



Avaya Call Management System High Availability Connectivity, Upgrade, and Administration

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Contents

Chapter 1: Introduction	5
Purpose.....	5
Change history.....	5
Chapter 2: CMS High Availability overview	6
Summary of CMS HA functionality.....	6
HA topology examples.....	7
Supported ACD systems.....	9
Special upgrade considerations.....	10
Chapter 3: Connecting High Availability servers to Communication Manager	11
Basic configuration rules.....	11
Ethernet ports on a CMS server.....	12
Server switch-over options.....	12
Chapter 4: Upgrading CMS servers in a High Availability environment	14
Upgrade scenarios.....	14
CMS software combinations.....	15
Considerations for servers with the same CMS version.....	15
Considerations for servers with different CMS versions.....	15
Steps to perform 24 hours before the upgrade.....	15
Steps to perform on the day of the upgrade.....	16
CMSADM backup.....	17
Process for setting up CMS on an HA server.....	17
Administering the Communication Manager system.....	18
Chapter 5: Configuring HA from the cmsadm command menu	19
Setting up the primary and secondary server roles.....	19
Reversing the primary and secondary server roles.....	21
Chapter 6: Resources	23
Documentation.....	23
CMS and CMS Supervisor Documents.....	23
Avaya Solutions Platform Documents.....	25
Finding documents on the Avaya Support website.....	25
Accessing the port matrix document.....	26
Avaya Documentation Center navigation.....	26
Viewing Avaya Mentor videos.....	27
Support.....	28
Using the Avaya InSite Knowledge Base.....	28

Chapter 1: Introduction

Purpose

This document outlines the steps to set up and maintain your Avaya Call Management System (CMS) High Availability (HA) system. Administrators, installation personnel, and other software specialists responsible for HA configuration can use this document.

Before using this document, ensure that you are familiar with CMS and the Red Hat Enterprise Linux (RHEL) operating system.

Change history

The following table summarizes changes in this document for Release 21.x:

Issue	Date	Summary of changes
Issue 1	June 2024	<ul style="list-style-type: none">Revised the information in the chapter CMS High Availability overview on page 6.Added HA topology examples for standard and failure scenarios.Cleaned up outdated and redundant upgrade information.Added information about the automated HA configuration process in Configuring HA from the cmsadm command menu on page 19.Minor rephrasing changes throughout the document.

Chapter 2: CMS High Availability overview

CMS HA provides redundancy to reduce the potential loss of call center data. You can configure HA if you have two CMS servers, which are typically installed in separate data centers. Both CMS servers must operate on the same release and maintain a similar capacity. HA configurations designate one server as the primary and the other as the secondary. When the primary CMS server goes down, the secondary CMS server takes over. CMS servers connect to an Automatic Call Distribution (ACD) system. CMS supports the Automatic Call Distribution (ACD) feature of the Avaya Aura[®] Communication Manager system.

You can optionally configure a dual-IP primary or secondary CMS server. The dual-IP option enables the assignment of two IP addresses: One connects to the main ACD, for example, Communication Manager, and the other connects to an Enterprise Survivability Server (ESS) Communication Manager system. During a standard operation, the dual-IP CMS server collects data from the main ACD. When a fragmentation or failure occurs, the dual-IP CMS server collects data from ESS Communication Manager.

Admin-Sync

Admin-Sync is a required connector for all HA and survivable CMS configurations. During standard operations, the primary and secondary CMS servers collect ACD data independently. Admin-Sync pushes administration data from the primary server to the secondary server. Hence, perform all CMS administration on the primary server.

Related links

[HA topology examples](#) on page 7

Summary of CMS HA functionality

CMS HA provides functionalities associated with the ACD feature of Communication Manager systems operating in conjunction with the CMS software application. The CMS HA configuration includes the following key functionalities:

- Dual ACD links on the Communication Manager system.
- A paired set of CMS servers, each connected separately to one of the dual ACD links, receives simultaneous and identical sets of call data.
- Separate network subnet connections for paired ACD-CMS combinations.

HA redundancy of critical hardware components reduces the possibility of data loss due to single-point-of-failure sources. HA also minimizes data loss, which can occur during CMS software upgrades or due to software or database corruption problems.

ACD data is simultaneously routed to two CMS servers through paired C-LAN circuit packs or Ethernet ports on the Communication Manager system over separate TCP/IP over Ethernet subnets.

The following are the key functional and operational differences between the primary and secondary CMS HA servers:

- Most changes to CMS administration occur on the primary server. The Admin-Sync add-on automatically pushes changes made on the primary server to the secondary server.
- If you have the External Call History package, install it on both servers. If you have customized report solutions, ensure External Call History is active on both servers. Otherwise, activate it on the primary server and leave it inactive on the secondary server.

Aside from the above differences, the primary and secondary servers function similarly and collect identical data streams through their respective ACD links. If either server fails or needs to be brought down for maintenance, the remaining unit is capable of carrying the full CMS activity load without interruption.

