ten sequential agent numbers. The default number is 6001.
20. In the **Sample CDN (Route Point)** box, type a number for the Avaya Contact Center Select CDN (Route Point). This number must match an IP Office short code entry number. For more information, see Configuring a shortcode to Contact Center Route Points on page 28. The default number is 3000.
21. In the **Callback Mailbox Number** box, type the voice mail mailbox number. This voice mail number is used by the Customer Service sample application in Orchestration Designer. The default number is 6999.
22. In the **Sample Agent's Password** section, in the **Password** box, type a password for the Windows accounts of the sample agents. Avaya recommends that you enter a password that conforms to your corporate password policy.
23. In the **Confirm Password** box, re-type the password for the Windows accounts of the sample agents.
24. Select the **Core** tab.

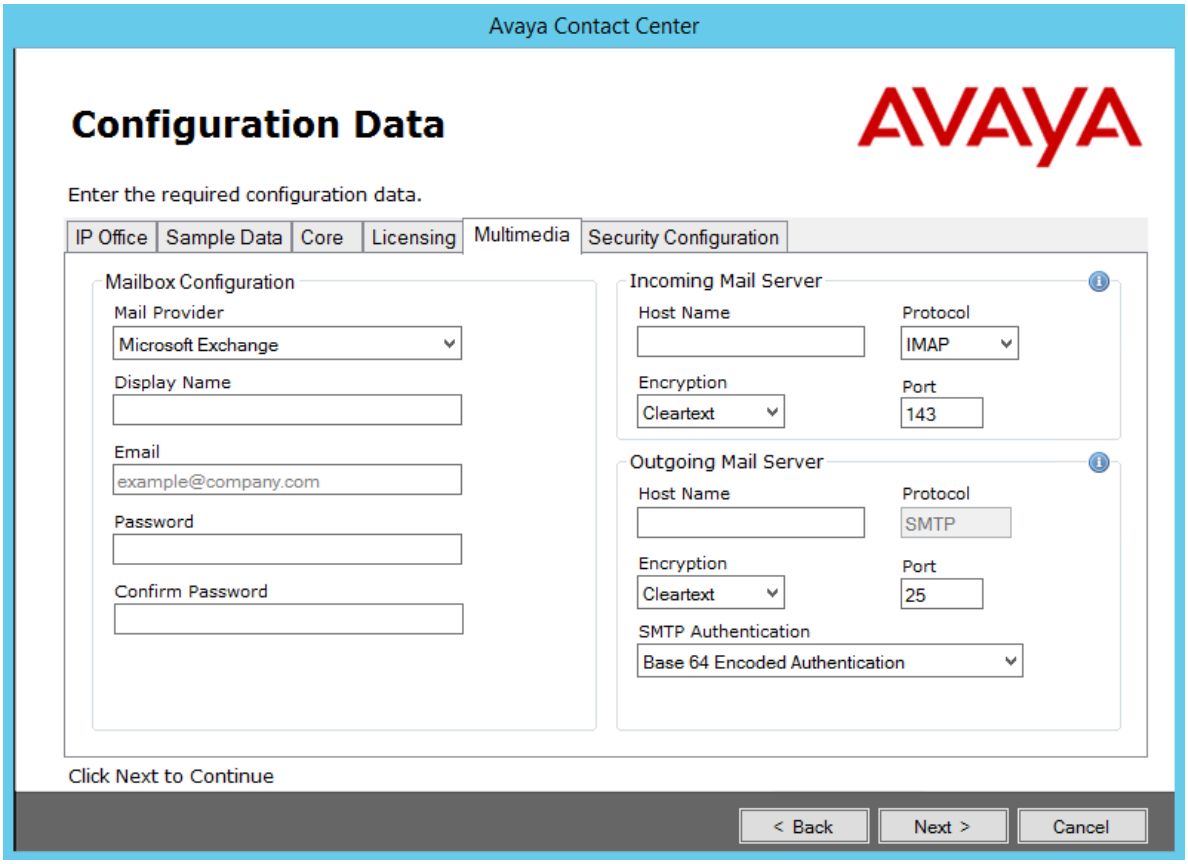


25. In the **Avaya Aura® Media Server** section, in the **IP Address** box, type the IP address of your Avaya Aura® Media Server.

26. In the **Port** box, type the port number for your Avaya Aura® Media Server. The default port number is 5060.
27. From the **IP Office Contact Center Media Services Locale** list, select the locale (including language and dialects) of the solution environment.
28. In the **System Account Configuration** section, in the **Password** box, type a password for the Avaya Contact Center Select 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.
29. In the **Confirm Password** box, type the password.
30. Select the **Licensing** tab.

