



# What's New in Avaya Aura<sup>®</sup> Release 8.0.1

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# Chapter 1: Introduction

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## Purpose

This document provides an overview of the new and enhanced features of Avaya Aura® Release 8.0 and later components.

This document is intended for the following audience:

- Contractors
- Employees
- Channel associates
- Remote support
- Sales representatives
- Sales support
- On-site support
- Avaya Business Partners

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## Avaya Aura® Release 8.0.1 components

Product component	Release version
Appliance Virtualization Platform	8.0.1
AVP Utilities	8.0.1
System Manager	8.0.1
WebLM	8.0.1
Session Manager	8.0.1
Communication Manager	8.0.1
Branch Gateway	8.0.1
Presence Services	8.0.1
Application Enablement Services	8.0.1

*Table continues...*



Product component	Release version
Call Center Elite	8.0.1
Communication Manager Messaging	7.0
Media Server	8.0.1

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## Product compatibility

For the latest and most accurate compatibility information, go to <https://support.avaya.com/CompatibilityMatrix/Index.aspx>.

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## Technical Assistance

Avaya provides the following resources for technical assistance.

### Within the US

For help with feature administration and system applications, call the Avaya Technical Consulting and System Support (TC-SS) at 1-800-225-7585.

### International

For all international resources, contact your local Avaya authorized dealer for additional help.

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## Change history

Issue	Date	Summary of changes
4	December 2018	Updated the <a href="#">What's new in Avaya Aura Media Server</a> on page 76 section.
3	December 2018	For Release 8.0.1, added the following sections: <ul style="list-style-type: none"> <li>• <a href="#">New in Appliance Virtualization Platform Release 8.0.1</a> on page 28</li> <li>• <a href="#">New in AVP Utilities Release 8.0.1</a> on page 31</li> <li>• <a href="#">New in System Manager Release 8.0.1</a> on page 34</li> <li>• <a href="#">New in Session Manager Release 8.0.1</a> on page 47</li> <li>• <a href="#">New in Communication Manager Release 8.0.1</a> on page 53</li> <li>• <a href="#">New in WebLM Release 8.0.1</a> on page 43</li> </ul>

*Table continues...*



Issue	Date	Summary of changes
		<ul style="list-style-type: none"> <li>• <a href="#">New in Application Enablement Services Release 8.0.1</a> on page 69</li> <li>• <a href="#">New in Presence Services Release 8.0.1</a> on page 64</li> </ul> <p>For Release 8.0.1, updated the following sections:</p> <ul style="list-style-type: none"> <li>• <a href="#">Appliance Virtualization Platform overview</a> on page 10</li> <li>• <a href="#">Supported servers</a> on page 26</li> <li>• <a href="#">Appliance Virtualization Platform feature matrix</a> on page 30</li> <li>• <a href="#">AVP Utilities feature matrix</a> on page 32</li> <li>• <a href="#">System Manager feature matrix</a> on page 41</li> <li>• <a href="#">WebLM feature matrix</a> on page 46</li> <li>• <a href="#">Session Manager feature matrix</a> on page 51</li> <li>• <a href="#">Communication Manager feature matrix</a> on page 62</li> <li>• <a href="#">Application Enablement Services feature matrix</a> on page 73</li> </ul>
2	August 2018	<p>For Release 8.0, updated the following sections:</p> <ul style="list-style-type: none"> <li>• <a href="#">Avaya Aura applications upgrade</a> on page 24</li> <li>• <a href="#">New in Appliance Virtualization Platform Release 8.0</a> on page 28</li> <li>• <a href="#">New in AVP Utilities Release 8.0</a> on page 31</li> <li>• <a href="#">New in System Manager Release 8.0</a> on page 36</li> <li>• <a href="#">New in WebLM Release 8.0</a> on page 43</li> <li>• <a href="#">New in Session Manager Release 8.0</a> on page 48</li> <li>• <a href="#">New in Communication Manager Release 8.0</a> on page 56</li> <li>• <a href="#">New in Application Enablement Services Release 8.0</a> on page 71</li> </ul>
1	July 2018	Release 8.0 document.

# Chapter 2: Avaya Aura<sup>®</sup> overview

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## Avaya Aura<sup>®</sup> applications deployment offers

Avaya Aura<sup>®</sup> supports the following deployment offers:

- Avaya Aura<sup>®</sup> Virtualized Appliance (VA): Avaya-provided server, Avaya Aura<sup>®</sup> Appliance Virtualization Platform, based on the customized OEM version of VMware<sup>®</sup> ESXi 6.0.
- Avaya Aura<sup>®</sup> Virtualized Environment (VE): Customer-provided VMware infrastructure and Kernel-based Virtual Machine (KVM).
- Avaya Aura<sup>®</sup> on Infrastructure as a Service: Amazon Web Services, Microsoft Azure, and Google Cloud Platform.
- Software-only environment: Deployment on the Red Hat Enterprise Linux operating system.

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## Avaya Aura<sup>®</sup> Virtualized Appliance overview

Avaya Aura<sup>®</sup> Virtualized Appliance is a turnkey solution. Avaya provides the hardware, all the software including the VMware hypervisor and might also offer the customer support of the setup. Virtualized Appliance offer is different from Avaya Aura<sup>®</sup> Virtualized Environment, where Avaya provides the Avaya Aura<sup>®</sup> application software and the customer provides and supports the VMware hypervisor and the hardware on which the hypervisor runs.

### Deployment considerations

- Deployment on the Appliance Virtualization Platform server is performed from the System Manager Solution Deployment Manager or the Solution Deployment Manager standalone Windows client.
- Avaya provides the servers, Appliance Virtualization Platform, which includes the VMware ESXi hypervisor.

## Appliance Virtualization Platform overview

From Release 7.0, Avaya provides the VMware<sup>®</sup>-based Avaya Aura<sup>®</sup> Appliance Virtualization Platform to provide virtualization for Avaya Aura<sup>®</sup> applications.

Avaya Aura<sup>®</sup> Virtualized Appliance offer includes:

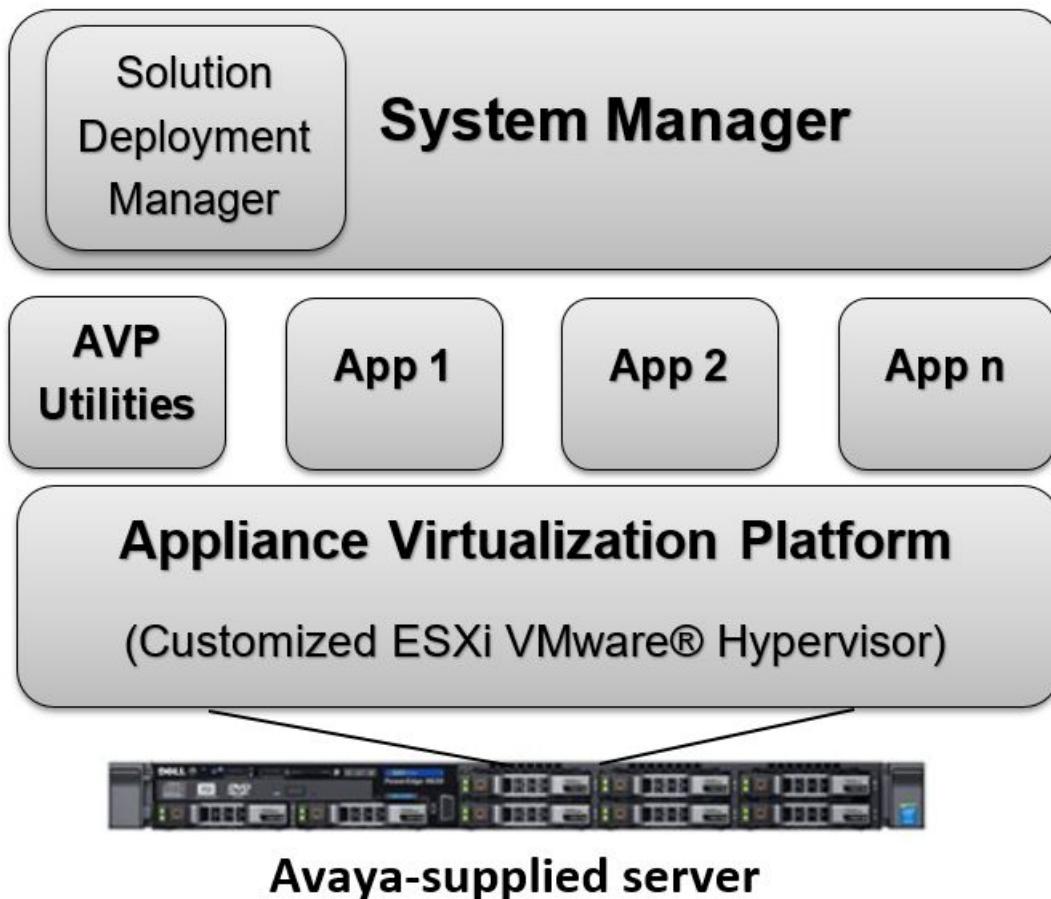
- Common Servers: Dell<sup>™</sup> PowerEdge<sup>™</sup> R620, Dell<sup>™</sup> PowerEdge<sup>™</sup> R630, HP ProLiant DL360p G8, and HP ProLiant DL360 G9
- Avaya S8300E

**\* Note:**

- With WebLM Release 7.x and later, you cannot deploy WebLM on S8300E Server running on Appliance Virtualization Platform.
- Common Servers using ESXi 6.0 can require more memory than System Platform or ESXi 5.5. For memory validation process, see PSN027060u or the Release Notes.

- Avaya Converged Platform 120 Server: Dell PowerEdge R640

Appliance Virtualization Platform is the customized OEM version of VMware® ESXi 6.0. With Appliance Virtualization Platform, customers can run any combination of supported applications on Avaya-supplied servers. Appliance Virtualization Platform provides greater flexibility in scaling customer solutions to individual requirements.



From Avaya Aura® Release 7.0 and later, Appliance Virtualization Platform replaces System Platform.

You can deploy the following applications on Appliance Virtualization Platform:

- AVP Utilities 8.0.1
- System Manager 8.0.1
- Session Manager 8.0.1
- Branch Session Manager 8.0.1

- Communication Manager 8.0.1
- Application Enablement Services 8.0.1
- WebLM 8.0.1
- Communication Manager Messaging 7.0

For information about other Avaya product compatibility information, go to <https://support.avaya.com/CompatibilityMatrix/Index.aspx>.

**\* Note:**

For deploying Avaya Aura® applications on Appliance Virtualization Platform only use Solution Deployment Manager.

## Virtual Appliance components

Software component	Description
ESXi Host	The physical machine running the ESXi Hypervisor software.
Appliance Virtualization Platform	Avaya-provided virtualization turnkey solution that includes the hardware and all the software including the VMware hypervisor.
Solution Deployment Manager	Centralized software management solution of Avaya that provides deployment, upgrade, migration, and update capabilities for the Avaya Aura® virtual applications.
Open Virtualization Appliance (OVA)	The virtualized OS and application packaged in a single file that is used to deploy a virtual machine.

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## Virtualized Environment overview

You can deploy the Avaya Aura® applications in one of the following Virtualized Environment:

- VMware in customer-provided Virtualized Environment
- Kernel-based Virtual Machine Virtualized Environment

## Avaya Aura® Virtualized Environment overview

Avaya Aura® Virtualized Environment integrates real-time Avaya Aura® applications with VMware® and Kernel-based Virtual Machine (KVM).

## Kernel-based Virtual Machine overview

Kernel-based Virtual Machine (KVM) is a virtualization infrastructure for the Linux kernel that turns the Linux kernel into a hypervisor. You can remotely access the hypervisor to deploy applications on the KVM host.

KVM virtualization solution is:

- Cost effective for the customers.
- Performance reliable and highly scalable.

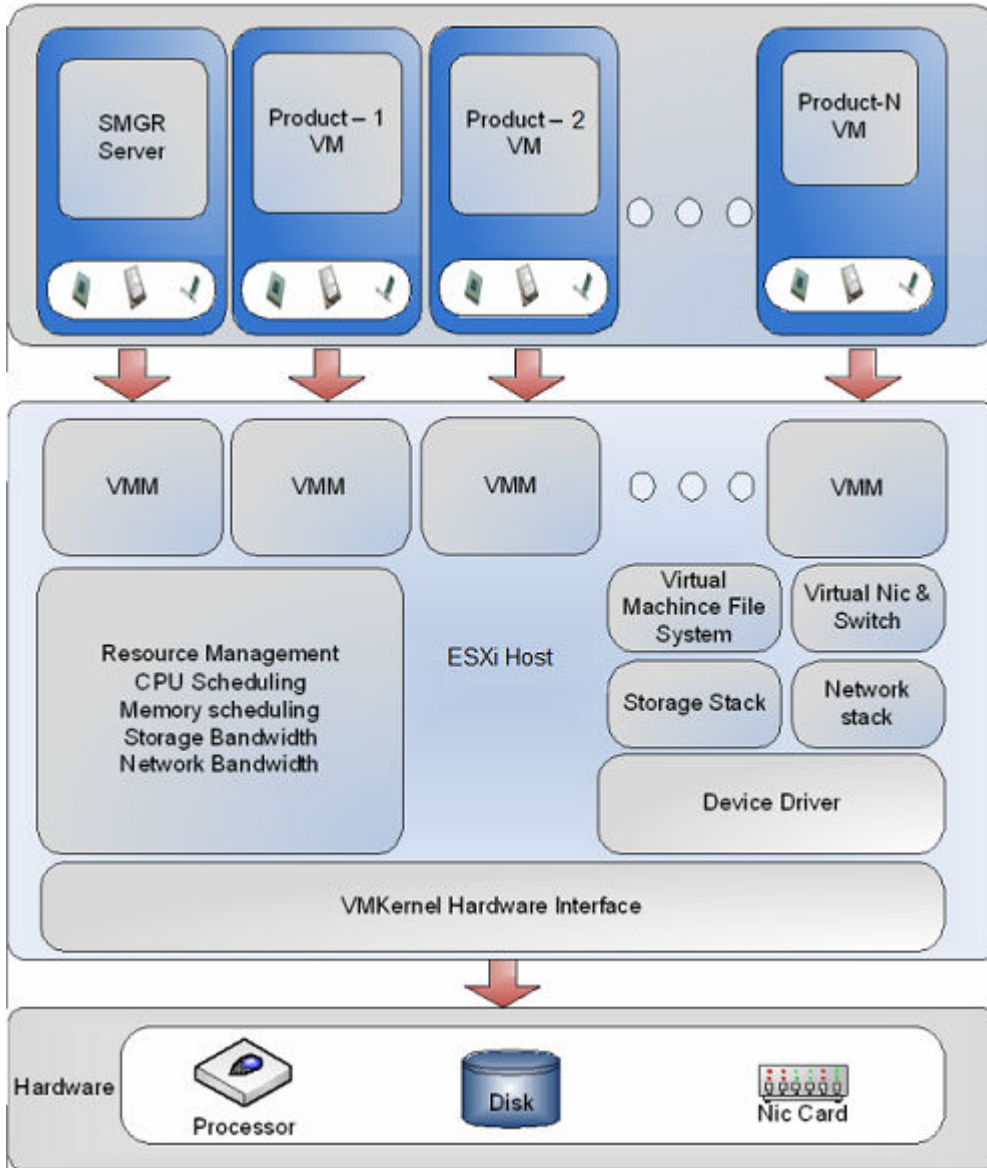
- Secure as it uses the advanced security features of SELinux.
- Open source software that can be customized as per the changing business requirements of the customers.