HA topology examples

The following topology images show examples of:

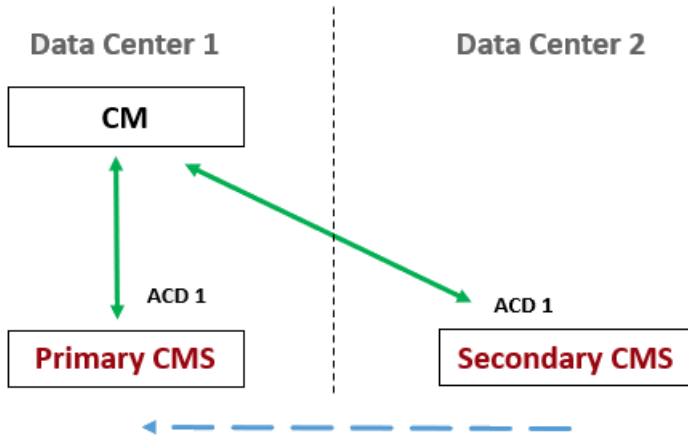
- A standard CMS HA setup and a dual-IP server in a typical “sunny day” scenario.
- A CMS server failure and a Communication Manager link failure for a standard CMS HA setup.

*** Note:**

To conserve space, all images use CM to refer to Communication Manager.

Standard operation: Basic CMS HA setup

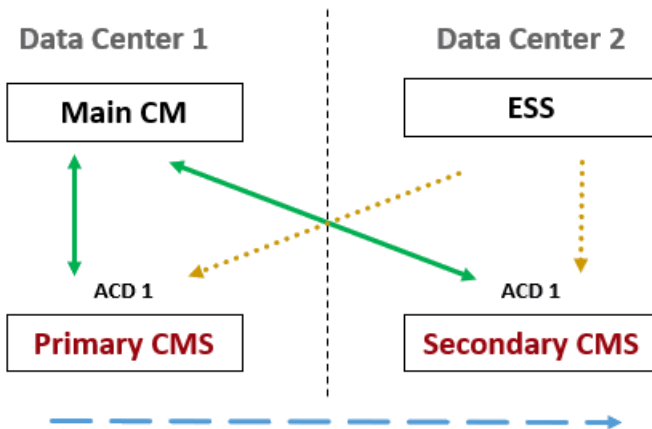
In the following example, the primary and secondary CMS servers are in different data centers. Both CMS servers connect to the same Communication Manager. The secondary CMS server sends a Heartbeat signal to the primary server every 20 seconds to verify connectivity.



Standard operation: Dual-IP setup

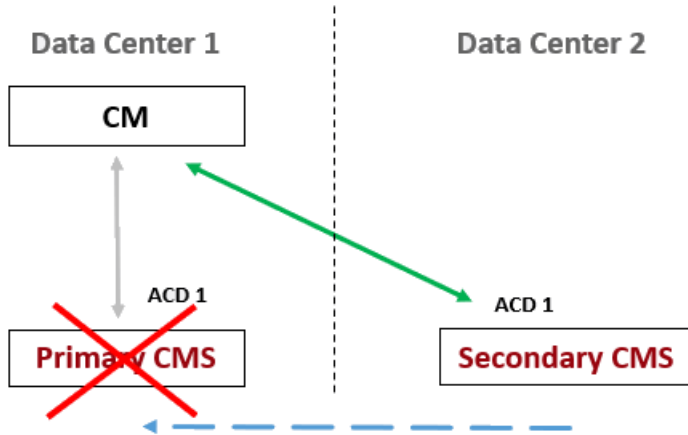
The following example illustrates a dual-IP setup featuring a main Communication Manager and an ESS. The links to the main Communication Manager remain connected and active in this scenario. Links to the ESS are not connected. With the dual-IP feature, the main Communication Manager and ESS cannot both be active and connected to the same CMS ACD simultaneously.

In this scenario, Admin-Sync pushes administrative data from the primary CMS to the secondary CMS in real time.



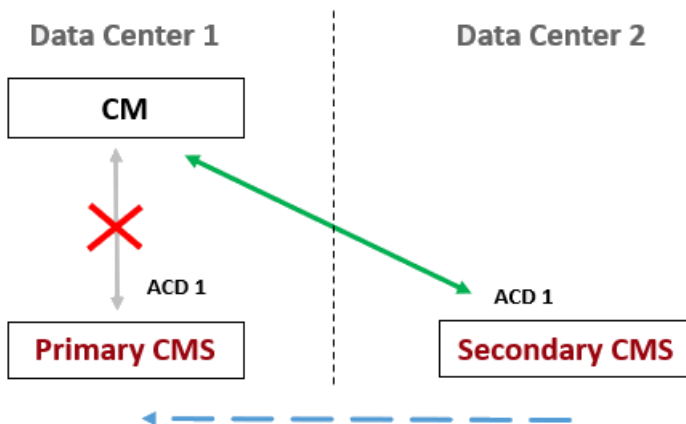
Failure scenario: Primary CMS server is down

In this basic HA setup example, the primary CMS server is down due to a network or hardware failure. The Heartbeat signal indicates a primary CMS server failure. Therefore, the secondary CMS automatically becomes the active server.