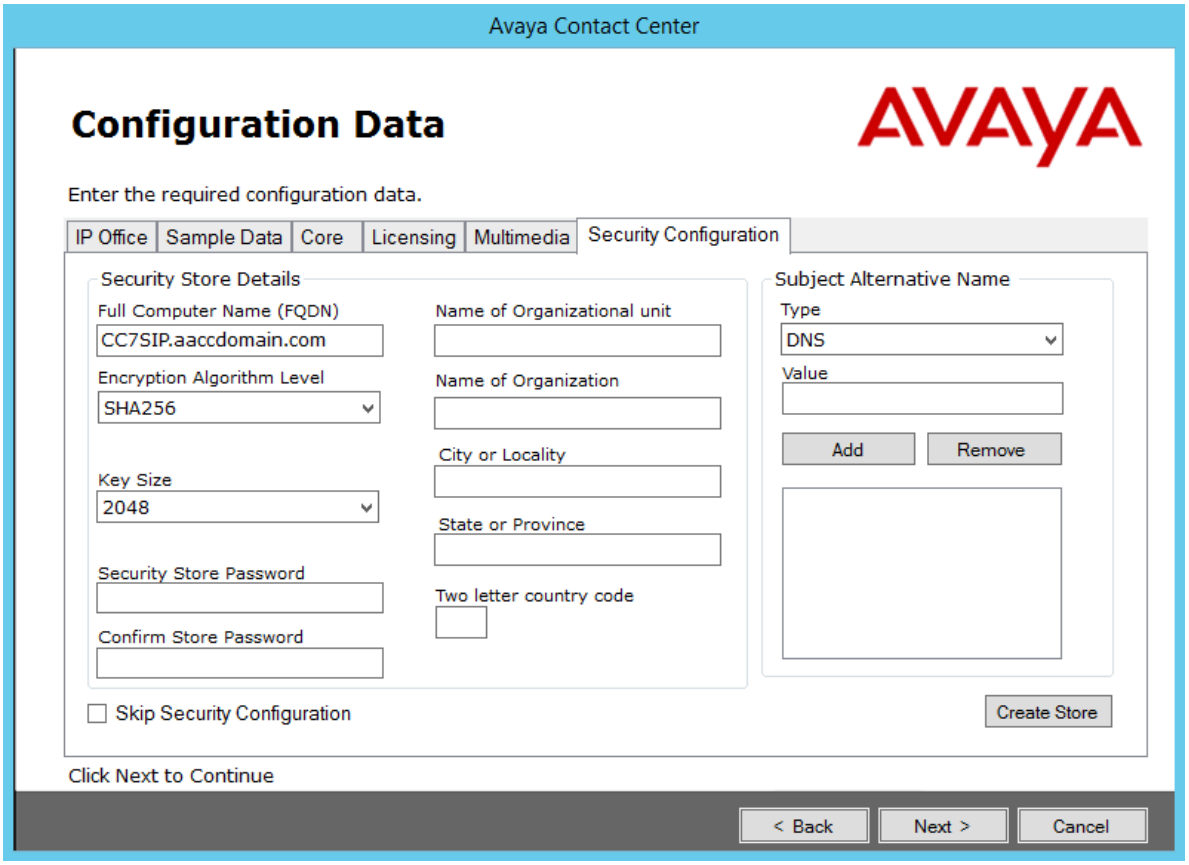


31. From the **License Type** list, select **Remote WebLM**.
32. In the **IP Address** box, type the IP address of the remote Avaya WebLM server.
33. **(Optional)** To configure the Avaya WebLM centralized licensing, select the **Centralized** check box and, in the **CLID** box, type the Centralized License ID (CLID) of the ACCS server.
34. Select the **Multimedia** tab.



35. In the **Mailbox Configuration** section, from the **Mail Provider** list, select None, Microsoft Exchange, Gmail, Outlook Hotmail, Yahoo, or Other (POP3/IMAP). The default is Microsoft Exchange. If Avaya Contact Center Select is not going to process email contacts, select **None**. If you select Gmail, Outlook Hotmail, or Yahoo, the Incoming Mail Server and Outgoing Mail Server sections are automatically populated for you.
36. In the **Mailbox Configuration** section, in the **Display Name** box, type a display name for the mailbox.
37. In the **Mailbox Configuration** section, in the **Email** box, type the email address for the mailbox. For example, sales@company.com.
38. In the **Mailbox Configuration** section, in the **Password** box, type the password for the mailbox.
39. In the **Mailbox Configuration** section, in the **Confirm Password** box, re-type the password for the mailbox.
40. In the **Incoming Mail Server** section, in the **Host Name** box, type the name of the server on which email messages are received in your network.
41. In the **Incoming Mail Server** section, from the **Protocol** list, select the communication protocol for the inbound email server. Select **POP3** or **IMAP**. The default protocol is POP3.

42. In the **Incoming Mail Server** section, from the **Encryption** list, select the encryption type to use. Select **Cleartext**, **TLS**, or **STARTTLS**.
43. In the **Incoming Mail Server** section, in the **Port** box, type the port number of the incoming email server. For the POP3 protocol, the default port number is 110. For the IMAP protocol, the default port number is 143.
44. In the **Outgoing Mail Server** section, in the **Host Name** box, type the name of the server from which email messages are sent. Your inbound and outbound mail servers can have the same name.
45. For outgoing email, the **Protocol** is SMTP.
46. In the **Outgoing Mail Server** section, from the **Encryption** list, select the encryption type to use. Select **Cleartext**, **TLS**, or **STARTTLS**.
47. In the **Outgoing Mail Server** section, in the **Port** box, type the port number of the outgoing email server. The default port number is 25.
48. In the **Outgoing Mail Server** section, from the **SMTP Authentication** list, select SMTP Authentication Disabled or Base 64 Encoded Authentication. The default authentication method is Base 64 Encoded Authentication.
49. Select the **Security Configuration** tab, and configure the security details in the **Security Store Details** section.



50. If you do not want to enable security, select the **Skip Security Configuration** checkbox and skip to 66 on page 63.