## Supported applications in Virtualized Environment

Application	Release	VMware	KVM
Avaya Aura® System Manager	Release 8.0.1	Y	Y
Avaya WebLM	Release 8.0.1	Y	Y
Avaya Aura® Session Manager	Release 8.0.1	Y	Y
Avaya Aura® Communication Manager	Release 8.0.1	Y	Y
Avaya Aura® AVP Utilities	Release 8.0.1	—	—
Avaya Aura® Application Enablement Services	Release 8.0.1	Y	Y
Avaya Aura® Media Server (Software only)	Release 8.0.1	Y	Y
Avaya Diagnostic Server (Software only)	Release 3.0	Y	Y
Avaya Session Border Controller for Enterprise	Release 7.2.2	Y	Y

## Topology

The following is an example of a deployment infrastructure for System Manager on VMware.



### Virtualized Environment components

Virtualized component	Description
Open Virtualization Appliance (OVA)	The virtualized OS and application packaged in a single file that is used to deploy a virtual machine.
VMware	
ESXi Host	The physical machine running the ESXi Hypervisor software.
ESXi Hypervisor	A platform that runs multiple operating systems on a host computer at the same time.

*Table continues...*

Virtualized component	Description
vSphere Web Client	Using a Web browser, vSphere Web Client connects to a vCenter server or directly to an ESXi host if a vCenter Server is not used.
vSphere Client (HTML5)	vSphere Client (HTML5) is available in vSphere 6.5. Using a Web browser, it connects to a vCenter server or directly to an ESXi host if a vCenter Server is not used. This is the only vSphere client administration tool after the next vSphere release.
vCenter Server	vCenter Server provides centralized control and visibility at every level of the virtual infrastructure. vCenter Server provides VMware features such as High Availability and vMotion.
KVM	
KVM hypervisor	A platform that runs multiple operating systems on a host computer at the same time.

## Overview of Infrastructure as a Service environment

Infrastructure as a Service (IaaS) environment enables enterprises to securely run applications on the virtual cloud. The supported Avaya Aura® applications on IaaS can also be deployed on-premises. Avaya Aura® application supports the following platforms within this offer:

- Amazon Web Services
- Microsoft Azure
- Google Cloud Platform
- IBM Bluemix

For information about Bluemix, see IBM Bluemix product documentation.

Communication Manager supports the following offers on the Infrastructure as a Service environment:

Offer	Supported environments
OVA	Amazon Web Services
ISO	<ul style="list-style-type: none"> <li>• Amazon Web Services</li> <li>• Microsoft Azure</li> <li>• Google Cloud Platform</li> </ul>

Supporting the Avaya Aura® applications on the IaaS platforms provide the following benefits:

- Minimizes the capital expenditure on infrastructure. The customers can move from capital expenditure to operational expense.
- Reduces the maintenance cost of running the data centers.
- Provides a common platform for deploying the applications.
- Provides a flexible environment to accommodate the changing business requirements of customers.



- Allows you to pay per-use licensing.
- Allows you to upgrade at a minimal cost.
- Supports mobility to move from one network to another.
- Allows you to stay current with latest security updates provided by the service provider.

You can connect the following applications to the Avaya Aura® IaaS instances from the customer premises:

- Avaya Aura® Conferencing Release 8.0 and later
- Avaya Aura® Messaging Release 6.3 and later
- G430 Branch Gateway, G450 Branch Gateway, and G650 Media Gateway

### **Supported third-party applications**

With the software-only (ISO) offer, customers can install third-party applications on the system and get more control on the system. For the list of supported third-party software applications in Release 8.0 and later, see the Avaya Product Support Notice at [PSN020360u](#).

## **Amazon Web Services overview**

Amazon Web Services is an Infrastructure as a Service platform that enables enterprises to securely run applications on the virtual cloud. The key components of Amazon Web Services are Amazon Elastic Compute Cloud (EC2) and Amazon Simple Storage Service (S3).

## **Microsoft Azure overview**

Microsoft Azure is an Infrastructure as a Service platform that enables enterprises to securely deploy and manage applications through a global network of Microsoft-managed data centers.

## **Google Cloud Platform overview**

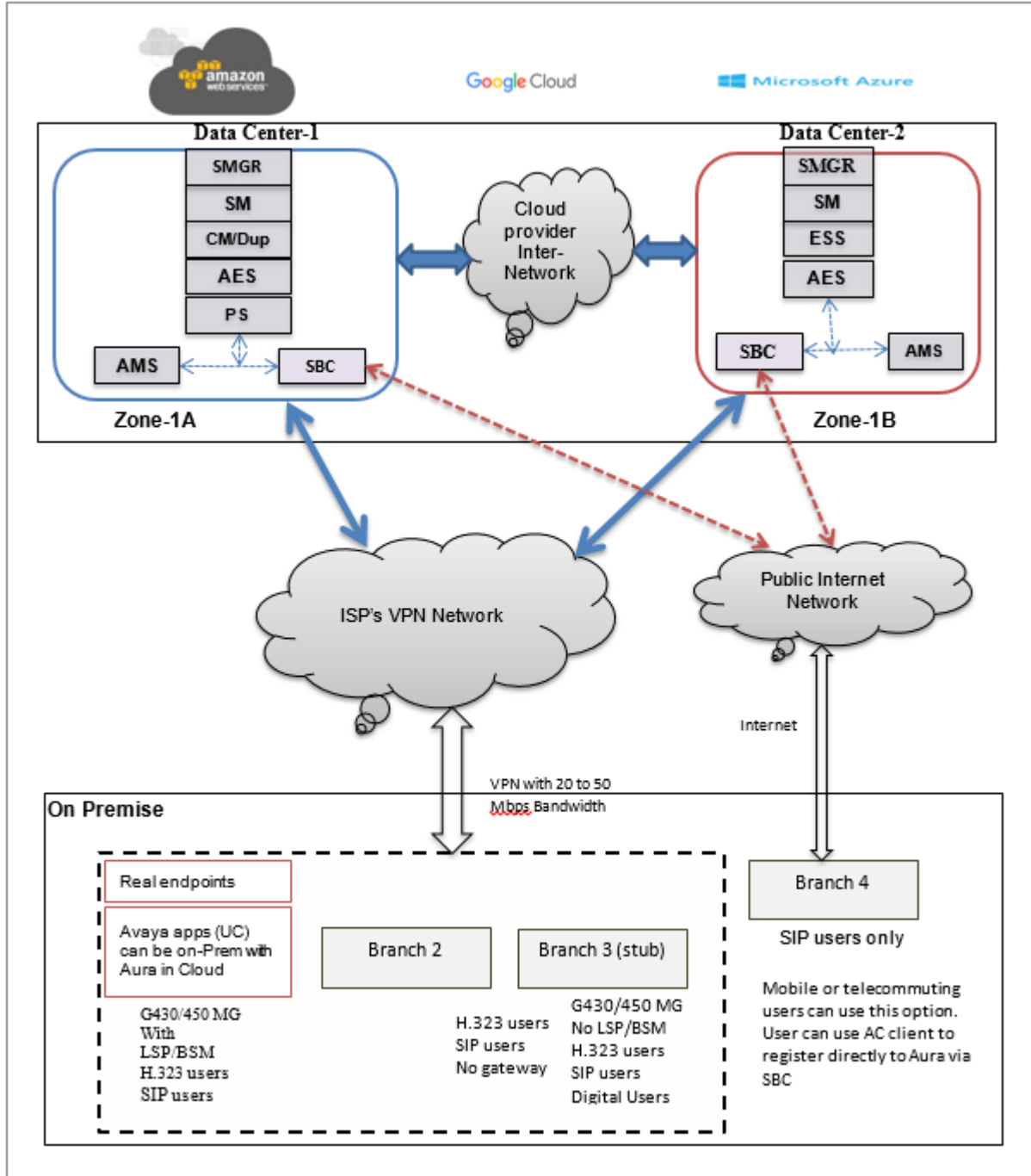
Google Cloud Platform is a suite of public cloud computing services offered by Google.

## **Topology**

The following diagram depicts the architecture of the Avaya applications on the Infrastructure as a Service platform. This diagram is an example setup of possible configuration offered by Avaya.

### **! Important:**

The setup must follow the Infrastructure as a Service deployment guidelines, but does not need to include all the applications.



## Supported applications in Infrastructure as a Service Environment

Application	Release	Amazon Web Services	Microsoft Azure	Google Cloud Platform
Avaya Aura® System Manager	Release 8.0.1	Y	Y	Y
Avaya WebLM	Release 8.0.1	Y	Y	Y
Avaya Aura® Session Manager	Release 8.0.1	Y	Y	Y
Avaya Aura® Communication Manager	Release 8.0.1	Y	Y	Y
Presence Services using Avaya Breeze® platform	Release 8.0.1	Y	Y	Y
Avaya Aura® Device Services	Release 7.1.3	Y	—	—
Avaya Aura® Application Enablement Services (Software only)	Release 8.0.1	Y	Y	Y
Avaya Aura® Media Server (Software only)	Release 8.0.1	Y	Y	Y
Avaya Diagnostic Server (Software only)	Release 3.0	Y	Y	Y
Avaya Session Border Controller for Enterprise	Release 7.2.2	Y	Y	Y

## Software-only environment overview

Avaya Aura® Release 8.0 and later supports software-only installation. In a software-only installation, the customer owns the operating system and must provide and configure the operating system for use with Avaya Aura® application. With the software-only offer, the customer can install and customize the operating system to meet the requirements to install the Avaya Aura® application.

You must run the software-only offer on the supported environments to enable the use of Avaya approved third-party applications for anti-virus, backup, and monitoring.

Customers must procure a server that meets the recommended hardware requirements and the appropriate version of Linux® Operating System.

### Supported third-party applications

With the software-only (ISO) offer, customers can install third-party applications on the system and get more control on the system. For the list of supported third-party software applications in Release 8.0 and later, see the Avaya Product Support Notice at [PSN020360u](#).

### Avaya Aura® Software-Only environment RPMs

For the list of tested Avaya Aura® Software-Only RPMs, see Avaya PSN020361u at [PSN020361u](#).

## Supported platforms

You can deploy the Avaya Aura® application software-only *ISO image* on the following platforms:

- VMware
- Kernel-based Virtual Machine (KVM)
- Hyper-V

 **Note:**

Starting with the Release 8.0.1, Avaya Aura® applications support Hyper-V.

- Amazon Web Services
- Google Cloud Platform
- Microsoft Azure

## Supported applications in Software-only Environment

- Avaya Aura® System Manager
- Avaya WebLM
- Avaya Aura® Session Manager
- Avaya Aura® Communication Manager
- Avaya Aura® Application Enablement Services
- Avaya Aura® Media Server

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## Solution Deployment Manager overview

Solution Deployment Manager is a centralized software management solution in System Manager that provides deployments, upgrades, migrations, and updates to Avaya Aura® applications. Solution Deployment Manager supports the operations on the customer's Virtualized Environment and the Avaya Aura® Virtualized Appliance model.

Solution Deployment Manager provides the combined capabilities that Software Management, Avaya Virtual Application Manager, and System Platform provided in earlier releases.

From Release 7.1 and later, Solution Deployment Manager supports migration of Virtualized Environment-based 6.x, 7.0.x, and 7.1.x applications to Release 8.0 and later in the customer's Virtualized Environment. For migrating to Release 8.0, you must use Solution Deployment Manager Release 8.0.

Release 7.0 and later support a standalone version of Solution Deployment Manager, the Solution Deployment Manager client. For more information, see *Using the Solution Deployment Manager client*.

System Manager with Solution Deployment Manager runs on:

- Avaya Aura® Virtualized Appliance: Contains a server, Appliance Virtualization Platform, and Avaya Aura® application OVA. Appliance Virtualization Platform includes a VMware ESXi 6.0 hypervisor.

- Customer-provided Virtualized Environment solution: Avaya Aura® applications are deployed on customer-provided, VMware® certified hardware.
- Software-Only environment: Avaya Aura® applications are deployed on the customer-owned hardware and the operating system.

With Solution Deployment Manager, you can do the following in Virtualized Environment and Avaya Aura® Virtualized Appliance models:

- Deploy Avaya Aura® applications.
- Upgrade and migrate Avaya Aura® applications.

**\* Note:**

When an application is configured with Out of Band Management, Solution Deployment Manager does not support upgrade for that application.

For information about upgrading the application, see the application-specific upgrade document on the Avaya Support website.