Failure scenario: Communication Manager link is not working

An outage can also occur due to a failure of the Communication Manager link. The Heartbeat signal from the secondary CMS to the primary CMS continues to work as expected. In this situation, the secondary CMS server does not detect that the link to the primary CMS failed. Therefore, set the secondary CMS as the active server.



Related links

[Basic configuration rules](#) on page 11

[Configuring HA from the cmsadm command menu](#) on page 19

Supported ACD systems

CMS interfaces with the following ACD systems:

- Communication Manager Release 7.x
- Communication Manager Release 8.x
- Communication Manager Release 10.x

To use all the features of a particular Communication Manager release, administer the relevant release number in CMS. For more information, see *Avaya Call Management System and Communication Manager Connections, Administration, and Troubleshooting*.

Special upgrade considerations

During a software upgrade or after a server recovers from a failure, the alternate server actively maintains uninterrupted data collection in the CMS HA configuration. Synchronization between the primary and secondary servers is a key maintenance requirement for HA configurations. Hence, CMS upgrades proceed in a way that restores server synchronization quickly and efficiently, while minimizing data loss.

Related links

[Upgrading CMS servers in a High Availability environment](#) on page 14

Chapter 3: Connecting High Availability servers to Communication Manager

This chapter outlines the connectivity requirements and recommendations for CMS HA systems. The connectivity configurations described represent the optimal link setups for HA. For detailed connectivity images, see the information about connecting a Communication Manager system link in *Avaya Call Management System and Communication Manager Connections, Administration, and Troubleshooting*.

Related links

[Supported ACD systems](#) on page 9

Basic configuration rules

CMS HA servers do not have to be physically located in the same building, or even in the same city.

CMS HA computers can collect data from up to eight different ACD Communication Manager systems. The server does not support mixed ACD links that combine single ACD links with HA dual links. Mixed ACD links can cause significant call data loss and fill system error logs with meaningless data.

All link connections operate through the TCP/IP over Ethernet LAN protocol. Ensure that connections run over LAN facilities that are local to the Communication Manager system.

Connect each CMS HA server to a separate UPS on a separate protected power circuit.

Dual control C-LAN circuit packs or Ethernet ports on the Communication Manager system handle ACD traffic routing. Administer the Communication Manager system to enable the dual control C-LAN circuit packs or Ethernet ports. For details about the administration of dual ACD links on HA configurations, see the section on administering a Communication Manager system link in *Avaya Call Management System and Communication Manager Connections, Administration, and Troubleshooting*.

Ethernet ports on a CMS server

Each CMS HA server ideally includes a second Ethernet card. When two Ethernet ports are available, the provisioning process uses the first, built-in port to connect to the customer LAN or public network. Reserve the second Ethernet port for the Communication Manager system link.

The following image shows an ideal HA configuration for a single-ACD system.

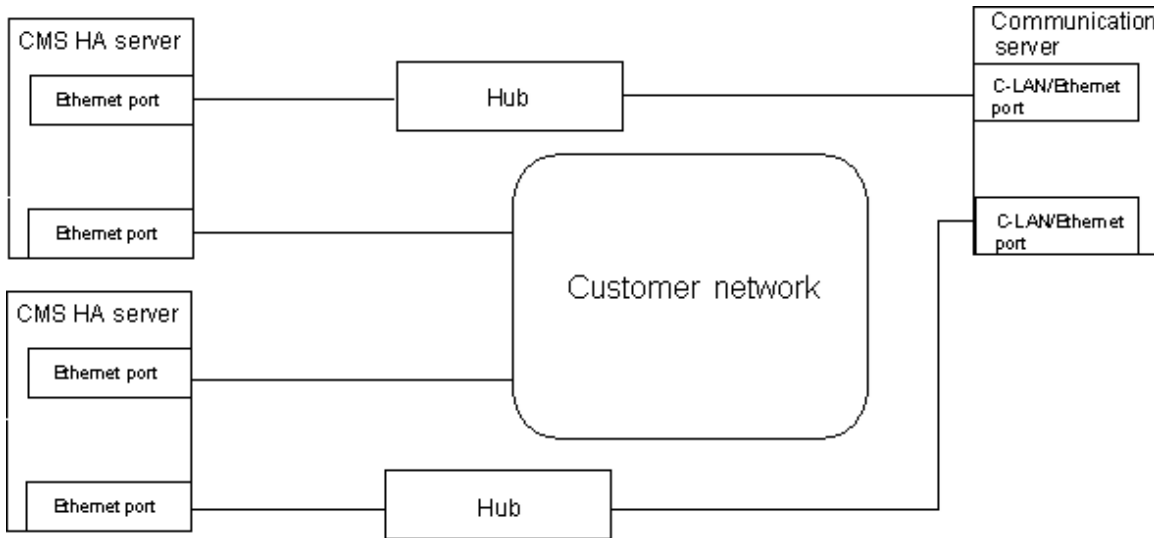


Figure 1: Local Communication Manager system configuration image

* Note:

Customer networks frequently require a different LAN setup than the ideal configuration shown above due to the presence of multiple ACDs connected to the CMS server. For information about alternate LAN configurations, see *Avaya Call Management System and Communication Manager Connections, Administration, and Troubleshooting*.