    Important:

    A warning message appears. If you proceed without enabling security and IP Office is using TLS, you cannot test a first call quickly without additional configuration steps. The CTI link is disabled until you configure Contact Center TLS certificates to communicate securely with IP Office, or until you configure IP Office to allow an unsecured CTI connection. After the deployment, to complete your security configuration, follow the procedures in *Avaya Contact Center Select Advanced Administration*.

51. 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.

52. In the **Name of Organizational unit** box, type the name of the department or division within the company.
53. In the **Name of Organization** box, type the company name.
54. In the **City or Locality** box, type the name of the city or district in which the contact center is located.
55. In the **State or Province** box, type the state or province in which the contact center is located.
56. In the **Two Letter Country Code** box, type the country code in which the contact center is located.
57. In the **Security Store password** box, type a password for accessing the new security store.
58. 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.

59. 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 Business Continuity system, add the current server FQDN and the Managed name for the HA pair.

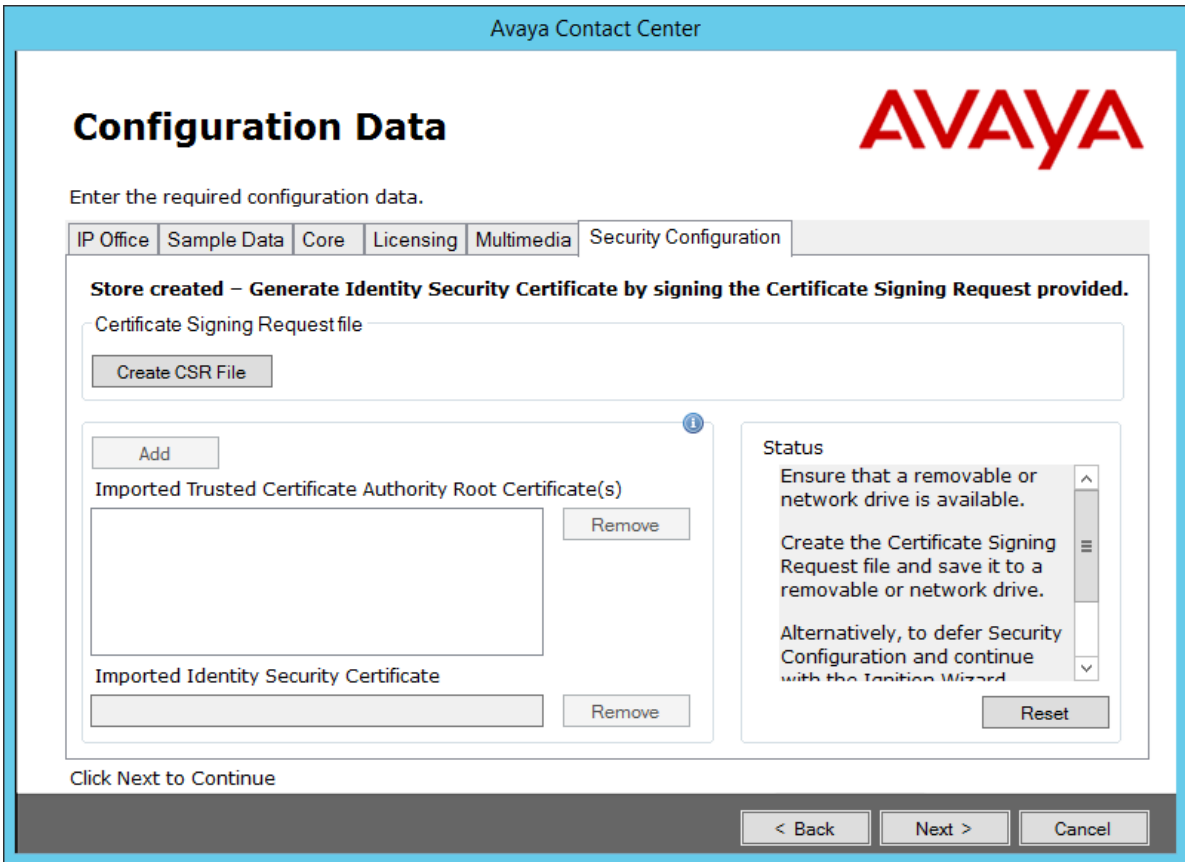
60. If you want to change the encryption setting, select the required encryption settings from the **Encryption Algorithm Level** and **Key Size** drop-down lists.

    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.

61. Click **Create Store**.

62. You can now use the **Security Configuration** tab to create and save a Certificate Signing Request (CSR) file.



63. Click **Create CSR File**.

64. 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.

65. Click **Add** to import certificates. In the **Open** dialog box, navigate to the location of a certificate and click **Open**. To remove the imported certificate, select the required certificate from the list and click **Remove**.

    You can import either a chained certificate, or separate root and signed certificates. Root certificates appear in the **Imported Trusted Certificate Authority Root Certificate(s)** section. A signed certificate appears in the **Imported Identity Security Certificate** section.

    If a chained certificate contains both root and signed certificates, you can add root certificates and signed certificate simultaneously by importing just one chained certificate.

    If a chained certificate contains root certificates only, you can use the chained certificate to add all root certificates at a time. To add a signed certificate, click **Add** and navigate to the required signed certificate.

    If you have separate root and signed certificates, you must add them one by one by clicking the **Add** button. Always add a signed certificate last.

    Important:

    When adding a chained certificate, the system can ask you to enter the password you created for accessing the security store. See 57 on page 61.

66. Click **Next**.
67. Review and confirm your inputs, and click **Configure**.

    The configuration utility begins to configure the Avaya Contact Center Select components.