- Download Avaya Aura® applications.
- Install service packs, feature packs, and software patches for the following Avaya Aura® applications:
  - Communication Manager and associated devices, such as gateways, media modules, and TN boards.
  - Session Manager
  - Branch Session Manager
  - AVP Utilities
  - Appliance Virtualization Platform, the ESXi host that is running on the Avaya Aura® Virtualized Appliance.

The upgrade process from Solution Deployment Manager involves the following key tasks:

- Discover the Avaya Aura® applications.
- Refresh applications and associated devices, and download the necessary software components.
- Run the preupgrade check to ensure successful upgrade environment.
- Upgrade Avaya Aura® applications.
- Install software patch, service pack, or feature pack on Avaya Aura® applications.

For more information about the setup of the Solution Deployment Manager functionality that is part of System Manager 8.0, see *Avaya Aura® System Manager Solution Deployment Manager Job-Aid*.

### Related links

[Solution Deployment Manager Client](#) on page 21

## Solution Deployment Manager Client

For the initial System Manager deployment or when System Manager is inaccessible, you can use the Solution Deployment Manager client. The client must be installed on the computer of the technician. The Solution Deployment Manager client provides the functionality to deploy the OVAs or ISOs on an Avaya-provided server, customer-provided Virtualized Environment, or Software-only environment.

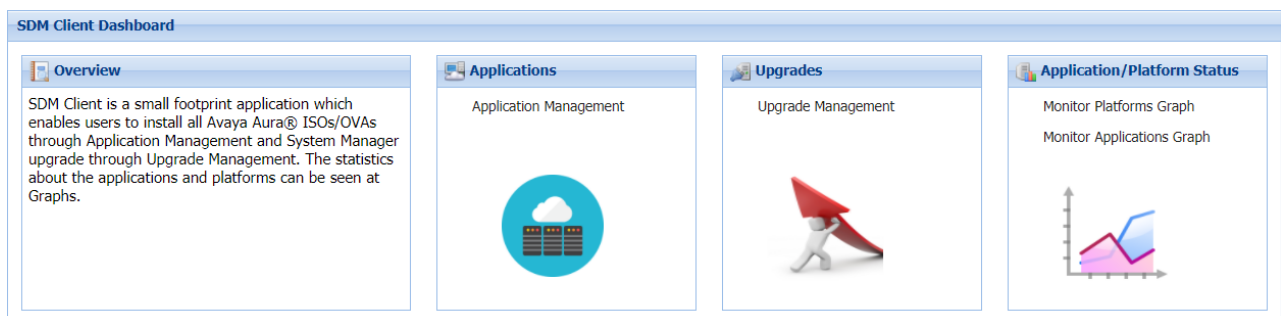
A technician can gain access to the user interface of the Solution Deployment Manager client from the web browser.

Use the Solution Deployment Manager client to:

- Deploy System Manager and Avaya Aura® applications on Avaya appliances, VMware-based Virtualized Environment, and Software-only environment.
- Upgrade System Platform-based System Manager.
- Upgrade VMware-based System Manager from Release 7.0.x to Release 7.1 and later.
- Upgrade VMware-based System Manager from Release 6.x or 7.x to Release 8.0 and later.
- Install System Manager software patches, service packs, and feature packs.
- Configure Remote Syslog Profile.
- Create the Appliance Virtualization Platform Kickstart file.
- Install Appliance Virtualization Platform patches.
- Restart and shutdown the Appliance Virtualization Platform host.
- Start, stop, and restart a virtual machine.
- Change the footprint of Avaya Aura® applications that support dynamic resizing. For example, Session Manager and Avaya Breeze® platform.

### \* Note:

- You can deploy or upgrade the System Manager virtual machine only by using the Solution Deployment Manager client.
- You must always use the latest the Solution Deployment Manager client for deployment.
- You must use Solution Deployment Manager Client 7.1 and later to create the kickstart file for initial Appliance Virtualization Platform installation or recovery.



**Figure 1: Solution Deployment Manager Client dashboard**

## Related links

[Solution Deployment Manager overview](#) on page 19

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# Solution Deployment Manager

Solution Deployment Manager simplifies and automates the deployment and upgrade process.

With Solution Deployment Manager, you can deploy the following applications:

- AVP Utilities 8.0.1
- System Manager 8.0.1
- Session Manager 8.0.1
- Branch Session Manager 8.0.1
- Communication Manager 8.0.1
- Application Enablement Services 8.0.1
- WebLM 8.0.1
- Communication Manager Messaging 7.0

For information about other Avaya product compatibility information, go to <https://support.avaya.com/CompatibilityMatrix/Index.aspx>.

With Solution Deployment Manager, you can migrate, upgrade, and update the following applications:

- Linux-based Communication Manager 5.x and the associated devices, such as Gateways, TN boards, and media modules.

 **Note:**

In bare metal Linux-based deployments, the applications are directly installed on the server and not as a virtual machine.

- Hardware-based Session Manager 6.x
- System Platform-based Communication Manager
  - Duplex CM Main / Survivable Core with Communication Manager
  - Simplex CM Main / Survivable Core with Communication Manager, Communication Manager Messaging, and Utility Services
  - Simplex Survivable Remote with Communication Manager, Branch Session Manager, and Utility Services
  - Embedded CM Main with Communication Manager, Communication Manager Messaging, and Utility Services
  - Embedded Survivable Remote with Communication Manager, Branch Session Manager, and Utility Services
- System Platform-based Branch Session Manager
  - Simplex Survivable Remote with Communication Manager, Branch Session Manager, and Utility Services



- Embedded Survivable Remote with Communication Manager, Branch Session Manager, and Utility Services

**\* Note:**

You must manually migrate the Services virtual machine that is part of the template.

The centralized deployment and upgrade process provides better support to customers who want to upgrade their systems to Avaya Aura® Release 8.0.1. The process reduces the upgrade time and error rate.

## Solution Deployment Manager dashboard

You can gain access to the Solution Deployment Manager dashboard from the System Manager web console or by installing the Solution Deployment Manager client.

**App Management** : To deploy OVA files for supported Avaya Aura® applications. Also, to define the physical location, ESXi host, and discover virtual machines required for application deployments and virtual machine life cycle management.[\[..More\]](#)

**Upgrade Management** : To upgrade supported Avaya Aura® applications to Release 7.0.x. Also, to refresh applications, analyze software, and perform preupgrade checks required for upgrades.[\[..More\]](#)

**Download Management** : To download the software releases that the customer is entitled from Avaya PLDS or from an alternate source.[\[..More\]](#)

**Software Library Management** : To set a location where you can store the software and firmware files that you downloaded.[\[..More\]](#)

**User Settings** : To configure the location from where System Manager displays information about the latest software and firmware releases.[\[..More\]](#)

**Application/Platform Status** : Monitor the CPU and memory usage of platforms and applications.[\[..More\]](#)

## Solution Deployment Manager capabilities

With Solution Deployment Manager, you can perform deployment and upgrade-related tasks by using the following links:

- **Upgrade Release Setting:** To select **Release 7.x Onwards** or **6.3.8** as the target upgrade. Release 8.0.1 is the default upgrade target.
- **Manage Software:** To analyze, download, and upgrade the IP Office, Unified Communications Module, and IP Office Application Server firmware. Also, you can view the status of the firmware upgrade process.
- **Application Management:** To deploy OVA files for the supported Avaya Aura® application.
  - Configure Remote Syslog Profile.
  - Generate the Appliance Virtualization Platform Kickstart file.
- **Upgrade Management:** To upgrade Communication Manager that includes TN boards, media gateways and media modules, Session Manager, Communication Manager Messaging, Utility Services, Branch Session Manager, and WebLM to Release 8.0.1.
- **User Settings:** To configure the location from where System Manager displays information about the latest software and firmware releases.
- **Download Management:** To download the OVA files and firmware to which the customer is entitled. The download source can be the Avaya PLDS or an alternate source.

- **Software Library Management:** To configure the local or remote software library for storing the downloaded software and firmware files.
- **Upload Version XML:** To save the `version.xml` file to System Manager. You require the `version.xml` file to perform upgrades.

---

## Avaya Aura® applications upgrade

With System Manager Solution Deployment Manager, you can upgrade the following Avaya Aura® applications to Release 8.0.1:

- Communication Manager
- Session Manager
- Branch Session Manager
- AVP Utilities
- WebLM

 **Note:**

- You must upgrade System Manager to Release 8.0.1 by using the Solution Deployment Manager client before you upgrade the Avaya Aura® applications to Release 8.0.1.
- System Manager Solution Deployment Manager does not support upgrade from VMware-based Communication Manager Release 6.x to VMware-based Communication Manager Release 7.x and 8.x. For manually upgrading VMware-based Communication Manager, see *Upgrading Avaya Aura® Communication Manager* on the Avaya Support website.

---

## Support for VMware components

Avaya Aura® Release 8.0 supports deployment and upgrades on the following VMware components in Virtualized Environment.

- VMware® vSphere ESXi 6.0
- VMware® vSphere ESXi 6.5
- VMware® vSphere ESXi 6.7
- VMware® vCenter Server 6.0
- VMware® vCenter Server 6.5
- VMware® vCenter Server 6.7

**\* Note:**

- Avaya Aura® Release 8.0 and later does not support vSphere ESXi 5.0 and 5.5.
- With VMware® vSphere ESXi 6.5, vSphere Web Client replaces the VMware® vSphere Client for ESXi and vCenter administration.

## Supported Red Hat Enterprise Linux operating system versions

The following table lists the supported Red Hat Enterprise Linux operating system versions of Avaya Aura® applications.

Linux operating system	Avaya Aura® Release		
	7.0.x	7.1.x	8.0.x
Linux operating system Release 6.5 with 64-bit	Y		
Linux operating system Release 7.2 with 64-bit		Y <b>* Note:</b> Utility Services Release 7.1 uses the Red Hat Enterprise Linux operating system Release 7.3 with 64-bit.	
Linux operating system Release 7.4 with 64-bit			Y

## Supported ESXi version

The following table lists the supported ESXi versions of Avaya Aura® applications.

ESXi version	Avaya Aura® Release					
	7.0.x	7.1	7.1.1	7.1.2	7.1.3	8.0.x
ESXi 5.0	Y					
ESXi 5.1	Y					
ESXi 5.5	Y	Y	Y	Y	Y	

*Table continues...*

ESXi version	Avaya Aura® Release					
	7.0.x	7.1	7.1.1	7.1.2	7.1.3	8.0.x
ESXi 6.0		Y	Y	Y	Y	Y
ESXi 6.5		Y	Y	Y	Y	Y
ESXi 6.7					Y	Y
<p><b>* Note:</b>                      With VMware® vSphere ESXi 6.5, vSphere Web Client replaces the VMware® vSphere Client for ESXi and vCenter administration.</p>						

## Supported servers

The following table lists the supported servers of Avaya Aura® applications.

Supported servers	Avaya Aura® Release			
	7.0.x	7.1.x	8.0	8.0.1
S8300D	Y	Y		
S8300E	Y	Y	Y	Y
HP ProLiant DL360 G7	Y	Y		
HP ProLiant DL360p G8	Y	Y	Y	Y
HP ProLiant DL360 G9	Y	Y	Y	Y
Dell™ PowerEdge™ R610	Y	Y		
Dell™ PowerEdge™ R620	Y	Y	Y	Y
Dell™ PowerEdge™ R630	Y	Y	Y	Y
Avaya Converged Platform 120 Server				Y

## Supported gateways

The following table lists the supported gateways of Avaya Aura® applications.

Supported gateways	Avaya Aura® Release			
	6.3.x	7.0.x	7.1.x	8.0.x
G250 Branch Gateway	Y	Y		
G350 Branch Gateway	Y	Y		

*Table continues...*

Supported gateways	Avaya Aura® Release			
	6.3.x	7.0.x	7.1.x	8.0.x
G430 Branch Gateway	Y	Y	Y	Y
G450 Branch Gateway	Y	Y	Y	Y
G650 Media Gateway	Y	Y	Y	Y
G700 Branch Gateway	Y	Y		

---

## Supported browsers

The following table lists the supported browsers of Avaya Aura® applications.

Supported browsers	Avaya Aura® Release		
	7.0.x	7.1.x	8.0.x
Internet Explorer	Microsoft Internet Explorer Release 9.x, 10.x, and 11.x	Internet Explorer 11.x and later	Internet Explorer 11.x and later
Mozilla Firefox	Mozilla Firefox Release 37, 38, and 39	Mozilla Firefox Release 48, 49, and 50	Mozilla Firefox Release 59, 60, and 61
Microsoft Edge (Spartan) Browser (included with Windows 10)		Supported only for Utility Services.	
Google Chrome		Google Chrome 53, 54, and 55 is supported only for Utility Services.	

# Chapter 3: What's new in Appliance Virtualization Platform

This chapter provides an overview of the new and enhanced features of Appliance Virtualization Platform Release 8.0 and later.

For more information about these features and administration, see:

- *Deploying Avaya Aura® Appliance Virtualization Platform*
- *Upgrading Avaya Aura® Appliance Virtualization Platform*

---

## New in Appliance Virtualization Platform Release 8.0.1

Appliance Virtualization Platform Release 8.0.1 supports the following new features and enhancements:

### **Support for new Avaya Converged Platform 120 Server**

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

---

## New in Appliance Virtualization Platform Release 8.0

Appliance Virtualization Platform Release 8.0 supports the following new features and enhancements:

### **Utility Services is replaced with AVP Utilities**

In Avaya Aura® Release 8.0, Utility Services is replaced with AVP Utilities. While some of the Utility Services features are migrated to other Avaya Aura® applications, the following features of Utility Services are migrated to AVP Utilities:

- Services Port access for virtual machines
- Appliance Virtualization Platform log collection and alarming
- Enabling SSH access for Appliance Virtualization Platform

Following features of Utility Services are migrated to other Avaya Aura® applications:

Features of Utility Services 7.x	Migrated to	Description
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
File Server	Avaya Aura® Device Services Release 7.1.3.1	Avaya Aura® Device Services will provide this feature for IP Phones.  The Firmware download capability is moved to Avaya Aura® Device Services starting with Release 7.1.3.1. Avaya Aura® Device Services Release 7.1.3.1 can run on Appliance Virtualization Platform Release 8.0.  Avaya Aura® Device Services will not provide this feature for Gateway Firmware.
MyPhone	Avaya Aura® Unified User Portal 8.0	Existing configurations must be re-applied, if any.