Server switch-over options

The CMS High Availability option ensures an uninterrupted data stream between the Communication Manager system and the CMS server, which stores the data. Some customers request continuous access to their CMS data. Following a major failure event on their primary HA server, customers have the option to switch over to their secondary server for purposes of CMS data monitoring and reporting. Perform a server switch-over when the anticipated downtime of the primary server is significant.

Customers choose from the following switch-over options:

- No switch-over: Customers who do not need continuous access to their CMS data can choose to remain on the primary server after a major failure. When the primary server goes

down, the secondary server continues collecting call data without interruption. However, the restoration of the primary server enables customers to access the data.

- Manual server switch-overs: To maintain uninterrupted access to CMS data, perform a manual server switch-over. At a minimum, this process requires individual users to re-administer their CMS Supervisor clients to redirect them from the primary to the secondary server.

Customer network characteristics often require additional actions, including re-administration or the addition of NTS servers and the physical reconnection of peripheral devices. Customers considering the manual switch-over option must consult their TSO and CSI representatives to discuss logistical issues.

Chapter 4: Upgrading CMS servers in a High Availability environment

Combine a new CMS server with an existing CMS server to create a High Availability environment. Perform the required upgrade tasks to ensure that both servers use the same CMS version.

This chapter uses the following terminology:

- Original server: The existing CMS server that is already installed on-site.
- HA server: The new server that you are adding to your environment to enable HA.

Upgrade scenarios

Use the same CMS version and base load number for all CMS servers in an HA environment. Upgrade the original server if it runs a different CMS version than the HA server you are adding. Use one of the following upgrade processes:

- Base load upgrade: Perform this simplified upgrade process when the original server is on the same CMS release, but is one base load older than the new HA server.
- Software upgrade: Perform a standard software upgrade when the original server is on an older CMS release and the new HA server uses the latest release.
- Platform upgrade: Perform a platform upgrade when the original server is on a platform that is no longer supported with the latest CMS release. In this case, replace the old server with a platform compatible with the upgrade release.

Additional information

For more information about upgrades, see the following documents:

- *Avaya Call Management System Overview and Specification*
- *Planning for Avaya Call Management System Upgrades*
- *Upgrading Avaya Call Management System*
- *Avaya Call Management System Base Load Upgrade*

CMS software combinations

One of the following CMS software combinations applies to your upgrade:

- The CMS servers have the same CMS version and base load.
- The CMS servers have the same CMS version, but the base load is different.
- The original server has an earlier version of CMS than the version installed on the new HA server.

Considerations for servers with the same CMS version

Installing the correct CMS version on the original server simplifies the logistics of creating a new HA configuration for the following reasons:

- Configure Communication Manager for the correct CMS version and dual ACD links before deploying the new HA server on-site. Maintain the unused Communication Manager system link in a busied-out condition until the new HA server becomes operational.
- The original server either does not require a software upgrade or requires a base load upgrade to match the new HA server installation.

Achievement of a synchronized system requires minimal or no software installation, followed by one or two maintenance backups and restorations between the two servers. The servers are not entirely synchronized due to operational differences between the primary and secondary servers.

Considerations for servers with different CMS versions

When the original server runs on an earlier CMS software version, the HA upgrade process follows a specific sequence of installation and administration tasks. Perform a full software or platform upgrade from a previous release to release 21.0. This upgrade process involves various maintenance backups, data migrations, and data restores. Carry out these activities in a specific order to ensure minimal system downtime and streamline provisioning.

The following sections outline the steps to upgrade the CMS version of the original server. Review these sections to understand the requirements for a full upgrade.

Steps to perform 24 hours before the upgrade

About this task

Perform the preparation tasks in this topic approximately 24 hours before the upgrade.

Before you begin

Ensure that you have a complete system backup before you start the upgrade.

Procedure

1. Upgrade the ACD system, for example, Communication Manager, and administer it to run with the current version of CMS installed on the original server.
2. Verify that the backup device on the original server is compatible with the backup device on the new HA server.

The upgrade process includes exchanging backup media between the two servers.

3. Avaya services and the customer coordinate to:
 - Determine which CMS server serves as the primary and which as the secondary.
 - Establish a cut-off time to ensure that last-minute changes do not interfere with the upgrade.

After the established cut-off time, no system administration changes can be made until the upgrade is complete.