68. When the Avaya Contact Center Select is configuration details are applied, the **Configuration Complete** screen appears.
69. Click **Finish**.
70. On the **Avaya Contact Center** message box, click **OK** to restart Avaya Contact Center Select.

    Avaya Contact Center Select software is now installed on the virtual machine.

Using the Contact Center Dashboard

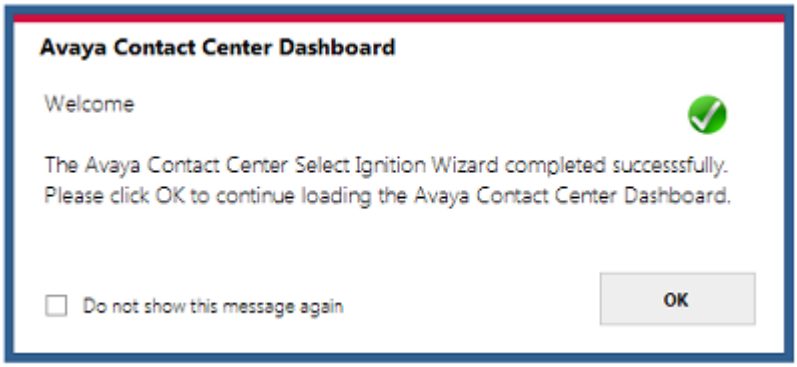
About this task

You can use the Contact Center Dashboard to access Contact Center system tools and diagnose system problems. The Contact Center Dashboard displays some Operating System and system details such as CPU type, network details, and Operating System activation status.

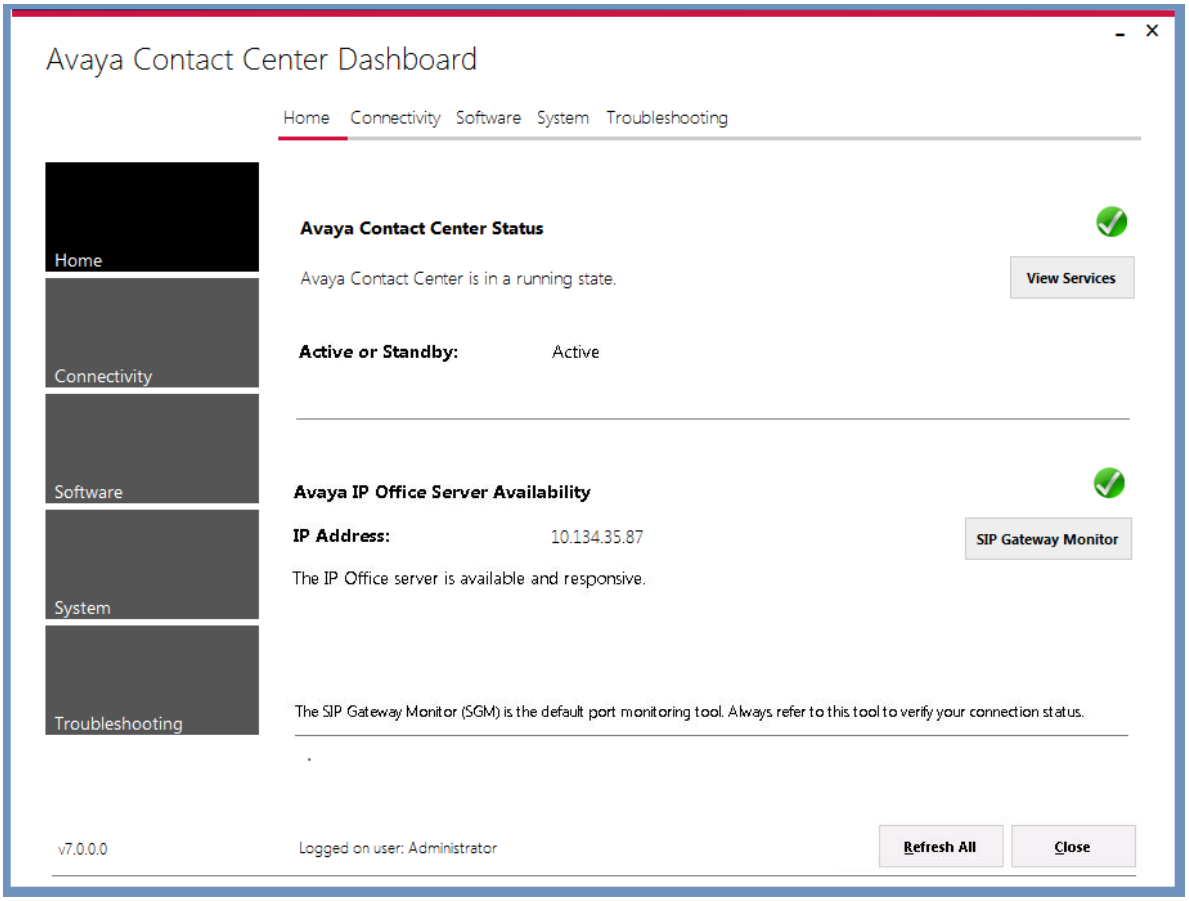
The Contact Center Dashboard launches automatically the first time the Contact Center server boots up.