The following features of Utility Services are no longer supported by an Avaya Aura® application. Third-party applications must be used for the following features:

Features of Utility Services 7.x	Description
Call Detail Recordings (CDR) collection	You must use third-party applications. However, you can use the Call Detail Recordings data with the third-party solutions.
Dynamic Host Configuration Protocol (DHCP)	You must use a separate DHCP server.

### Discontinued the support of S8300D and Common Server Release 1

Appliance Virtualization Platform cannot be deployed or upgraded on the S8300D, Dell™ PowerEdge™ R610, or HP ProLiant DL360 G7 server.

### Upgrade of Utility Services 7.x to AVP Utilities 8.0 during Appliance Virtualization Platform Release 8.0 upgrade

From Release 8.0, Utility Services is replaced with AVP Utilities. Therefore, while you attempt to upgrade Appliance Virtualization Platform to Release 8.0, the system provides the option to upgrade Utility Services 7.x to AVP Utilities 8.0.



### Upgrade of Utility Services 7.x to AVP Utilities 8.0 in bulk during Appliance Virtualization Platform Release 8.0 upgrade

You can upgrade Utility Services 7.x to AVP Utilities 8.0 in bulk by using **AVPU Configuration Import** and importing the `hostUSUpgradeInfo.xlsx` spreadsheet while upgrading one or more Appliance Virtualization Platform to Release 8.0.1.

### Retry Utility Services 7.x to AVP Utilities 8.0 upgrade

If the upgrade from Utility Services to AVP Utilities fails, you can retry the upgrade by using **More Actions > Rollback/Retry** on the **Applications** tab after selecting the Utility Services application.

### Roll back to Utility Services

If the upgrade from Utility Services to AVP Utilities fails, you can roll back to Utility Services by using **More Actions > Rollback/Retry** on the **Applications** tab after selecting the Utility Services application.

## Appliance Virtualization Platform feature matrix

The following table lists the feature matrix of Appliance Virtualization Platform.

 **Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature name	Release 7.1.x	Release 8.0	Release 8.0.1
OVA signing	Y	Y	Y
IPv6 support	Y	Y	Y
Enhanced Access Security Gateway (EASG)	Y	Y	Y
Compliance with DISA security STIGs	Y	Y	Y
Extended Security Hardening	Y	Y	Y
Support for TLS 1.2	Y	Y	Y
Support for Avaya Converged Platform 120 Server			Y

# Chapter 4: What's new in AVP Utilities

This chapter provides an overview of the new and enhanced features of AVP Utilities Release 8.0 and later.

For more information about these features and administration, see *Administering Avaya Aura® AVP Utilities*.

---

## New in AVP Utilities Release 8.0.1

AVP Utilities Release 8.0.1 supports the following new features and enhancements:

### Support for new Avaya Converged Platform 120 Server

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

---

## New in AVP Utilities Release 8.0

AVP Utilities Release 8.0 supports the following new features and enhancements:

### Utility Services is replaced with AVP Utilities

In Avaya Aura® Release 8.0, Utility Services is replaced with AVP Utilities. While some of the Utility Services features are migrated to other Avaya Aura® applications, the following features of Utility Services are migrated to AVP Utilities:

- Services Port access for virtual machines
- Appliance Virtualization Platform log collection and alarming
- Enabling SSH access for Appliance Virtualization Platform

Following features of Utility Services are migrated to other Avaya Aura® applications:

Features of Utility Services 7.x	Migrated to	Description
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP

*Table continues...*

Features of Utility Services 7.x	Migrated to	Description
		directory is supported for SIP phones only.
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
File Server	Avaya Aura® Device Services Release 7.1.3.1	Avaya Aura® Device Services will provide this feature for IP Phones.  The Firmware download capability is moved to Avaya Aura® Device Services starting with Release 7.1.3.1. Avaya Aura® Device Services Release 7.1.3.1 can run on Appliance Virtualization Platform Release 8.0.  Avaya Aura® Device Services will not provide this feature for Gateway Firmware.
MyPhone	Avaya Aura® Unified User Portal 8.0	Existing configurations must be re-applied, if any.

The following features of Utility Services are no longer supported by an Avaya Aura® application. Third-party applications must be used for the following features:

Features of Utility Services 7.x	Description
Call Detail Recordings (CDR) collection	You must use third-party applications. However, you can use the Call Detail Recordings data with the third-party solutions.
Dynamic Host Configuration Protocol (DHCP)	You must use a separate DHCP server.

## AVP Utilities feature matrix

The following table lists the feature matrix of AVP Utilities.

 **Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature	Release 7.x	Release 8.0	Release 8.0.1
Services port access	Y	Y	Y
Appliance Virtualization Platform alarming	Y	Y	Y
Enabling SSH access	Y	Y	Y
Extended security hardening	Y	Y	Y
Enhanced Access Security Gateway	Y	Y	Y
Out of Band Management	Y	Y	Y
Enterprise System Directory	Y		
File Server	Y		
MyPhone Admin	Y		
Support for Avaya Converged Platform 120 Server			Y

# Chapter 5: What's new in System Manager

This chapter provides an overview of the new and enhanced features of System Manager Release 8.0 and later.

For more information about these features and administration, see *Administering Avaya Aura® System Manager*.

---

## New in System Manager Release 8.0.1

Avaya Aura® System Manager Release 8.0.1 supports the following new features and enhancements:

### **Support for Geographic Redundancy in mixed deployment environment**

From Release 8.0.1, System Manager also supports Geographic Redundancy in a mixed deployment environment. The deployment environment can be any of the following:

- Avaya Aura® Virtualized Appliance (VA): Avaya-provided server, Avaya Aura® Appliance Virtualization Platform, based on the customized OEM version of VMware® ESXi 6.0.
- Avaya Aura® Virtualized Environment (VE): Customer-provided VMware infrastructure and Kernel-based Virtual Machine (KVM).
- Avaya Aura® on Infrastructure as a Service: Amazon Web Services, Microsoft Azure, and Google Cloud Platform.
- Software-only environment: Deployment on the Red Hat Enterprise Linux operating system.

For example, the primary System Manager server can be on Appliance Virtualization Platform and the secondary System Manager server can be on a customer-provided virtualized environment.

### **Support for new Avaya Converged Platform 120 Server**

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

### **Enhancements to the CPU resources**

With Release 8.0.1, applications support enhanced CPU resources in the Appliance Virtualization Platform and VMware environments. For more information, see the product-specific deployment guide on the Avaya Support website.

## Support for Hyper-V

With the Release 8.0.1, Avaya Aura® applications support deployment in the software-only environment on Hyper-V. Hyper-V is a virtualized platform that allows you to run multiple operating systems as virtual machines on Windows.

For more information about deployment in the software-only environment, see the product specific software-only deployment guide.

## Software-only offer supports third-party software

With the software-only (ISO) offer, customers can install third-party applications on the system and get more control on the system. For the list of supported third-party software applications in Release 8.0.1, see the Avaya Product Support Notice at [PSN020360u](#).

## Support for new CS 1000 endpoints

With the Release 8.0.1, Avaya Device Adapter Snap-in supports new CS 1000 endpoints. The following are the supported newCS 1000 endpoints:

Set type	Endpoints
CS1k-IPCC	1110 [default], 1120, 1140, 1150, 1165, 1210, 1220, 1230, 2001, 2002, 2004, 2050 (softphone)
CS1k-ana	500 [default]

The new endpoints support the following functions from System Manager:

- Creating custom templates to Add, Edit, View, Delete, Duplicate, and Upgrade using the **Services > Template** page.
- Administering CS1k endpoints from the **Manage Endpoint** page.
- Configuring endpoints as part of Communication Manager Endpoint Communication Profile from **User Management**.
- Bulk Importing/Exporting of Endpoint as part of User import/export using XML and Excel data.

For more information, see Avaya Device Adapter Snap-in Reference.

## Support for Avaya B199 conference phones

System Manager 8.0.1 and later provide the support for Avaya B199 conference phones. Avaya B199 are SIP-based conference phones that enhance collaboration and provide superior user experience and audio quality performance.

System Manager provides a default endpoint template corresponding to the Avaya B199 set type. You can create and manage new station types of Avaya B199 conference phones by using these templates.

For more information about the features of Avaya B199 conference phones, see “Avaya B199 Conference Phones Overview and Specifications”.

### Note:

- Communication Manager internally maps the Avaya B199 set type as 9630 SIP set type.

- You cannot configure the Avaya B199 stations from the Communication Manager System Access Terminal (SAT). You can configure and manage Avaya B199 conference phones from the System Manager user interface only.

### **Support for virtual phone**

From System Manager Release 8.0.1, you can create and manage virtual phones by using the default endpoint template of virtual set type.

### **Support for bulk export and import of agents**

Use the **Elements > Communication Manager > Call Center > Agents** page of System Manager to:

- Download a pre-loaded excel `AgentList.xlsx` file from **More Actions > Download Excel Template** for adding and importing the agents in bulk.
- Export one or more agents by using **More Actions > Export Selected Agents** or **More Actions > Export All Agents**

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## **New in System Manager Release 8.0**

Avaya Aura® System Manager Release 8.0 supports the following new features and enhancements:

### **System Manager dashboard**

System Manager dashboard displays the following widgets:

- Alarms
- Application State
- Notifications
- System Resource Utilization
- Information
- Shortcuts

### **Removal of CallPilot**

CallPilot is not supported.

### **Customer root account**

During deployment or upgrade of the application, the customer can enable or disable the root user account.

### **Enhancements to Upgrade Management in System Manager**

- Supports upgrade from VMware-based Release 6.x applications to Release 8.0.
- Enhanced the Add Element page to add the VMware-based system details.



## Preserve security hardening modes on upgrade

When you upgrade an application from Release 7.1.x to Release 8.0, the system preserves the security hardening modes that are configured on the Release 7.1.x application.

## Extended Hostname Validation

With the Extended Hostname Validation (EHV) feature, the system validates the host name or domain name of the server with the value in the **subject** or **subjectAltName** (SAN) field in the identity certificate for establishing the SSL connection.

On the System Manager web console, on the **Services > Security > Configuration > Security Configuration** page, added a new Extended hostname validation section that has the **Extended Hostname Validation** check box.

## Additional certificate for a service

For adding additional certificate for a service, making a certificate as a default certificate for a service, and removing an additional identity certificate, on the Manage Identity Certificates page, the following buttons are added: Add, Make default, and Remove.

## Product Initiated Registration

On the System Manager web console, on the **Services > Inventory > Manage Elements** page, following options are added:

- **More Actions > SAL Gateway configuration.**
- **More Actions > Avaya Services Registration.**

## Support for new endpoints

Supports the following new endpoints:

- Avaya J129 IP Phone
- Avaya J169 IP Phone
- Avaya J179 IP Phone

For information about the features supported by Avaya J100 Series IP Phones, see *Avaya J100 Series IP Phones Overview and Specifications* on the Avaya Support website.

## Support for 16-digit extension

System Manager supports configuration of 16-digit extension in dial plan analysis. The following Communication Manager objects support 16-digit extension:

- Coverage Path
- Dialplan Analysis
- Dialplan Parameters
- Locations
- Registered IP Stations
- Stations
- Station with Off-PBX Telephone Integration
- Uniform Dial Plan

- Vector Directory Numbers

### **Support for a software-only deployment**

Avaya Aura® Release 8.0 and later supports software-only installation. In a software-only installation, the customer owns the operating system and must provide and configure the operating system for use with Avaya Aura® application. With the software-only offer, the customer can install and customize the operating system to meet the requirements to install the Avaya Aura® application.

The software-only offer allows the customer to install third party application on the system and provides more control on the system.

You must run the software-only offer on the supported environments to enable the use of Avaya approved third party applications for Antivirus, backup, and monitoring.

Customers must procure a server that meets the recommended hardware requirements as well as the appropriate version of Red Hat Enterprise Linux (RHEL) Operating System.

The software-only offer is supported on the following platforms:

- VMware
- Kernel-based Virtual Machine
- Amazon Web Services
- Microsoft Azure
- Google Cloud
- IBM Bluemix

For more information about software-only deployment, see product-specific deployment guide for Software-Only Environment.

### **Support for new Infrastructure as a Service platform**

With Release 8.0, you can deploy the applications on the following Infrastructure as a Service platform:

- Google Cloud
- Microsoft Azure

For more information about Infrastructure as a Service installation, see product-specific deployment guide for Infrastructure as a Service Environment.

### **Supported browsers**

- Internet Explorer 11
- Mozilla Firefox 59, 60, and 61

### **Multiple Appearance Directory Number**

To support migration of CS 1000 users to Avaya Aura®, the Multiple Appearance Directory Number (MADN) feature is now implemented in Communication Manager Release 8.0. The MADN feature was originally implemented on Nortel CS 1000. This feature is almost similar to the existing Communication Manager bridging feature.

As implemented on Nortel CS 1000, MADN has two flavors:

- Single call arrangement
- Multiple call arrangement
- The Single call arrangement feature operation is similar to the existing Communication Manager bridging feature with exclusion enabled. To enable single call arrangement like operation on Communication Manager, configure traditional per-call appearance bridges and enable exclusion by using Class of Service for the principal. For more information on bridging, see *Avaya Aura® Communication Manager Feature Description and Implementation*.
- The Multiple call arrangement feature defines a new form of bridge alerting that associates a bridge button to a principal extension, and not to a specific call appearance of a principal extension. A multiple call arrangement bridge allows an alerting bridge user to answer a call alerting on any call appearance of the principal, or even a call that does not alert at the principal because all principal call appearances are in use.
- Traditional per-call appearance bridge button: brdg-appr B:1 E:1000
- MAC per principal bridge button: brdg-appr B:a E:1000

By specifying the bridge button identifier (B) with the value *a*, this allows any call to principal 1000 to alert at this bridge button. An MAC bridge button may be used on any multi-call appearance DCP, H.323, or SIP station.