4. Perform a CMSADM backup and a full maintenance backup on the original server.

Steps to perform on the day of the upgrade

About this task

This procedure outlines the high-level steps you need to perform on the day of the upgrade. For detailed information about the upgrade steps described in this procedure, see *Upgrading Avaya Call Management System*.

Before you begin

- Perform the required preparation steps described in [Steps to perform 24 hours before the upgrade](#) on page 15.
- Back up the required system data and ACD-specific administration data on the original server. After performing the backup, do not make any administrative changes until the upgrade is complete.

Procedure

1. Install and configure the new HA server.
2. Ensure that you put CMS into single-user mode.

The upgrade process uses the CMSADM backup you created before the upgrade to migrate the system administration, agent, and call center administration data onto the new HA server.

3. After the most recent intra-hour interval archive completes on the original server, busy out all ACD links on their respective Communication Manager systems, and re-administer the ACD links for the CMS load and dual ACD links.
4. Release the busy out for the ACD links.
5. When the ACD links for the new HA server come up, verify that CMS data collection on the new HA server is active for all ACDs.

6. Perform an incremental maintenance backup on the original server for the historical data.
7. Perform a base load upgrade, software upgrade, and platform upgrade as required.
For information about upgrade options, see [Upgrade scenarios](#) on page 14.
8. After completing the upgrade and setting up the new CMS software, restart the CMS data collection on the original server and check data collection from all ACDs.
9. Migrate the CMS historical data from the incremental maintenance backup performed in step 6 to the new HA server.
10. When the migration completes, use the original full backup to migrate the remaining historical data to the new HA server.
11. Use the CMS system administration and ACD-specific administration data backup tape to migrate that data back onto the newly upgraded original CMS server.

CMSADM backup

The ACMSADM file system backup saves all system files except CMS call data and supports system restoration in the event of an upgrade failure. Perform a CMSADM backup within 24 hours of starting the HA upgrade process. Back up CMSADM on both servers as soon as the HA upgrade is complete.

The CMSADM file system backup includes the following:

- Operating system files and programs.
- CMS programs.
- Non-CMS customer data placed on the computer.

For more information about backing up data and preparing for an upgrade, see *Upgrading Avaya Call Management System*.

Process for setting up CMS on an HA server

Setting up CMS on an HA server follows a process similar to setting up a standard CMS. The following sections explain additional considerations for setting up HA.

Important:

Incorrect administration of the hardware link or ACD prevents the CMS software from communicating with the Communication Manager system. For Communication Manager system administration procedures, see the information about administering the CMS link in *Maintaining and Troubleshooting Avaya Call Management System*.

Data storage parameters

Use the same data storage values in the new HA configuration as those on the original server. For the procedure used to set up data storage parameters, see *Maintaining and Troubleshooting Avaya Call Management System*.

Setting up a LAN for Communication Manager system connections

Ensure that LAN connections for HA configurations include two Ethernet ports for each server. Private LAN subnets are typically used for the Communication Manager server connections to CMS.

Considerations for running ECHI in the HA environment

If you use the External Call History Interface (ECHI) in an HA environment, install the ECHI software on the primary and secondary servers. When running ECHI on HA servers, consider the following:

- If you use ECHI to support customized reporting features, keep the ECHI software active on the primary and secondary servers.
- If you do not use ECHI to support customized reporting features, keep the ECHI software active on the primary server and leave it inactive on the secondary server.

Administering the Communication Manager system

Re-administer the Communication Manager system for the new CMS version and HA dual C-LAN or Ethernet port option after busying out the original server links. For information about Communication Manager system administration for HA configurations, see the section on administering the Communication Manager system link in *Maintaining and Troubleshooting Avaya Call Management System*.

After you re-administer the Communication Manager system, activate the links and start data collection on the new HA server. At this stage of the HA upgrade process, both CMS servers are offline, and call data is not collected. Complete the Communication Manager system administration for the new CMS version and HA dual links, and begin data collection on the new HA server. Verify that data collection is active on all ACD links.

Note:

The services migration log is in `/cms/maint/r3mig/mig.log`. The log can include information that is not intended for customers.

Chapter 5: Configuring HA from the cmsadm command menu

After deploying two servers and upgrading them to the same CMS version, you can finish configuring HA. Use the automated HA configuration process, which is available from the `cmsadm` command menu, to do the following:

- Set up the primary and secondary server roles.
- Reverse the primary and secondary roles.

You cannot use the HA configuration process to configure a third survivability server.

Related links

[Upgrading CMS servers in a High Availability environment](#) on page 14

Setting up the primary and secondary server roles

About this task

Decide which of the two CMS servers you want to designate as the primary server. On the primary server, run `cmsadm` and perform the HA configuration process. You also need the details of the server you plan to designate as the secondary server.

Before you begin

- Ensure that you can log in to both CMS servers with root privileges.
- Ensure that your `/etc/hosts` file contains the following entries in order: `IP_Address Fully_Qualified_Domain_Name Hostname`.
- Download the CMS HA zip file from PLDS and copy it to the CMS server designated as the primary.
- Install the WebLM license package. You require an Other Connector (OT Conn) license for the Admin-Sync connector, which pushes data from the primary server to the secondary server.
- If your CMS servers are in different time zones, ensure that you know your NTP server IP address.