Procedure

1. The Contact Center Dashboard Welcome message box automatically appears when the server starts up.

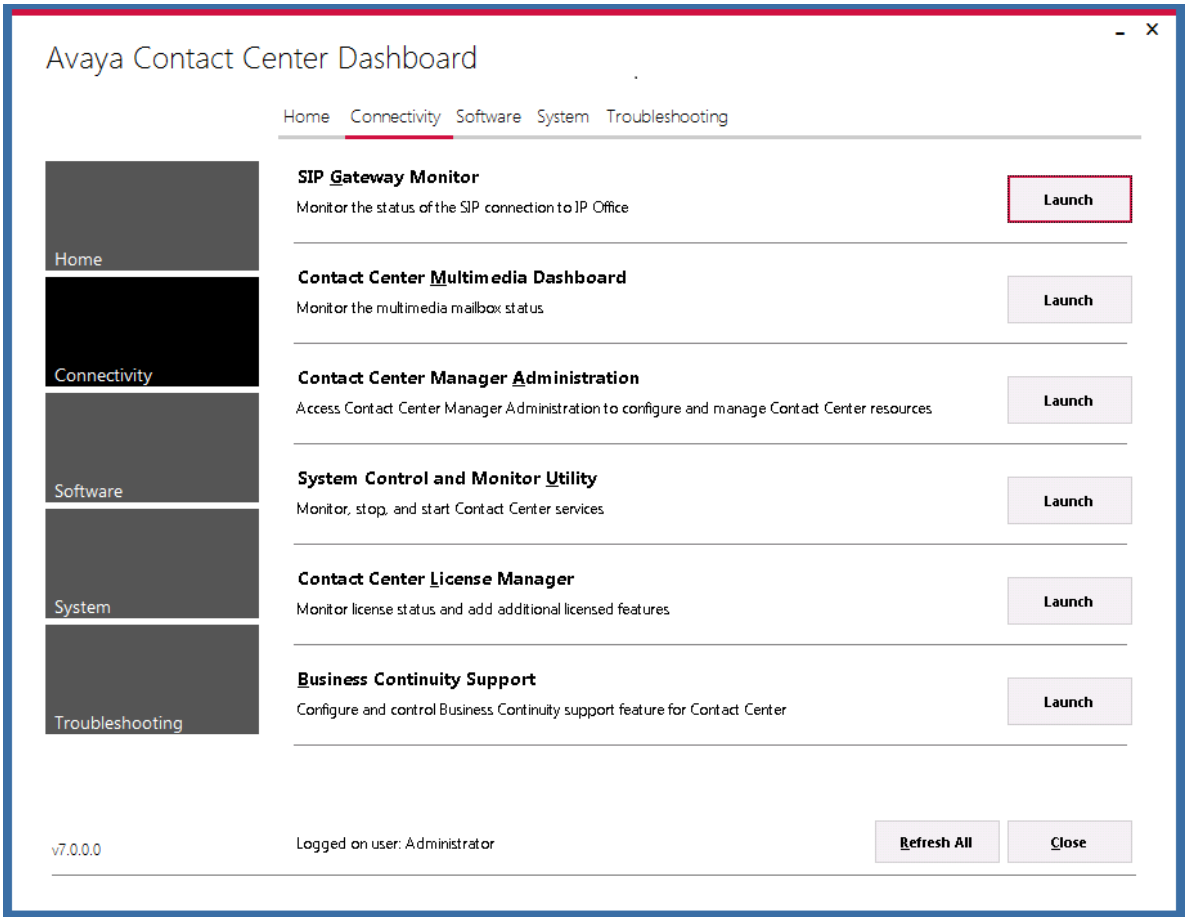


2. Click **OK**.
3. On the Contact Center Dashboard, select the **Home** tab.



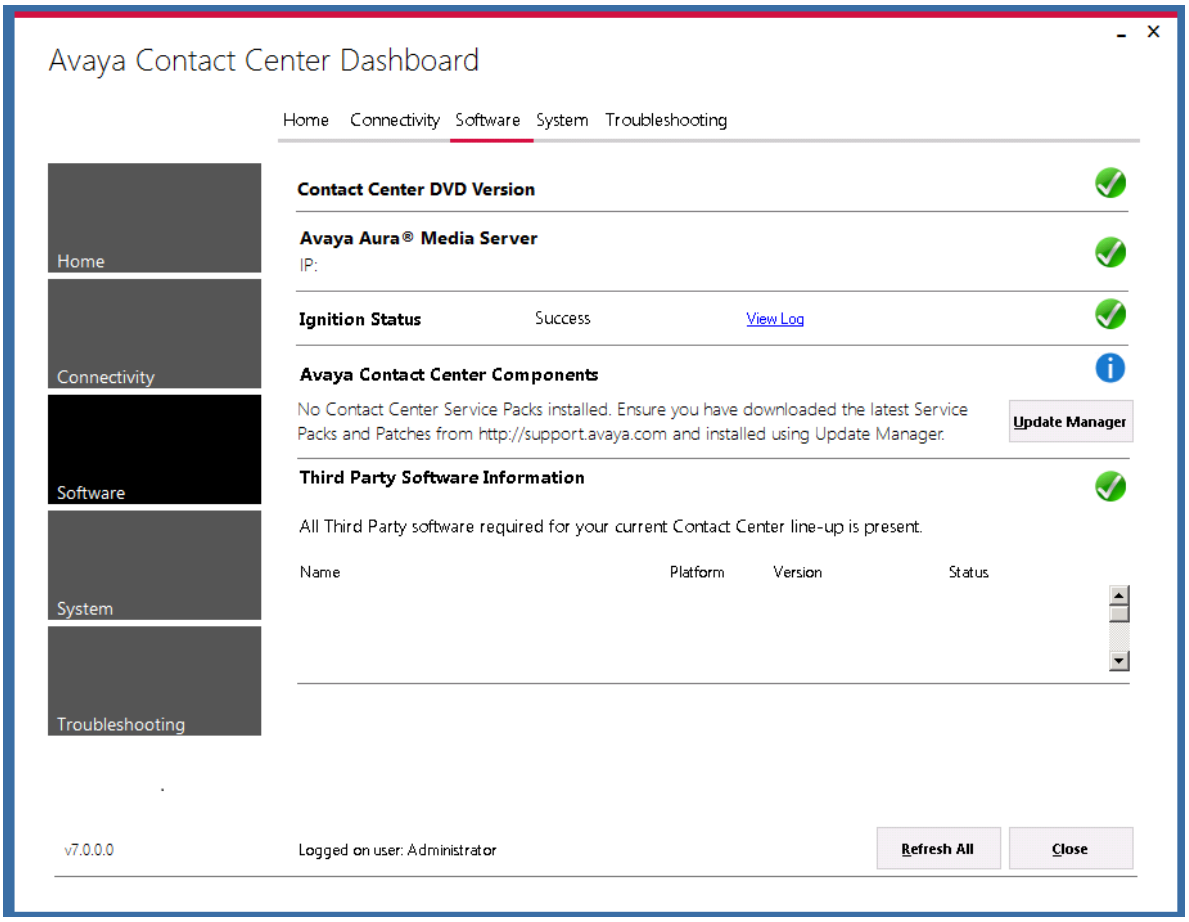
4. Click **Refresh All** to refresh the Contact Center Dashboard status reports.