Traditional per-call appearance bridge buttons for station 1000 may exist on stations like 1001, 10002, 1003. While MAC bridge buttons for station 1000 may exist on stations like 2001, 2002, 2003. It is not valid for a station to have both per-call appearance and multiple call arrangement bridges for the same principal. Which means, station 1001 cannot have brdg-appr B:1 E:1000 and brdg-appr B:a E:1000.

Multiple call arrangement operation differs significantly on call answer. For an incoming call to a principal station, Communication Manager alerts all stations that have per-call appearance bridge matching a principal and for the particular call appearance. Additionally, Communication Manager alerts all stations that have an idle multiple call arrangement bridge for that principal.

If the call is answered on single call arrangement bridge, the principal and other per-call appearance bridges get a simulated bridge appearance. But, all multiple call arrangement bridge appearances are dropped.

However, if the call is answered at the multiple call arrangement bridge appearance, then:

- The principal gets dropped
- All the alerting single call arrangement bridge stations are dropped
- All the alerting multiple call arrangement bridge stations that did not answer the call gets dropped

### **Avaya Device Adapter Snap-in**

Avaya Device Adapter Snap-in is a modular, reusable solution that enables IP phones working with Avaya Communication Server 1000 (CS 1000) to migrate to Avaya Aura® without significant investment on the existing infrastructure. Device Adapter offers a feasible solution to CS 1000 customers to take advantage of Avaya Aura® features with minimum expense on the cables and hardware.

Device Adapter is deployed on the Avaya Breeze® platform platform. A Device Adapter instance runs on an Avaya Breeze® platform cluster that might have one or more Avaya Breeze® platform

servers. A standard deployment solution has one or more Avaya Breeze® platform clusters. Implementing Device Adapter does not introduce any new hardware. Device Adapter works as a part of the Avaya Breeze® platform solution.

### Cluster Session Manager

Using the Cluster Session Manager, you can administer a list of unique node names having Session Manager IPs that are configured on Communication Manager. This eliminates the need for provisioning trunks for redundancy. This feature frees up trunks so that the available trunks can be used by SIP agents, SIP stations, or PSTN bound SIP trunk calls. You can also generate reports for displaying the status of active and idle trunks.

With Cluster Session Manager, you can manage up to 10 clusters, and each cluster can manage up to 28 Session Managers. From the Manage Users page, you can define the Primary Session Manager and the Secondary Session Manager. If the call to the SIP station is routed to a SIP trunk that has a clustered signaling group, then the Invite is sent to the station on primary Session Manager. If the primary Session Manager is not reachable, then the Invite is sent to the station on secondary Session Manager.

Using the Signaling Groups page, you can access the Communication Manager CLI and administer the Clustered and Cluster ID fields. These fields appear for SIP signaling groups only. For more information, see “Cluster Session Manager” chapter in *Avaya Aura® Communication Manager Screen Reference* and “SIP trunk optimization” chapter in *Avaya Aura® Communication Manager Feature Description and Implementation*.

### Utility Services is replaced with AVP Utilities

In Avaya Aura® Release 8.0, Utility Services is replaced with AVP Utilities. While some of the Utility Services features are migrated to other Avaya Aura® applications, the following features of Utility Services are migrated to AVP Utilities:

- Services Port access for virtual machines
- Appliance Virtualization Platform log collection and alarming
- Enabling SSH access for Appliance Virtualization Platform

Following features of Utility Services are migrated to other Avaya Aura® applications:

Features of Utility Services 7.x	Migrated to	Description
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
File Server	Avaya Aura® Device Services Release 7.1.3.1	Avaya Aura® Device Services will provide this feature for IP Phones.

*Table continues...*

Features of Utility Services 7.x	Migrated to	Description
		The Firmware download capability is moved to Avaya Aura® Device Services starting with Release 7.1.3.1. Avaya Aura® Device Services Release 7.1.3.1 can run on Appliance Virtualization Platform Release 8.0.  Avaya Aura® Device Services will not provide this feature for Gateway Firmware.
MyPhone	Avaya Aura® Unified User Portal 8.0	Existing configurations must be re-applied, if any.

The following features of Utility Services are no longer supported by an Avaya Aura® application. Third-party applications must be used for the following features:

Features of Utility Services 7.x	Description
Call Detail Recordings (CDR) collection	You must use third-party applications. However, you can use the Call Detail Recordings data with the third-party solutions.
Dynamic Host Configuration Protocol (DHCP)	You must use a separate DHCP server.

## System Manager feature matrix

The following table lists the feature matrix of System Manager.

**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature name	Release 7.1.x	Release 8.0	Release 8.0.1
OVA signing	Y	Y	Y
IPv6 support	Y	Y	Y
Enhanced Access Security Gateway (EASG)	Y	Y	Y
Compliance with DISA security STIGs	Y	Y	Y
Extended Security Hardening	Y	Y	Y
Support for TLS 1.2	Y	Y	Y

*Table continues...*

## What's new in System Manager

Feature name	Release 7.1.x	Release 8.0	Release 8.0.1
Customer Root Access		Y	Y
Preserve security hardening modes on upgrade		Y	Y
Extended host name validation		Y	Y
Support for 16-digit extension		Y	Y
Product Initiated Registration		Y	Y
Support for Software-only deployment		Y	Y
Support for deployment on Cloud Services	Y	Y	Y
Support for Geographic Redundancy in mixed deployment environment			Y
Support for Avaya Converged Platform 120 Server			Y

# Chapter 6: What's new in WebLM

This chapter provides an overview of the new and enhanced features of WebLM Release 8.0 and later.

For more information about these features and administration, see *Administering standalone Avaya WebLM*.

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## New in WebLM Release 8.0.1

WebLM Release 8.0.1 supports the following new features and enhancements:

### **Support for new Avaya Converged Platform 120 Server**

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

### **Enhancements to the CPU resources**

With Release 8.0.1, applications support enhanced CPU resources in the Appliance Virtualization Platform and VMware environments. For more information, see the product-specific deployment guide on the Avaya Support website.

### **Support for Hyper-V**

With the Release 8.0.1, Avaya Aura® applications support deployment in the software-only environment on Hyper-V. Hyper-V is a virtualized platform that allows you to run multiple operating systems as virtual machines on Windows.

For more information about deployment in the software-only environment, see the product specific software-only deployment guide.

### **Software-only offer supports third-party software**

With the software-only (ISO) offer, customers can install third-party applications on the system and get more control on the system. For the list of supported third-party software applications in Release 8.0.1, see the Avaya Product Support Notice at [PSN020360u](#).

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## New in WebLM Release 8.0

WebLM Release 8.0 supports the following new features and enhancements:

## Customer root account

During deployment or upgrade of the application, the customer can enable or disable the root user account.

## Support for a software-only deployment

Avaya Aura® Release 8.0 and later supports software-only installation. In a software-only installation, the customer owns the operating system and must provide and configure the operating system for use with Avaya Aura® application. With the software-only offer, the customer can install and customize the operating system to meet the requirements to install the Avaya Aura® application.

The software-only offer allows the customer to install third party application on the system and provides more control on the system.

You must run the software-only offer on the supported environments to enable the use of Avaya approved third party applications for Antivirus, backup, and monitoring.

Customers must procure a server that meets the recommended hardware requirements as well as the appropriate version of Red Hat Enterprise Linux (RHEL) Operating System.

The software-only offer is supported on the following platforms:

- VMware
- Kernel-based Virtual Machine
- Amazon Web Services
- Microsoft Azure
- Google Cloud
- IBM Bluemix

For more information about software-only deployment, see product-specific deployment guide for Software-Only Environment.

## Support for new Infrastructure as a Service platform

With Release 8.0, you can deploy the applications on the following Infrastructure as a Service platform:

- Google Cloud
- Microsoft Azure

For more information about Infrastructure as a Service installation, see product-specific deployment guide for Infrastructure as a Service Environment.

## Supported browsers

- Internet Explorer 11
- Mozilla Firefox 59, 60, and 61



## Utility Services is replaced with AVP Utilities

In Avaya Aura® Release 8.0, Utility Services is replaced with AVP Utilities. While some of the Utility Services features are migrated to other Avaya Aura® applications, the following features of Utility Services are migrated to AVP Utilities:

- Services Port access for virtual machines
- Appliance Virtualization Platform log collection and alarming
- Enabling SSH access for Appliance Virtualization Platform

Following features of Utility Services are migrated to other Avaya Aura® applications:

Features of Utility Services 7.x	Migrated to	Description
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
File Server	Avaya Aura® Device Services Release 7.1.3.1	Avaya Aura® Device Services will provide this feature for IP Phones.  The Firmware download capability is moved to Avaya Aura® Device Services starting with Release 7.1.3.1. Avaya Aura® Device Services Release 7.1.3.1 can run on Appliance Virtualization Platform Release 8.0.  Avaya Aura® Device Services will not provide this feature for Gateway Firmware.
MyPhone	Avaya Aura® Unified User Portal 8.0	Existing configurations must be re-applied, if any.

The following features of Utility Services are no longer supported by an Avaya Aura® application. Third-party applications must be used for the following features:

Features of Utility Services 7.x	Description
Call Detail Recordings (CDR) collection	You must use third-party applications. However, you can use the Call Detail Recordings data with the third-party solutions.
Dynamic Host Configuration Protocol (DHCP)	You must use a separate DHCP server.

## WebLM feature matrix

The following table lists the feature matrix of WebLM.

Feature name	Release 7.1	Release 7.1.1	Release 7.1.2	Release 7.1.3	Release 8.0	Release 8.0.1
OVA signing	Y	Y	Y	Y	Y	Y
IPv6 support	Y	Y	Y	Y	Y	Y
Enhanced Access Security Gateway (EASG)	Y	Y	Y	Y	Y	Y
Compliance with DISA security STIGs	Y	Y	Y	Y	Y	Y
Extended Security Hardening	Y	Y	Y	Y	Y	Y
Support for TLS 1.2	Y	Y	Y	Y	Y	Y
Customer Root Access					Y	Y
Support for Software-only deployment					Y	Y
Support for deployment on Cloud Services			Y	Y	Y	Y
Support for Avaya Converged Platform 120 Server						Y

# Chapter 7: What's new in Session Manager

This chapter provides an overview of the new and enhanced features of Session Manager Release 8.0 and later.

For more information about these features and administration, see *Administering Avaya Aura® Session Manager*.

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## New in Session Manager Release 8.0.1

Session Manager Release 8.0.1 supports the following new features and enhancements:

### **Support for new Avaya Converged Platform 120 Server**

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

### **Support for Hyper-V**

With the Release 8.0.1, Avaya Aura® applications support deployment in the software-only environment on Hyper-V. Hyper-V is a virtualized platform that allows you to run multiple operating systems as virtual machines on Windows.

For more information about deployment in the software-only environment, see the product specific software-only deployment guide.

### **Support for Regular Expression base adaptation module**

With the Release 8.0.1, Avaya Aura® Session Manager supports Regular Expression base adaptation modules. Using Regular Expression Adaptations, you can build your own adaptations to define criteria and instructions for message modification that uses regular expression.

You can also define rules based on multiple conditions in the content of SIP messages. You can define conditions on R-URI, Response-Line, standard and custom SIP Headers, and attachment bodies.

For more information about Regular Expression Adaptations, see *Administering Avaya Aura® Session Manager*.

### **Support for Call Journaling Server High Availability**

With the Release 8.0.1, Avaya Aura® Session Manager supports, Call Journaling Server High Availability. Using Call Journaling feature, you can capture call history data. This feature provides redundancy of the call log data on both primary and secondary Session Manager.

For more information about Call Journaling High Availability, see *Administering Avaya Aura® Session Manager*.

### **Cassandra security hardening**

Avaya Aura® Session Manager Release 8.0 supports security hardening. With the Release 8.0.1, when the security hardening is enabled, Cassandra uses FIPS 140-2 compliant cryptography for its TLS connections.

### **Support for multiple customer accounts with role-based access control**

With the Release 8.0.1, Avaya Aura® Session Manager supports multiple customer accounts and role-based access control to regulate user access to the various capabilities of the product. The customer account created at the time of deployment has administrator privileges to manage customer accounts. The account administrator can add or remove other customer accounts and can assign customer account roles to the existing users.

Session Manager supports the following roles:

- Auditor
- Avaya Services Administrator
- Avaya Services Maintenance and Support
- System Administrator
- Backup Administrator
- Security Administrator

For more information on multiple customer accounts, see *Administering Avaya Aura® Session Manager*.

### **Software-only offer supports third-party software**

With the software-only (ISO) offer, customers can install third-party applications on the system and get more control on the system. For the list of supported third-party software applications in Release 8.0.1, see the Avaya Product Support Notice at [PSN020360u](#).

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## **New in Session Manager Release 8.0**

Session Manager Release 8.0 supports the following new features and enhancements:

### **Support for a software-only deployment**

Avaya Aura® Release 8.0 and later supports software-only installation. In a software-only installation, the customer owns the operating system and must provide and configure the operating system for use with Avaya Aura® application. With the software-only offer, the customer can install and customize the operating system to meet the requirements to install the Avaya Aura® application.

The software-only offer allows the customer to install third party application on the system and provides more control on the system.

You must run the software-only offer on the supported environments to enable the use of Avaya approved third party applications for Antivirus, backup, and monitoring.

Customers must procure a server that meets the recommended hardware requirements as well as the appropriate version of Red Hat Enterprise Linux (RHEL) Operating System.

The software-only offer is supported on the following platforms:

- VMware
- Kernel-based Virtual Machine
- Amazon Web Services
- Microsoft Azure
- Google Cloud
- IBM Bluemix

For more information about software-only deployment, see product-specific deployment guide for Software-Only Environment.

### **Customer root account**

During deployment or upgrade of the application, the customer can enable or disable the root user account.