Procedure

1. Use PuTTY or a similar application to open command console windows for both CMS servers.

2. On both CMS servers, do the following to log in as the root user:
 - a. Run the `su - root` command.
 - b. When prompted, type the root password.
3. On the CMS server you plan to designate as the secondary server, run the `cat /etc/hosts` command to obtain server details from the hosts file.

During the HA configuration process, provide the IP address and FQDN for the secondary server.

4. On the CMS server you plan to designate as the primary server, run the `cmsadm` command.

The command output displays the following administration menu:

```
Avaya(TM) Call Management System Administration Menu

Select a command from the list below.
 1) acd_create   Define a new ACD
 2) acd_remove  Remove all administration and data for an ACD
 3) backup      Filesystem backup
 4) pkg_install Install a feature package
 5) pkg_remove  Remove a feature package
 6) run_pkg     Turn a feature package on or off
 7) run_ids    Turn Informix Database on or off
 8) run_cms    Turn Avaya CMS on or off
 9) passwd_age Set password aging options
10) dbaccess   Change Informix DB access permissions
11) config_pkg Configure a feature
12) config_HA Configure HA
Enter choice (1-12) or q to quit: █
```

5. To configure HA, type 12.
6. When prompted, type 1 to set up the primary and secondary server roles.
7. **(Optional)** When prompted, type your NTP server IP address if the CMS servers are in different time zones.
8. When prompted, type the IP address of the secondary CMS server.
9. When prompted, type the FQDN of the secondary CMS server.
10. When prompted, type the full path to the WebLM license package.
For example: `/export/home/cms/webilm_7.0.9.zip`
11. When prompted, type the full path to the CMS HA package.
For example: `/export/home/cms/HAcms_7.1.11.zip`

12. After pressing `Enter`, review the list of impacted services and system configuration files.

```
[NOTE] This process is service affecting.
The following services may be reconfigured and restarted.
- IDS
- CMS
- sshd - (conditional)
- chronyd (NTP Server) - (conditional)
- crond - (conditional)
- iptables (Firewall)

The following system configuration files may be modified.
- /etc/hosts
- /etc/services
- /etc/chrony.conf
- /etc/ssh/sshd_config
- /opt/informix/etc/sqlhosts
- /opt/informix/etc/onconfig.cms
- /cms/install/security/OpenPorts
- /root/.rhosts
- /root/.ssh/known_hosts
- /root/.ssh/authorized_keys
- /root/.ssh/id_rsa
- /root/.ssh/id_rsa.pub
- /root/.bash_profile

In-place backups will be created, tagged .zdt_758607_1715644188.
```

13. When prompted, type `y` to proceed with the HA configuration process.
14. Check the displayed information to ensure successful completion of the configuration process.
15. **(Optional)** To verify the HA configuration, run the `cat /etc/hosts` command and check whether the server details for the primary and secondary servers display correctly.

Reversing the primary and secondary server roles

About this task

You can reverse the primary and secondary server roles before a planned outage. For example, reverse the roles before bringing the server down for maintenance. To perform this task, log in to the primary server as the root user.

Before you begin

Set up the primary and secondary server roles. Setting up the roles saves all server details, so you do not need to re-enter them when reversing the roles.

Procedure

1. On the primary CMS server, run the `su - root` command and then type the root password to log in as the root user.
2. Run the `cmsadm` command on the primary server.
3. When you can view the administration menu, type `12` to configure HA.
4. When prompted, type `2` to reverse the roles.
5. Check the displayed information to verify successful role reversal.

Chapter 6: Resources

Documentation

CMS and CMS Supervisor Documents

Title	Description	Audience
Overview		
<i>Avaya Call Management System Overview and Specification</i>	Describes tested product characteristics and product capabilities including feature descriptions, interoperability, performance specifications, security, and licensing requirements.	Sales engineers, Administrators
<i>Product Privacy Statement for Avaya Call Management System</i>	Describes how personal data is stored and processed by CMS.	Administrators
Installation, upgrades, maintenance, and troubleshooting		
<i>Deploying Avaya Call Management System</i>	Describes how to plan, deploy, and configure CMS on new VMware-based installations.	Avaya support personnel
<i>Deploying Avaya Call Management System in an Infrastructure as a Service Environment</i>	Describes how to plan, deploy, and configure CMS on new Amazon Web Services and Google Cloud Platform installations.	Avaya support personnel
<i>Port Matrix for Avaya Call Management System</i>	Lists the ports and connections used by CMS.	Avaya support personnel
<i>Planning for Avaya Call Management System Upgrades</i>	Describes the procedures customers must plan for before and after upgrading to a new CMS release.	Administrators
<i>Upgrading Avaya Call Management System</i>	Describes the procedures required to upgrade to a new CMS release.	Avaya support personnel

Table continues...