5. In the **Avaya Contact Center Status** section, click **View Services** to monitor the state of the Contact Center Windows services.
6. In the **Avaya IP Office Server Availability** section, click **SIP Gateway Monitor** to determine if Contact Center is communicating with IP Office.
7. Select the **Connectivity** tab.



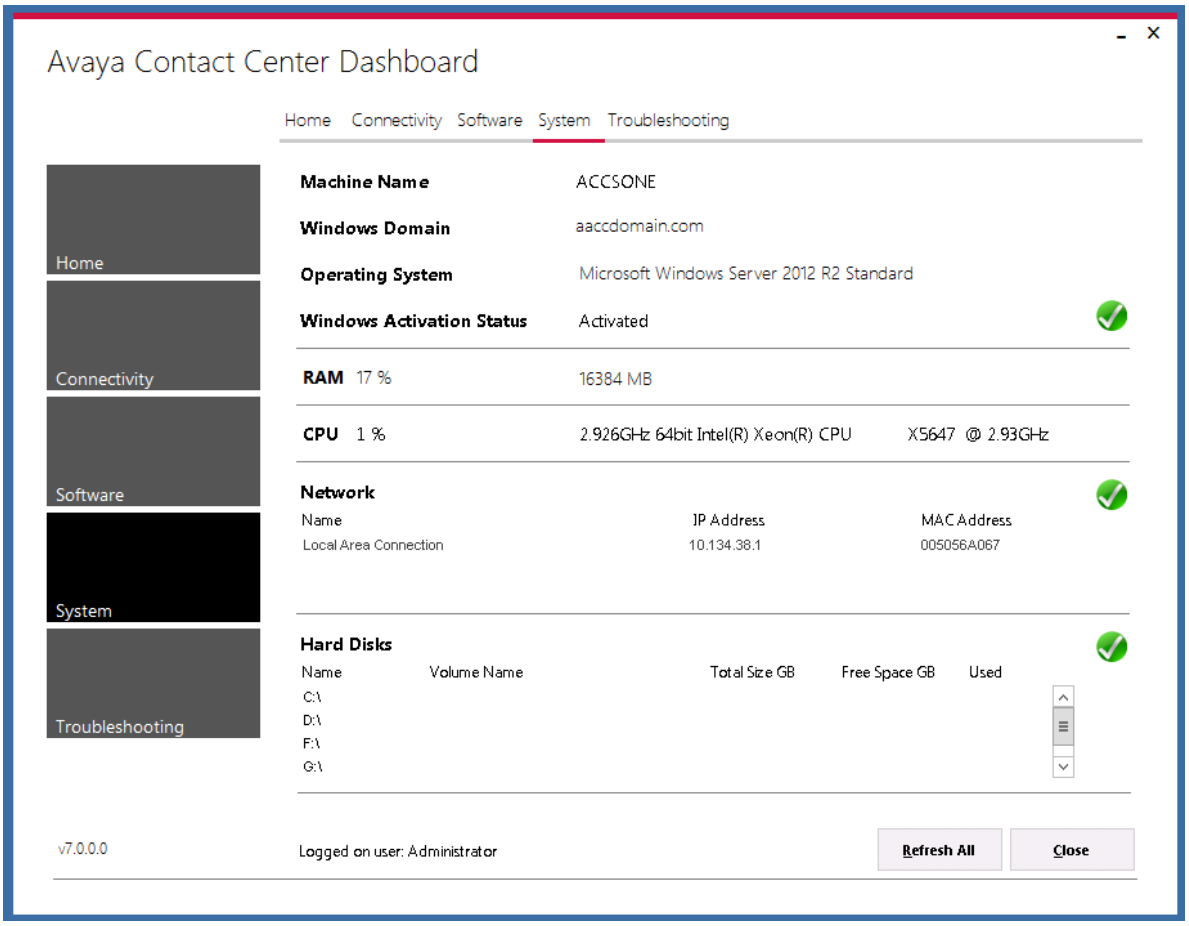
8. In the **SIP Gateway Monitor** section, click **Launch** to monitor the status of the SIP connection to IP Office.
9. In the **Contact Center Multimedia Dashboard** section, click **Launch** to monitor the multimedia mailbox status.
10. In the **Contact Center Manager Administration** section, click **Launch** to access Contact Center Manager Administration to configure and manage Contact Center resources.
11. In the **System Control and Monitoring Utility** section, click **Launch** to monitor, stop, and start Contact Center services.
12. In the **Contact Center License Manager** section, click **Launch** to monitor license status and add additional licensed features.
13. Select **Business Continuity Support** to configure the Business Continuity feature.