### **Support for SIP Resiliency**

Starting with Communication Manager and Session Manager Release 8.0, the administrator can enable the SIP Resiliency feature to reconstruct calls between SIP User Agents when the SIP signaling path for the call is disconnected. The signaling path can be disconnected if the user switches networks, network connectivity is lost, or Session Manager fails.

Communication Manager supports the SIP Resiliency feature by replacing SIP dialogs for each dialog of a SIP session. When Communication Manager receives an INVITE message containing a Replaces header, Communication Manager replaces the SIP dialog specified in the Replaces header.

A detailed call recording is generated for a reconstructed call on the appropriate Session Manager instance.

The support for SIP Resiliency depends on the support on the endpoints.

For more information about SIP resiliency, see *Administering Avaya Aura® Communication Manager* and *Administering Avaya Aura® Session Manager*.

### **Cassandra clustering**

Starting with the Session Manager Release 8.0, Cassandra clustering is enabled permanently to provide redundant storage of SIP device data on instances of Session Manager. All the Session Manager instances are members of the Cassandra cluster. Each Session Manager instance in the Session Manager cluster can be configured as part of a data center.

For more information about Cassandra clustering, see *Administering Avaya Aura® Session Manager*.

### **Preserve security hardening modes on upgrade**

When you upgrade an application from Release 7.1.x to Release 8.0, the system preserves the security hardening modes that are configured on the Release 7.1.x application.

## Extended Hostname Validation

With the Extended Hostname Validation (EHV) feature, the system validates the host name or domain name of the server with the value in the **subject** or **subjectAltName** (SAN) field in the identity certificate for establishing the SSL connection.

On the System Manager web console, on the **Services > Security > Configuration > Security Configuration** page, added a new Extended hostname validation section that has the **Extended Hostname Validation** check box.

## Additional certificate for a service

For adding additional certificate for a service, making a certificate as a default certificate for a service, and removing an additional identity certificate, on the Manage Identity Certificates page, the following buttons are added: Add, Make default, and Remove.

## Support for 16 digit dial plan

Starting with Avaya Aura® Release 8.0, Session Manager supports 16 digit dial plan.

## Supported browsers

- Internet Explorer 11
- Mozilla Firefox 59, 60, and 61

## Support for new Infrastructure as a Service platform

With Release 8.0, you can deploy the applications on the following Infrastructure as a Service platform:

- Google Cloud
- Microsoft Azure

For more information about Infrastructure as a Service installation, see product-specific deployment guide for Infrastructure as a Service Environment.

## Utility Services is replaced with AVP Utilities

In Avaya Aura® Release 8.0, Utility Services is replaced with AVP Utilities. While some of the Utility Services features are migrated to other Avaya Aura® applications, the following features of Utility Services are migrated to AVP Utilities:

- Services Port access for virtual machines
- Appliance Virtualization Platform log collection and alarming
- Enabling SSH access for Appliance Virtualization Platform

Following features of Utility Services are migrated to other Avaya Aura® applications:

Features of Utility Services 7.x	Migrated to	Description
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.

*Table continues...*

Features of Utility Services 7.x	Migrated to	Description
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
File Server	Avaya Aura® Device Services Release 7.1.3.1	Avaya Aura® Device Services will provide this feature for IP Phones.  The Firmware download capability is moved to Avaya Aura® Device Services starting with Release 7.1.3.1. Avaya Aura® Device Services Release 7.1.3.1 can run on Appliance Virtualization Platform Release 8.0.  Avaya Aura® Device Services will not provide this feature for Gateway Firmware.
MyPhone	Avaya Aura® Unified User Portal 8.0	Existing configurations must be re-applied, if any.

The following features of Utility Services are no longer supported by an Avaya Aura® application. Third-party applications must be used for the following features:

Features of Utility Services 7.x	Description
Call Detail Recordings (CDR) collection	You must use third-party applications. However, you can use the Call Detail Recordings data with the third-party solutions.
Dynamic Host Configuration Protocol (DHCP)	You must use a separate DHCP server.

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## Session Manager feature matrix

The following table lists the feature matrix of Session Manager.

**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

## What's new in Session Manager

Feature name	Release 7.0.x	Release 7.1.x	Release 8.0	Release 8.0.1
Support for New Avaya Converged Platform 120 Appliance				Y
Support for Hyper-V in Software-Only environment				Y
Support for Regular Expression based adaptation module				Y
Support for Call Journaling Server High Availability				Y
Cassandra security hardening				Y
Support for multiple customer accounts				Y
Support for role-based access control				Y
OVA signing		Y	Y	Y
IPv6 support		Y	Y	Y
Enhanced Access Security Gateway (EASG)		Y	Y	Y
Compliance with DISA security STIGs		Y	Y	Y
Extended Security Hardening		Y	Y	Y
Conference factory URI		Y	Y	Y
Support for TLS 1.2	Y	Y	Y	Y
Customer Root Access			Y	Y
Preserve security hardening modes on upgrade			Y	Y
SIP Resiliency			Y	Y
Extended host name validation			Y	Y
Cassandra clustering		Y	Y	Y
Support for Software-only deployment			Y	Y
Support for 16 digit dial plan			Y	Y



# Chapter 8: What's new in Communication Manager

This chapter provides an overview of the new and enhanced features of Communication Manager Release 8.0 and later.

For more information about these features and administration, see:

- *Avaya Aura® Communication Manager Feature Description and Implementation*
- *Avaya Aura® Communication Manager Screen Reference*

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## New in Communication Manager Release 8.0.1

Communication Manager Release 8.0.1 supports the following new features and enhancements:

### **Support for sharing the Avaya Aura® Media Server instance with multiple adopter applications**

With Release 8.0.1, Avaya Aura® Media Server instance can be shared with multiple adopter applications. However, if two or more adopter applications are simultaneously sharing the Avaya Aura® Media Server instance, then the applications cannot use the full Avaya Aura® Media Server capacity.

### **List emergency**

With Release 8.0.1, the `list emergency` command displays the timestamp with date of the dialed emergency call.

### **Support for Connection Preserving Migration with H.248 Link Recovery for BRI Trunks**

With Release 8.0.1, Communication Manager supports Connection Preservation Migration feature along with H.248 Link recovery for BRI Trunks based on MM720/721/722 media modules. The stable calls are not dropped when the H.248 gateway fails over to another controller.

### **Support for new Avaya Converged Platform 120 Server**

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

## Enhancements to the CPU resources

With Release 8.0.1, applications support enhanced CPU resources in the Appliance Virtualization Platform and VMware environments. For more information, see the product-specific deployment guide on the Avaya Support website.

## Support for Hyper-V

With the Release 8.0.1, Avaya Aura® applications support deployment in the software-only environment on Hyper-V. Hyper-V is a virtualized platform that allows you to run multiple operating systems as virtual machines on Windows.

For more information about deployment in the software-only environment, see the product specific software-only deployment guide.

## Software-only offer supports third-party software

With the software-only (ISO) offer, customers can install third-party applications on the system and get more control on the system. For the list of supported third-party software applications in Release 8.0.1, see the Avaya Product Support Notice at [PSN020360u](#).

## Support for new Avaya Converged Platform 120 Server

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

## Support for Avaya B199 conference phones

System Manager 8.0.1 and later provide the support for Avaya B199 conference phones. Avaya B199 are SIP-based conference phones that enhance collaboration and provide superior user experience and audio quality performance.

System Manager provides a default endpoint template corresponding to the Avaya B199 set type. You can create and manage new station types of Avaya B199 conference phones by using these templates.

For more information about the features of Avaya B199 conference phones, see “Avaya B199 Conference Phones Overview and Specifications”.

### Note:

- Communication Manager internally maps the Avaya B199 set type as 9630 SIP set type.
- You cannot configure the Avaya B199 stations from the Communication Manager System Access Terminal (SAT). You can configure and manage Avaya B199 conference phones from the System Manager user interface only.

## Support for UI and UCID by Communication Manager in CTI-initiated single step or consult transfer

In Release 8.0.1, Communication Manager supports preserving the UI and UCID information in CTI-initiated single step or consult transfer. Communication Manager provides UI and UCID of the related held call ID to the new call ID based on specific configurations in the system parameters special applications page and other associated fields.

For more information about this feature, see the System Parameters Special Application chapter in *Avaya Aura® Communication Manager Screen Reference* document.

For more information about the Special Application features, see *Avaya Aura® Communication Manager Special Application Features* document.

## Support for split stream recording by Communication Manager and Application Enablement Services

In Release 8.0.1, Communication Manager and Application Enablement Services support the split stream recording feature.

Communication Manager and Application Enablement Services supports recording applications primarily in Contact Center solutions for many years. The support is facilitated with the help of DMCC and ASAI/ CTI APIs which enable Communication Manager to provide a mixed media stream of all parties involved in a monitored call towards a specific recording device.

With the increased interest in real time speech analytics and voice biometrics, recording vendors require some amount of audio separation of the speakers in a call. This could be a stream for each individual speaker or one stream for a specific speaker and one mixed stream for all other participants.

To support this feature, the DMCC API is modified to allow external recording applications to request split stream recording. These application requests drive new connection capabilities within Communication Manager to generate the desired media streams towards one or more recording devices.

The DMCC API enhancement for split stream recording includes following three major changes:

- Allows each shared station DMCC Recorder to receive different content via RegisterTerminalRequest (applicable in pre-call scenario).
- Allows increased number of devices sharing a common extension by increasing the shared station multiple registration limits from three to ten.
- Allows each shared station DMCC Recorder to receive different content via SelectiveStreamRequest (applicable in mid-call scenario). This is a new API introduced since Release 8.0.1.

### Note:

- The split stream recording capability does not require any new administration or enabling of optional features on Communication Manager.
- Split stream recording consumes more media processing resources. A typical recorded call consumes three media channels, for example, Agent, Customer and DMCC recorder. With split stream recording of two recording streams, a total of four channels are required. If the two recording streams are redundant, then six media channels will be required.
- The split stream capability is not specific to DMCC with MR, but DMCC with MR is the preferred method. It allows immediate recording of a call and natively allows redundant recording. Another fundamental change resulting due to the implementation of split stream feature is with respect to the number of devices which may be registered to a common extension. To facilitate redundant split stream recording, the Maximum Registration limit is increased to ten in order to support the main station, a shared control softphone and four DMCC recorder ports.
- For more details about this feature and its usage, see “*Administering and Maintaining Avaya Aura® Application Enablement Services*” and “*AE Services DMCC Java Programmers Guide Release 8.0.1 December 2018*”.

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## New in Communication Manager Release 8.0

Communication Manager Release 8.0 supports the following new features and enhancements:

### **Support for 16-digit extension**

System Manager supports configuration of 16-digit extension in dial plan analysis. The following Communication Manager objects support 16-digit extension:

- Coverage Path
- Dialplan Analysis
- Dialplan Parameters
- Locations
- Registered IP Stations
- Stations
- Station with Off-PBX Telephone Integration
- Uniform Dial Plan
- Vector Directory Numbers

### **Support for a software-only deployment**

Avaya Aura® Release 8.0 and later supports software-only installation. In a software-only installation, the customer owns the operating system and must provide and configure the operating system for use with Avaya Aura® application. With the software-only offer, the customer can install and customize the operating system to meet the requirements to install the Avaya Aura® application.

The software-only offer allows the customer to install third party application on the system and provides more control on the system.

You must run the software-only offer on the supported environments to enable the use of Avaya approved third party applications for Antivirus, backup, and monitoring.

Customers must procure a server that meets the recommended hardware requirements as well as the appropriate version of Red Hat Enterprise Linux (RHEL) Operating System.

The software-only offer is supported on the following platforms:

- VMware
- Kernel-based Virtual Machine
- Amazon Web Services
- Microsoft Azure
- Google Cloud
- IBM Bluemix

For more information about software-only deployment, see product-specific deployment guide for Software-Only Environment.

## Support for new Infrastructure as a Service platform

With Release 8.0, you can deploy the applications on the following Infrastructure as a Service platform:

- Google Cloud
- Microsoft Azure

For more information about Infrastructure as a Service installation, see product-specific deployment guide for Infrastructure as a Service Environment.

## Supported browsers

- Internet Explorer 11
- Mozilla Firefox 59, 60, and 61

## Preserve security hardening modes on upgrade

When you upgrade an application from Release 7.1.x to Release 8.0, the system preserves the security hardening modes that are configured on the Release 7.1.x application.

## Native support for Avaya J100 Series IP Phones

Communication Manager 8.0 and later provide support for Avaya J100 Series IP Phones. Avaya J100 Series IP Phones are SIP-based phones that provide enhanced user experience and superior call quality performance.

Communication Manager provides default endpoint templates corresponding to different models of Avaya J100 Series IP Phones. You can create and manage new station types of Avaya J100 Series IP Phones by using these templates.

For more information about the features of Avaya J100 Series IP Phones, see *Avaya Aura® Communication Manager Hardware Description and Reference* and *Avaya J100 Series IP Phones Overview and Specifications*.

## Support for SIP Resiliency

Starting with Communication Manager and Session Manager Release 8.0, the administrator can enable the SIP Resiliency feature to reconstruct calls between SIP User Agents when the SIP signaling path for the call is disconnected. The signaling path can be disconnected if the user switches networks, network connectivity is lost, or Session Manager fails.

Communication Manager supports the SIP Resiliency feature by replacing SIP dialogs for each dialog of a SIP session. When Communication Manager receives an INVITE message containing a Replaces header, Communication Manager replaces the SIP dialog specified in the Replaces header.

A detailed call recording is generated for a reconstructed call on the appropriate Session Manager instance.

The support for SIP Resiliency depends on the support on the endpoints.

For more information about SIP resiliency, see *Administering Avaya Aura® Communication Manager* and *Administering Avaya Aura® Session Manager*.

## Multiple Appearance Directory Number

To support migration of CS 1000 users to Avaya Aura®, the Multiple Appearance Directory Number (MADN) feature is now implemented in Communication Manager Release 8.0. The MADN feature

was originally implemented on Nortel CS 1000. This feature is almost similar to the existing Communication Manager bridging feature.