Title	Description	Audience
<i>Avaya Call Management System Base Load Upgrade</i>	Describes the procedures to upgrade from one base load (for example, 19.1.0.0) to another base load (for example, 19.1.0.1). Not all releases support base load upgrades.	Avaya support personnel, Administrators
<i>Maintaining and Troubleshooting Avaya Call Management System</i>	Describes how to configure, maintain, and troubleshoot CMS.	Avaya support personnel, Administrators
<i>Avaya Call Management System and Communication Manager Connections, Administration, and Troubleshooting</i>	Describes how to connect and administer the Communication Manager systems used by CMS.	Avaya support personnel, Administrators
<i>Avaya Call Management System High Availability Connectivity, Upgrade and Administration</i>	Describes how to connect to HA servers and upgrade to HA.	Avaya support personnel, Administrators
User guides		
Using Avaya Call Management System High Availability	Describes how to install and maintain your CMS High Availability (HA) system.	Avaya support personnel, Administrators
<i>Using ODBC and JDBC with Avaya Call Management System</i>	Describes how to use Open Database Connectivity (ODBC) and Java Database Connectivity (JDBC) with CMS.	Administrators
Administration		
<i>Administering Avaya Call Management System</i>	Provides instructions on administering a contact center using CMS Supervisor.	Avaya support personnel, Administrators
<i>Avaya Call Management System Call History Interface</i>	Describes the format of the Call History data files and how to transfer these files to another computer.	Administrators
<i>Avaya Call Management System Database Items and Calculations</i>	Describes each database item and calculation that CMS tracks and how CMS calculates the values displayed on CMS reports and CMS Supervisor reports.	Administrators, Report designers
<i>Avaya Call Management System Custom Reports</i>	Describes how to design and create custom reports in CMS.	Administrators, Operations personnel, Report designers
<i>Avaya Call Management System Security</i>	Describes how to implement security features in CMS.	Avaya support personnel, Administrators.
CMS Supervisor		

Table continues...

Title	Description	Audience
<i>Avaya CMS Supervisor Clients Installation and Getting Started</i>	Describes how to install and configure CMS Supervisor.	Avaya support personnel, Administrators
<i>Avaya CMS Supervisor Reports</i>	Describes how to use CMS Supervisor reports.	Administrators, Operations personnel
<i>Avaya CMS Supervisor Report Designer</i>	Describes how to create new reports and to edit existing reports through Report Designer and Report Wizard.	Administrators, Operations personnel, Report designers

Avaya Solutions Platform Documents

Title	Description	Audience
<i>Avaya Solutions Platform Overview and Specification</i>	Describes the key features of Avaya Solutions Platform server.	IT Management, sales and deployment engineers, solution architects, support personnel.
<i>Installing the Avaya Solutions Platform 130 Series</i>	Describes how to install Avaya Solutions Platform 130 Series servers.	Sales and deployment engineers, solution architects, support personnel.
<i>Maintaining and Troubleshooting Avaya Solutions Platform 130 Series</i>	Describes procedures to maintain and troubleshoot Avaya Solutions Platform 130 Series servers.	Sales and deployment engineers, solution architects, support personnel.
<i>Avaya Solutions Platform 130 Series iDRAC9 Best Practices</i>	Describes procedures to use the iDRAC9 tools on the Avaya Solutions Platform 130 Series servers.	Sales and deployment engineers, solution architects, support personnel.

Finding documents on the Avaya Support website

Procedure

1. Go to <https://support.avaya.com>.
2. To log in, click **Sign In** at the top of the screen and then enter your login credentials when prompted.
3. Click **Product Support > Documents**.
4. In **Search Product**, start typing the product name and then select the appropriate product from the list displayed.
5. In **Select Release**, select the appropriate release number.
This field is not available if there is only one release for the product.
6. **(Optional)** In **Enter Keyword**, type keywords for your search.
7. From the **Select Content Type** list, select one or more content types.

For example, if you only want to see user guides, click **User Guides** in the **Select Content Type** list.

8. Click  to display the search results.

Accessing the port matrix document

Procedure

1. Go to <https://support.avaya.com>.
2. To log in, click **Sign In** at the top of the screen and then enter your login credentials when prompted.
3. Click **Product Support > Documents**.
4. In **Select Release**, select the appropriate release number.
This field is not available if there is only one release for the product.
5. From the **Select Content Type** list, select one or both of the following options:
 - **Application & Technical Notes**
 - **Design, Development & System Mgt**


Avaya Documentation Center navigation

For many programs, the latest customer documentation is available on the Avaya Documentation Center website at <https://documentation.avaya.com>. Some functionality is only available when you log in to the Avaya Documentation Center. The available functionality depends on your role.

Important:

If the documentation you are looking for is not available on the Avaya Documentation Center, you can find it on the [Avaya Support website](#).