14. Select the **Software** tab.



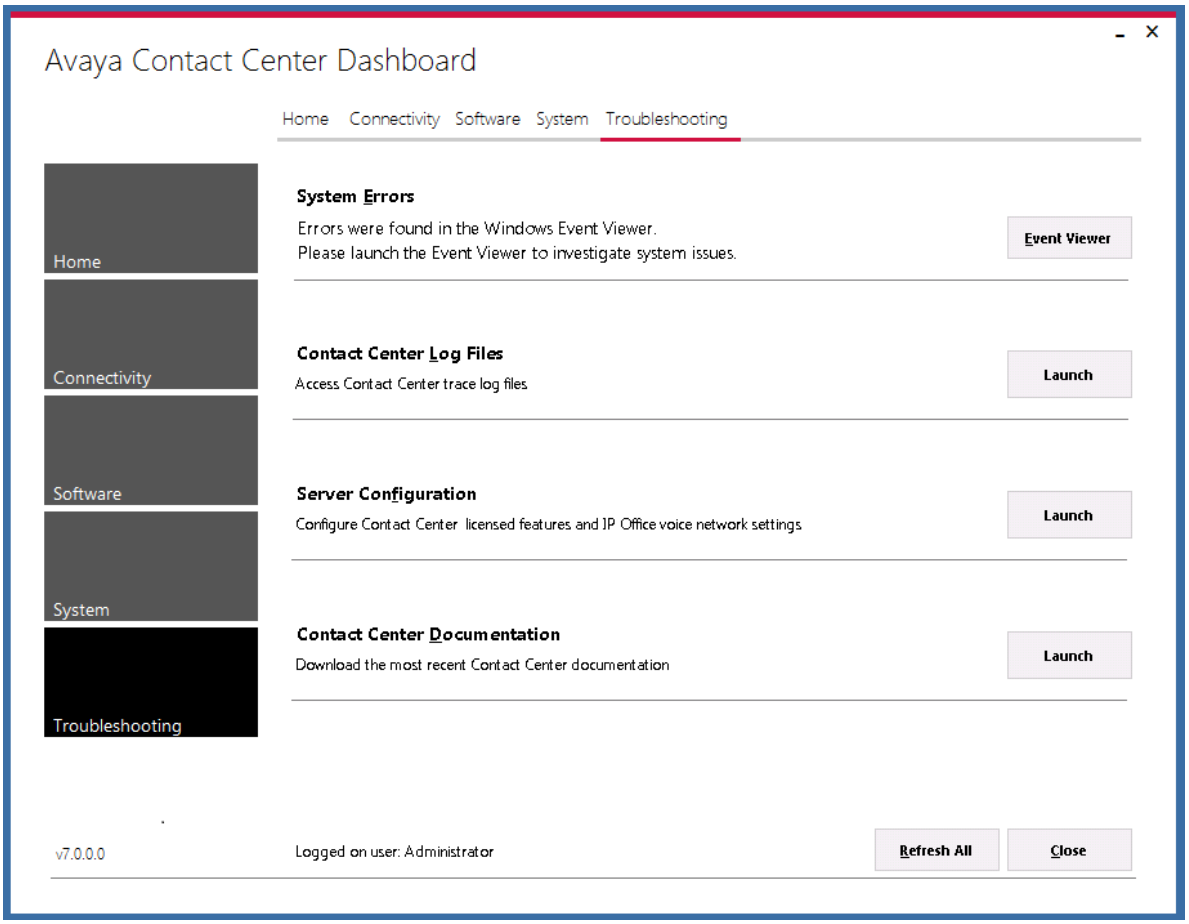
15. **Contact Center Version** displays the version of the Contact Center software installed on the server.
16. **Avaya Aura® Media Server** displays the version of Avaya Aura® Media Server software installed on the server.
17. **Ignition Status** displays the Contact Center software installation status.
18. **Avaya Contact Center Components** displays the Contact Center software and patch line-up installed on the server.
19. **Third Party Software Information** displays the versions of the third-party software components used by Contact Center that are installed on the server.

20. Select the **System** tab.



21. **Machine Name** displays the host name of the Contact Center server.
22. **Windows Domain** displays the name of the domain that the Contact Center server is in.
23. **Operating System** displays the Operating System version.
24. **Windows Activation Status** displays the Windows Operating System license and activation status.
25. **RAM** displays the amount of RAM memory in the server.
26. **CPU** displays the type of CPU in the server.
27. **Network** displays the networking details of the server: IP address and MAC address.
28. **Hard Disks** displays the number, size, and drive letter of the hard disk volumes in the server.