As implemented on Nortel CS 1000, MADN has two flavors:

- Single call arrangement
- Multiple call arrangement
- The Single call arrangement feature operation is similar to the existing Communication Manager bridging feature with exclusion enabled. To enable single call arrangement like operation on Communication Manager, configure traditional per-call appearance bridges and enable exclusion by using Class of Service for the principal. For more information on bridging, see *Avaya Aura® Communication Manager Feature Description and Implementation*.
- The Multiple call arrangement feature defines a new form of bridge alerting that associates a bridge button to a principal extension, and not to a specific call appearance of a principal extension. A multiple call arrangement bridge allows an alerting bridge user to answer a call alerting on any call appearance of the principal, or even a call that does not alert at the principal because all principal call appearances are in use.
- Traditional per-call appearance bridge button: brdg-appr B:1 E:1000
- MAC per principal bridge button: brdg-appr B:a E:1000

By specifying the bridge button identifier (B) with the value *a*, this allows any call to principal 1000 to alert at this bridge button. An MAC bridge button may be used on any multi-call appearance DCP, H.323, or SIP station.

Traditional per-call appearance bridge buttons for station 1000 may exist on stations like 1001, 1002, 1003. While MAC bridge buttons for station 1000 may exist on stations like 2001, 2002, 2003. It is not valid for a station to have both per-call appearance and multiple call arrangement bridges for the same principal. Which means, station 1001 cannot have brdg-appr B:1 E:1000 and brdg-appr B:a E:1000.

Multiple call arrangement operation differs significantly on call answer. For an incoming call to a principal station, Communication Manager alerts all stations that have per-call appearance bridge matching a principal and for the particular call appearance. Additionally, Communication Manager alerts all stations that have an idle multiple call arrangement bridge for that principal.

If the call is answered on single call arrangement bridge, the principal and other per-call appearance bridges get a simulated bridge appearance. But, all multiple call arrangement bridge appearances are dropped.

However, if the call is answered at the multiple call arrangement bridge appearance, then:

- The principal gets dropped
- All the alerting single call arrangement bridge stations are dropped
- All the alerting multiple call arrangement bridge stations that did not answer the call gets dropped

### **Avaya Device Adapter Snap-in**

Avaya Device Adapter Snap-in is a modular, reusable solution that enables IP phones working with Avaya Communication Server 1000 (CS 1000) to migrate to Avaya Aura® without significant investment on the existing infrastructure. Device Adapter offers a feasible solution to CS 1000

customers to take advantage of Avaya Aura® features with minimum expense on the cables and hardware.

Device Adapter is deployed on the Avaya Breeze® platform platform. A Device Adapter instance runs on an Avaya Breeze® platform cluster that might have one or more Avaya Breeze® platform servers. A standard deployment solution has one or more Avaya Breeze® platform clusters. Implementing Device Adapter does not introduce any new hardware. Device Adapter works as a part of the Avaya Breeze® platform solution.

### Customer root account

With Release 8.0, for accessing the root account, you can select the **Enable Customer Root Account for this Application** check box on the **Configuration Parameters** tab at the time of deploying or upgrading the application.

### Enhancement to SIP signaling

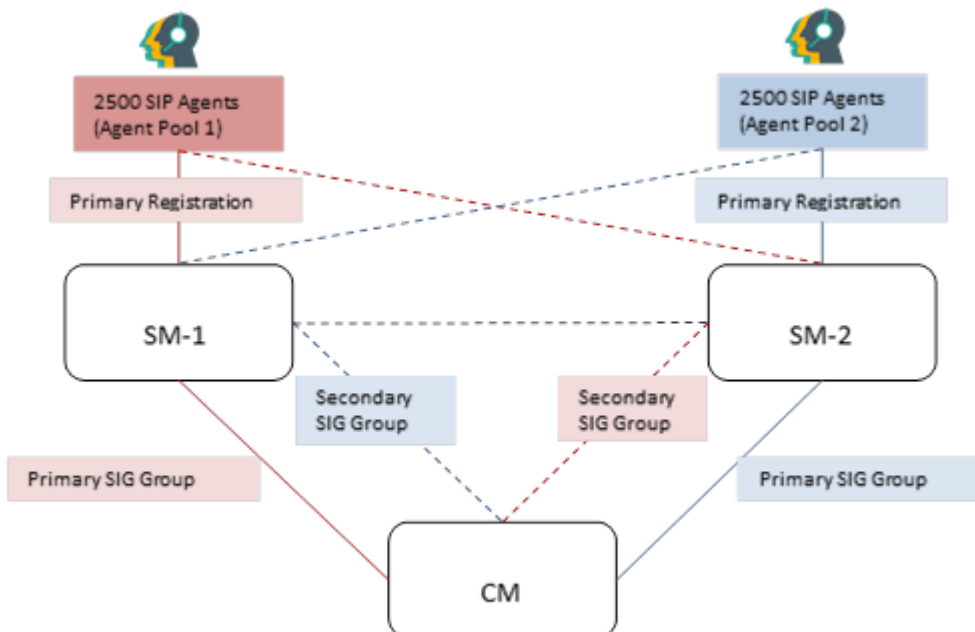
During local transfer or conference operations, Communication Manager sends the XML body to the UPDATE SIP message to other SIP parties including the parties of the current call.

### EC500 in-call feature invocation

When you connect an EC500 mobile phone to another phone in Communication Manager, you can use the in-call features, such as hold and consult, transfer, and conference. To enable the in-call features, you must dial the feature access code that the administrator configures.

### SIP trunk optimization

The SIP trunk optimization feature eliminates the need for provisioning trunks for redundancy. This feature frees up trunks so that the available trunks can be used by SIP agents, SIP stations, or PSTN bound SIP trunk calls. Following illustration explains the problem of trunk consumption due to redundancy.





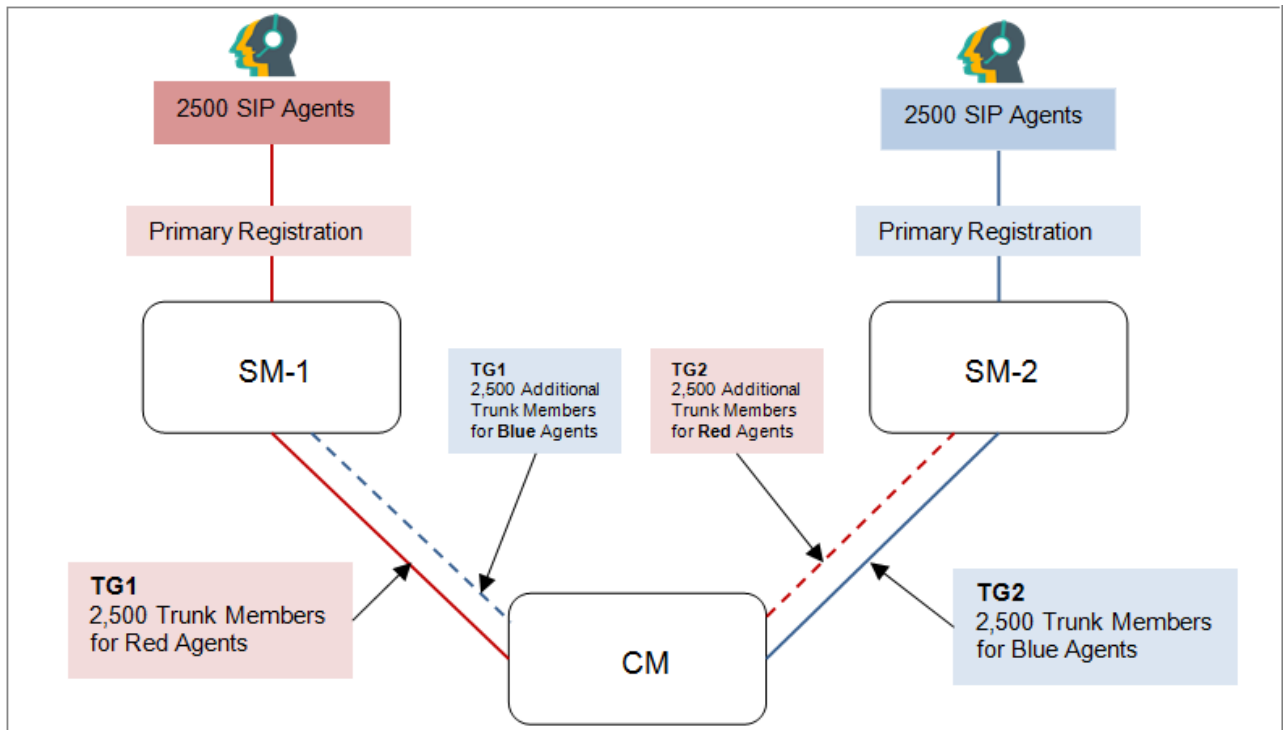
Above figure provides two scenarios:

- First scenario: When the connection between Communication Manager and Session Managers work fine.
- Second scenario: When the connection between Communication Manager and Session Manager fails.

In the first scenario, if Communication Manager wants to reach the red agents (agent pool 1), it can do so by utilizing the red trunk between Communication Manager and Session Manager-1. Similarly, if Communication Manager wants to reach the blue agents (agent pool 2), it can do so by utilizing the blue trunk between Communication Manager and Session Manager-2.

In the second scenario, if Session Manager-1 and Communication Manager connection is broken, or if Session Manager-1 fails, then Communication Manager has an alternate path to reach the red agents through Session Manager-2 using the blue trunk. With 2500 trunk members between Communication Manager and Session Manager-2, 5000 agents from both the agent pools cannot be supported. Same is the case if the blue agents fail over to Session Manager-1.

To address the issue on the second scenario, additional trunks must be administered between Communication Manager and Session Manager-1 and also between Communication Manager and Session Manager-2. To support failover of 2500 red agents over to Session Manager-2, additional 2,500 trunk members must be administered between Communication Manager and Session Manager-2. Similarly, to support failover of blue agents over to Session Manager-1, additional 2,500 trunk members must be administered between Communication Manager and Session Manager-1. To support the second scenario, additional trunks are shown by the dotted lines in the following figure.





In the second scenario, administering additional trunks provide a solution for giving service to red and blue agents, but introduces few other problems.

- The additional trunk members administered for redundancy remain unused in the first scenario, when entity links to Session Manager-1 and Session Manager-2 are in service.
- Double the number of trunks need to be provisioned to cover a rarely occurring second scenario. Given the limited trunk members on Communication Manager, using trunks for redundancy reduces the trunks required for actual traffic.
- Routing and administration of route-patterns becomes complex.

For provisioning connectivity to Session Manager-1 and Session Manager-2, Communication Manager has to create two signaling groups:

- Signaling group to Session Manager-1: Near-End as procr and Far-End as Session Manager-1
- Signaling group to Session Manager-2: Near-End as procr and Far-End as Session Manager-2

Each signaling must have 5000 trunks provisioned with Session Manager-1 and 5000 trunks to be provisioned with Session Manager-2 as described earlier.

SIP trunk optimization feature allows each signaling group to point to multiple Session Managers. In this particular case, a signaling group will point to both Session Manager-1 and Session Manager-2. This is achieved by pointing the signaling group to a cluster of Session Managers. An SM cluster can have as many as 28 Session Managers. With a Session Manager cluster, it is assumed that all Session Managers share similar configuration and any Session Manager can route a call to the far end station or far end trunk.

The ability of signaling group to point to both Session Managers reduces the required trunks by half to be administered on Communication Manager while achieving full redundancy. If the link to the Session Manager-1 fails, then the Signaling group uses the link to Session Manager-2 to route all the outgoing traffic. The effect of having one signaling group pointing to multiple Session Managers is as follows:

- Signaling group remains in service if at least one Session Manager administered in the cluster is reachable.
- Trunk group remains in service and all members administered in the trunk group can be used to deliver traffic.
- For example, trunk group with 5000 members in the first scenario can service 2500 agents on Session Manager-1 and 2500 agents on Session Manager-2. The same trunk group with 5000 members can services 2500 agents on Session Manager-1 and 2500 agents on Session Manager-2 through the link between Communication Manager and Session Manager-2, if the connectivity between Communication Manager and Session Manager-1 goes down. Even if Session Manager-1 goes down and all agents move to Session Manager-2, the same 5000 members will be able to reach all the 5000 agents.

Additional enhancements made in SIP trunk optimization feature are as follows:

- Number of trunk members have been increased to 9,999 for SIP trunk groups.
- Number of SIP agents have been increased to 10,000.
- System wide trunk members have been increased to 30,000.

- Measured trunks have been increased to 30,000.
- TLS connections for SIP have been increased to 56 from the current value of 32, to support 28 Session Managers. Because, two links are required to support each Session Manager.
- SIP Station form directly points to its Primary and Secondary Session Manager to support 28 Session Managers, because two links are required to support each Session Manager. For more details on the capacities, see *Avaya Aura® Communication Manager System Capacities Table*.
- Look Ahead Routing feature is deprecated for SIP station calls if routed over clustered signaling group.
- Route pattern can now specify a network region.

## Communication Manager feature matrix

The following table lists the feature matrix of Communication Manager.

**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature name	Release 7.0.x	Release 7.1 and Release 7.1.1	Release 7.1.2 and Release 7.1.3	Release 8.0	Release 8.0.1
OVA signing		Y	Y	Y	Y
IPv6 support		Y	Y	Y	Y
Enhanced Access Security Gateway (EASG)		Y	Y	Y	Y
Compliance with DISA security STIGs		Y	Y	Y	Y
Extended Security Hardening		Y	Y	Y	Y
Support for TLS 1.2		Y	Y	Y	Y
Customer Root Access				Y	Y
Preserve security				Y	Y

*Table continues...*

Feature name	Release 7.0.x	Release 7.1 and Release 7.1.1	Release 7.1.2 and Release 7.1.3	Release 8.0	Release 8.0.1
hardening modes on upgrade					
SIP trunk optimization				Y	Y
Automatic Call Distribution	Y	Y	Y	Y	Y
Emergency Calling Services	Y	Y	Y	Y	Y
Alphanumeric URI dialing			Y	Y	Y
Extended security hardening			Y	Y	Y
Support for Avaya Converged Platform 120 Server					Y

# Chapter 9: What's new in Presence Services

This chapter provides an overview of the new and enhanced features of Presence Services Release 8.0 and later.