While navigating through the Documentation Center, you can click the **Avaya Documentation Center** logo at the top of the screen to return to the home page anytime. On the Avaya Documentation Center, you can do the following:

- Click **Avaya Links** in the top menu bar to access other Avaya websites, including the Avaya Support website.
- Click **Languages** () in the top menu bar to change the display language and view localized documents.
- In the **Search Documentation** field, search for keywords and click **Filter** to filter by solution category, product, or user role.
You can select multiple items in each filter category. For example, you can select a product and multiple user roles.
- Click **Library** in the top menu bar to access the complete library of documents. Use the filtering options to refine your results.
- After performing a search or accessing the library, you can sort content on the search results page. When you find the item you want to view, click it to open it.

- Use the table of contents in a document for navigation. You can also click < or > next to the document title to navigate to the previous topic or the next topic.
- Click **Share** (➔) to share a topic by email or copy the URL.
- Download a PDF of the current topic in a document, the topic and its subtopics, or the entire document.
- Print the section you are viewing.
- Add content to a collection by clicking **Add to My Topics** (📁). You can add the topic and its subtopics or add the entire publication.
- View the topics in your collections. To access your collections, click your name in the top menu bar and then click **My Topics**.

You can do the following:

- Create, rename, and delete a collection.
- Set a collection as the default or favorite collection.
- Save a PDF of the selected content in a collection and download it to your computer.
- Share content in a collection with others through email.
- Receive collections that others have shared with you.
- Click **Watch** (👁) to add a topic to your watchlist so you are notified when the content is updated or removed.
- View and manage your watchlist by clicking **Watchlist** from the top menu with your name.

You can do the following:

- Enable **Email notifications** to receive email alerts.
- Unwatch the selected content or all topics.
- Send feedback for a topic.

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.

- To find videos on the Avaya Support website, go to <https://support.avaya.com/> and do one of the following:
 - In **Search**, type `Avaya Mentor Videos`, click **Clear All** and select **Video** in the **Select Content Type**.

- In **Search**, type the product name. On the Search Results page, click **Clear All** and select **Video** in the **Select 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 keyword or keywords 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 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.

Using the Avaya InSite Knowledge Base

The Avaya InSite Knowledge Base is a web-based search engine that provides:

- Up-to-date troubleshooting procedures and technical tips.
- Information about service packs.
- Access to customer and technical documentation.
- Information about training and certification programs.
- Links to other pertinent information.

If you are an authorized Avaya Partner or a current Avaya customer with a support contract, you can access the Knowledge Base without extra cost. You must have a login account and a valid Sold-To number.

Use the Avaya InSite Knowledge Base for any potential solutions to problems.

1. Go to <https://support.avaya.com>.
2. To log in, click **Sign In** at the top of the screen and then enter your login credentials when prompted.

3. Click **Product Support > Products**.
4. In **Search Product**, start typing the product name and then select the appropriate product from the list displayed.
5. Select the release number, if applicable.
6. Click the **Technical Solutions** tab to view articles for resolving technical issues.

Index

A

accessing port matrix	26
ACD integration	9
administering Communication Manager	
busy out links	18
data collection	18
Avaya InSite Knowledge Base	28
Avaya support website	28

C

CMSADM backup	17
collection	
delete	26
edit	26
generating PDF	26
sharing content	26
Communication Manager	
connecting HA server	11
configuration HA	
cmsadm process	19
configuration rules	11
connecting servers to Communication Manager	11
considerations for running ECHI	18
considerations for servers with different CMS versions	15
considerations for servers with the same CMS version	15
content	
publishing PDF output	26
searching	26
sharing	26
sort by last updated	26
watching for updates	26

D

data storage parameters	17
day of the upgrade	16
document changes	5
Documentation	23
documentation center	26
finding content	26
navigation	26
documentation portal	26

E

ECHI in an HA environment	18
Ethernet ports	12
External Call History Interface	18

F

finding content on documentation center	26
finding port matrix	26
FSBE	12

H

HA configuration	19
primary and secondary roles	19
reversing roles	21
HA connectivity	
link setup	11
HA connectivity to Communication Manager	11
HA examples	
failure scenario	7
sunny day scenario	7
HA functionality	6
HA overview	6
HA topology examples	7
HA upgrade scenarios	14
HA upgrades	14
High Availability	
defined	12

I

introduction	5
introduction to CMS HA	6

K

KB	
Support site	28

P

port matrix	26
ports, Ethernet	
on computers	12
primary server	6
purpose	5

R

reversing primary and secondary roles	21
---	--------------------

S

searching for content	26
secondary server	6

servers with different CMS versions	15
servers with the same version	15
setting up a LAN for Communication Manager system	
connections	18
setting up CMS on an HA server	17
setting up primary and secondary roles	19
sharing content	26
software combinations	15
sort documents	26
support	28
supported ACD systems	9
switch-over	
options	12

U

upgrade	
special consideration	10
upgrade preparation	
24 hours before upgrading	15
backup	17
upgrading CMS	
HA	14

V

videos	27
--------------	--------------------

W

watchlist	26
-----------------	--------------------