29. Select the **Troubleshooting** tab.



30. Select **System Errors** to access Contact Center events in the Microsoft Windows Event Viewer.
31. Select **Contact Center Log Files** to access Contact Center trace log files.
32. Select **Server Configuration** to configure Contact Center licensed features and IP Office voice network settings.
33. Select **Contact Center Documentation** to access and download the most recent Contact Center documentation from the Avaya support website.

Configuring IP Office for unsecured CTI connections

About this task

When you skip security configuration during Avaya Contact Center Select installation, by default Avaya Contact Center Select uses TCP for the CTI connection to IP Office. You cannot test a first call quickly until you configure IP Office to allow an unsecured CTI connection.

If Avaya Contact Center Select uses TLS to communicate with IP Office, you can skip this procedure.

Procedure

1. Using IP Office Manager, select **File** > **Advanced** > **Security Settings** > **System** > **Unsecured Interfaces**.
2. In the **Application Controls** section, select the **TAPI** check box.
3. Click **OK**.
4. Select **File** > **Save Security Settings**.

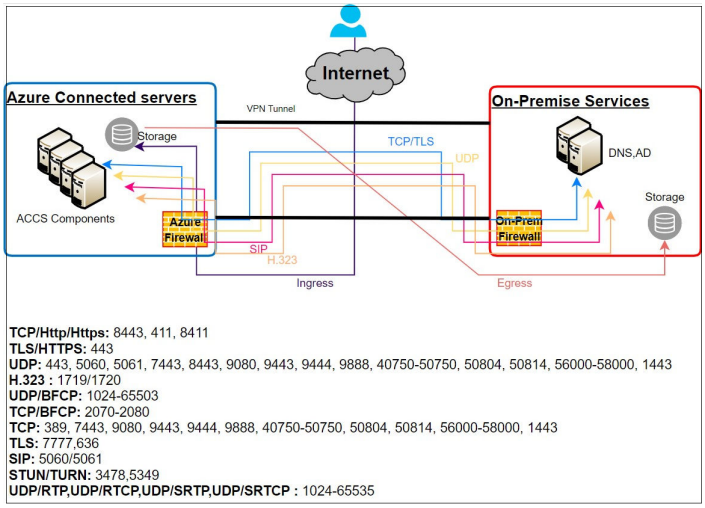
Next steps

Verify that the TCP connection between Avaya Contact Center Select and IP Office is connected. Open the **SIP Gateway Management Client** and verify that the **CTI Proxy** link **Transport** setting is **TCP** and that the link status is **CONNECTED**.

Chapter 8: Data Security and Backup

Data privacy and security on Microsoft Azure

Microsoft provides you with a trusted set of cloud services and takes a defense-in-depth approach to provide you with security on Microsoft Azure. Microsoft helps you get protected faster across identity, network, and data by combining built-in security controls and partner solutions, and also provides tools to help you with security management and threat protection. Microsoft Azure DISKs of each server store all the Avaya Contact Center Select data.



The following are the Defense in Depth (DiD) approaches provided by Microsoft:

- Identity and access: Microsoft provides the users with Role-Based Access Control (RBAC).

  For more information on RBAC, see What Azure role-based access control is.

- Applications and data security: The applications and data security are protected by disk encryption.

  For more information on Microsoft Azure disk data encryption, see Azure data security and encryption best practices-Protect data at rest.

- Network Security: The network security is provided with basic Distributed Denial-Of-Service (DDOS) protection. The network security group is provided with Microsoft Azure Firewall service.

- Virtual machine encryption: You can encrypt Microsoft Azure virtual machines using Microsoft Azure disk encryption to protect the contents of both Windows and Linux virtual machines.

Microsoft uses BitLocker for Windows and DM-Crypt for Linux to encrypt both the operating system volume and the data disks.

Microsoft enables connections from customer sites and remote workers to Microsoft Azure Virtual Networks using Site-to-Site and Point-to-Site VPNs.

- A Site-to-Site (S2S) VPN gateway connection connects your on-premises network to an Microsoft Azure virtual network over an IPsec/IKE VPN tunnel.
- A Point-to-Site (P2S) VPN gateway connection allows you to create a secure connection to the virtual network from an individual client computer.

Recovering files from Microsoft Azure virtual machine backup

About this task

Microsoft Azure Backup service is a secure and cost-effective solution for Avaya Contact Center Select deployment. You can restore the data with application consistency.

You can configure backup for all four components (IP Office, Avaya Aura® Media Server, Web-based License Manager, and Avaya Contact Center Select).

Before you begin

Ensure that the resource groups for all the components are available.

Procedure

1. Log in to the Microsoft Azure portal: https://portal.azure.com/.
2. Navigate to **Virtual machines**.
3. In the left navigation pane, in the Operations section, click **Backup**.
4. On the Backup screen, perform the following:

   In the Recovery Services vault section, select **Create new**.

   Specify the name of the new recovery services vault.

   a. In the Resource group field, select the resource group corresponding to the component.
   b. In the **Choose backup policy** field, select **Create a new policy**.
   c. In the **Policy name** field, specify the policy name.
   d. In the Retention range section, select the retention period according to your requirements.
   e. Click **OK**.
   f. Click **Enable Backup**.

5. To back up all the components, repeat the procedure.

   For more information on recovering files, see Recover files from Azure virtual machine backup.

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