For more information about these features and administration, see *Avaya Aura® Presence Services Snap-in Reference*.

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## New in Presence Services Release 8.0.1

Presence Services Release 8.0.1 supports the following new features and enhancements:

### **Avaya Multimedia Messaging integration**

Avaya Multimedia Messaging is the rich multimedia messaging service utilized by Avaya Equinox® clients. In Presence Services Release 8.0.1, Avaya Multimedia Messaging functionality is integrated into the current Presence Services platform creating one streamlined solution for the users. It is a powerful tool for interaction with IM and rich Presence enabled.

### **Avaya Equinox® support**

Presence Services 8.0.1 supports the following Presence and IM capable Avaya Equinox® clients:

- Avaya Equinox® 3.3 or later
  - Avaya Equinox® Native
  - Avaya Equinox® Web
- Avaya Equinox® Attendant

Avaya Equinox® uses SIP for Presence information and REST protocol for IM.

Avaya Equinox® clients use Presence Services to:

- Gather real-time presence of users for watchers across the Avaya client portfolio.
- Gather real-time presence of users for watchers across vendors such as Cisco, Microsoft, and third-party clients.
- Support point-to-point and multiparty messaging, and compose and send multimedia messages, such as Text, voice, video, file, and photo, between one or more Avaya Equinox® users.

- Create dynamic team or group conversations.
- Hold subject-based conversations.
- Support persistent conversations across devices and clients.
- Store messages centrally and deliver the messages after the users connect.
- Transition from multimedia messaging to voice, video, or multiparty collaborative calls.
- Provide IsTyping and Message Read indication.
- Provide emoticon pass through.

**\* Note:**

Presence Services does not support the IsTyping, Message Read, and emoticon and font pass through features when a user on an Avaya Equinox® client is in conversation with a contact on a federated system such as Microsoft Lync, Openfire, or Cisco Jabber.

### Multi-user chat support

Presence Services supports multi-user chat with federated users and Avaya Equinox® clients. Presence Services supports multi-user chat sessions for XMPP and Microsoft RTC federated systems.

### Backup and restore for cluster database

Prior to release 8.0.1, Presence Services used the cluster database to store end-user information such as manual presence states and manual notes. The Backup and Restore feature of Avaya Breeze® platform is used to back up and restore this user data.

In release 8.0.1, Presence Services still uses the cluster database to persist user conversation and store message-related data to fully support features of Avaya Equinox® client. The Backup and Restore feature of Avaya Breeze® platform also backs up and restores IM conversations, messages, and multi-media attachment files for the Presence Services clusters.

### Multimedia attachment storage

To enable an Equinox client to use multimedia attachments, Presence Services requires an attachment store. Presence Services uses different attachment stores for the following deployment methods:

- On-premise: Presence Services attachment store uses the on-cluster virtual hard disk space that is provided by the virtual host services through its datastores. You can also build the datastores from local hard disks or SAN disk arrays.
- Cloud: Presence Services uses AWS S3 storage as the attachment store, along with a local caching store.

The maximum size of a multimedia attachment file is 32 MB. You can configure the default size settings for different attachment types such as video, audio, image, and text in the Presence Services service attributes. When you exceed the attachment store limit, Presence Services automatically starts removing the oldest attachment files from the store.

### AWS support

With Release 8.0.1, you can deploy Presence Services on Amazon Web Services cloud platform.

### Supported migration paths

The supported migration paths for Presence Services Release 8.0.1 are the following:

Release	Requirement
7.0.0.x	Direct upgrade to 8.0.1
7.0.1.x	Direct upgrade to 8.0.1
7.1.x	Direct upgrade to 8.0.1
8.0	Direct upgrade to 8.0.1

**\* Note:**

The Presence Services service attributes from releases prior to 8.0.1 must be manually copied and re-entered for Presence Services release 8.0.1.

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## New in Presence Services Release 8.0

Presence Services Release 8.0 supports the following new features and enhancements:

### **Publish status to Microsoft RTC requires a license**

To enable the Publish status to Microsoft RTC feature, you must install Presence Services Enhanced snap-in and license file. For license file installation, you must activate and download the Presence Services Enhanced license file from Avaya PLDS and install the license file on the System Manager WebLM.

### **New alarms are added**

Presence Services Release 8.0 provides a solution to the following health check alarms:

- Federation domains are overlapping between federation groups
- Federation domains overlap with Aura domain
- Presence Services Enhanced Snap-in is not installed
- License has expired

### **Extended hostname validation**

Extended hostname validation provides an extra measure of certificate checking when establishing outgoing TLS connections with another server.

### **Microsoft federation deployment**

Presence Services supports upgrading Microsoft federation deployment from Release 7.0.0 or 7.0.1 to Release 8.0.

For upgrading from Microsoft federation deployment Release 7.0.x, 7.1.x, or 8.0 to Release 8.0.1, note the following:

- Presence Services configuration attributes earlier in the **Lync Federation** group are replaced with a new **Microsoft Federation** group. You must manually migrate to the new Microsoft Federation group for 8.0.1.
- Use of the AMM federation relay for Intra-enterprise federation is no longer required or supported.

- Intra-enterprise federation between two different domains is now supported. This federation works directly with the Microsoft Front End server and not the Microsoft Edge server as in previous 7.0.x and 7.1.x releases.
- Inter-enterprise federation between two different domains requires use of the at the edge of the Avaya Aura® network.

### Enhancement to Maximum number of contacts per user

Presence Services now supports a maximum of 40 contacts per user compared to the previously supported 25 contacts per user.

### Supported migration paths

The supported migration paths for Presence Services Release 8.0 are:

Release	Requirement
7.0.0.x	Direct upgrade to 8.0.
7.0.1.x	Direct upgrade to 8.0.
7.1.x	Direct upgrade to 8.0.

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## Presence Services feature matrix

The following table lists the feature matrix of Presence Services.

**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature	7.1	7.1.2	8.0	8.0.1
Access Control Lists	Y	Y	Y	Y
Exchange Collector	Y	Y	Y	Y
Microsoft Real Time Communication federation	N	Y	Y	Y
Inter-PS federation				Y
XMPP federation	N	Y	Y	Y
Zang federation	N	Y	Y	Y
Simple Authentication and Security Layer	Y	Y	Y	Y
IM Blocking in Do Not Disturb state				
Inter-Tenant Communication Control	Y	Y	Y	Y
Multi-tenancy				Y
Message Archiver				Y

*Table continues...*

## What's new in Presence Services

<b>Feature</b>	<b>7.1</b>	<b>7.1.2</b>	<b>8.0</b>	<b>8.0.1</b>
Offline IM Storage				Y
IM Blocking in Do Not Disturb state				Y
Extended Hostname Validation	N	N	Y	Y
Microsoft RTC	N	Y	Y	Y
IPv6	Y	Y	Y	Y



# Chapter 10: What's new in Application Enablement Services

This chapter provides an overview of the new and enhanced features of Application Enablement Services Release 8.0 and later.

For more information about these features and administration, see:

- *Administering Avaya Aura® Application Enablement Services*
- *Deploying Avaya Aura® Application Enablement Services in Virtualized Environment*
- *Deploying Avaya Aura® Application Enablement Services in a Software-Only Environment*
- *Deploying Avaya Aura® Application Enablement Services in Infrastructure as a Service Environment*
- *Deploying Avaya Aura® Application Enablement Services in Virtual Appliance*
- *Upgrading Avaya Aura® Application Enablement Services*

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## New in Application Enablement Services Release 8.0.1

Application Enablement Services Release 8.0.1 supports the following new features and enhancements:

### **Support for new Avaya Converged Platform 120 Server**

From Release 8.0.1, Avaya Aura® applications support the Avaya Converged Platform 120 server (Dell PowerEdge R640) in the Avaya Aura® Virtualized Appliance offer.

### **Enhancements to the CPU resources**

With Release 8.0.1, applications support enhanced CPU resources in the Appliance Virtualization Platform and VMware environments. For more information, see the product-specific deployment guide on the Avaya Support website.

### **Support for Hyper-V**

With the Release 8.0.1, Avaya Aura® applications support deployment in the software-only environment on Hyper-V. Hyper-V is a virtualized platform that allows you to run multiple operating systems as virtual machines on Windows.

For more information about deployment in the software-only environment, see the product specific software-only deployment guide.

## **Software-only offer supports third-party software**

With the software-only (ISO) offer, customers can install third-party applications on the system and get more control on the system. For the list of supported third-party software applications in Release 8.0.1, see the Avaya Product Support Notice at [PSN020360u](#).

## **Support of Held Call ID on auto dial request by Application Enablement Services**

With Release 8.0.1, Application Enablement Services provides the Held Call ID on third-party auto dial request (CVLAN) that is generated for single-step transfer using TSAPI or DMCC client.

## **Support for split stream recording by Communication Manager and Application Enablement Services**

In Release 8.0.1, Communication Manager and Application Enablement Services support the split stream recording feature.

Communication Manager and Application Enablement Services supports recording applications primarily in Contact Center solutions for many years. The support is facilitated with the help of DMCC and ASAI/ CTI APIs which enable Communication Manager to provide a mixed media stream of all parties involved in a monitored call towards a specific recording device.

With the increased interest in real time speech analytics and voice biometrics, recording vendors require some amount of audio separation of the speakers in a call. This could be a stream for each individual speaker or one stream for a specific speaker and one mixed stream for all other participants.

To support this feature, the DMCC API is modified to allow external recording applications to request split stream recording. These application requests drive new connection capabilities within Communication Manager to generate the desired media streams towards one or more recording devices.

The DMCC API enhancement for split stream recording includes following three major changes:

- Allows each shared station DMCC Recorder to receive different content via RegisterTerminalRequest (applicable in pre-call scenario).
- Allows increased number of devices sharing a common extension by increasing the shared station multiple registration limits from three to ten.
- Allows each shared station DMCC Recorder to receive different content via SelectiveStreamRequest (applicable in mid-call scenario). This is a new API introduced since Release 8.0.1.

### **\* Note:**

- The split stream recording capability does not require any new administration or enabling of optional features on Communication Manager.
- Split stream recording consumes more media processing resources. A typical recorded call consumes three media channels, for example, Agent, Customer and DMCC recorder. With split stream recording of two recording streams, a total of four channels are required. If the two recording streams are redundant, then six media channels will be required.
- The split stream capability is not specific to DMCC with MR, but DMCC with MR is the preferred method. It allows immediate recording of a call and natively allows redundant recording. Another fundamental change resulting due to the implementation of split stream feature is with respect to the number of devices which may be registered to a

common extension. To facilitate redundant split stream recording, the Maximum Registration limit is increased to ten in order to support the main station, a shared control softphone and four DMCC recorder ports.

- For more details about this feature and its usage, see “*Administering and Maintaining Avaya Aura® Application Enablement Services*” and “*AE Services DMCC Java Programmers Guide Release 8.0.1 December 2018*”.

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## New in Application Enablement Services Release 8.0

Application Enablement Services Release 8.0 supports the following new features and enhancements:

### Support for 16-digit dial plan

Starting with Avaya Aura® Release 8.0, Application Enablement Services supports 16-digit dial plan.

### Customer root account

During deployment or upgrade of the application, the customer can enable or disable the root user account.

### Preserve security hardening modes on upgrade

When you upgrade an application from Release 7.1.x to Release 8.0, the system preserves the security hardening modes that are configured on the Release 7.1.x application.

### Support for a software-only deployment

Avaya Aura® Release 8.0 and later supports software-only installation. In a software-only installation, the customer owns the operating system and must provide and configure the operating system for use with Avaya Aura® application. With the software-only offer, the customer can install and customize the operating system to meet the requirements to install the Avaya Aura® application.

The software-only offer allows the customer to install third party application on the system and provides more control on the system.

You must run the software-only offer on the supported environments to enable the use of Avaya approved third party applications for Antivirus, backup, and monitoring.

Customers must procure a server that meets the recommended hardware requirements as well as the appropriate version of Red Hat Enterprise Linux (RHEL) Operating System.

The software-only offer is supported on the following platforms:

- VMware
- Kernel-based Virtual Machine
- Amazon Web Services
- Microsoft Azure
- Google Cloud

- IBM Bluemix

For more information about software-only deployment, see product-specific deployment guide for Software-Only Environment.

### Supported browsers

- Internet Explorer 11
- Mozilla Firefox 59, 60, and 61

### Utility Services is replaced with AVP Utilities

In Avaya Aura® Release 8.0, Utility Services is replaced with AVP Utilities. While some of the Utility Services features are migrated to other Avaya Aura® applications, the following features of Utility Services are migrated to AVP Utilities:

- Services Port access for virtual machines
- Appliance Virtualization Platform log collection and alarming
- Enabling SSH access for Appliance Virtualization Platform

Following features of Utility Services are migrated to other Avaya Aura® applications:

Features of Utility Services 7.x	Migrated to	Description
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
Enterprise System Directory (ESD)	Avaya Aura® System Manager Release 8.0	Only LDAP integration with Avaya Aura® System Manager is supported. Searching the LDAP directory is supported for SIP phones only.
File Server	Avaya Aura® Device Services Release 7.1.3.1	Avaya Aura® Device Services will provide this feature for IP Phones.  The Firmware download capability is moved to Avaya Aura® Device Services starting with Release 7.1.3.1. Avaya Aura® Device Services Release 7.1.3.1 can run on Appliance Virtualization Platform Release 8.0.  Avaya Aura® Device Services will not provide this feature for Gateway Firmware.
MyPhone	Avaya Aura® Unified User Portal 8.0	Existing configurations must be re-applied, if any.

The following features of Utility Services are no longer supported by an Avaya Aura® application. Third-party applications must be used for the following features:

Features of Utility Services 7.x	Description
Call Detail Recordings (CDR) collection	You must use third-party applications. However, you can use the Call Detail Recordings data with the third-party solutions.
Dynamic Host Configuration Protocol (DHCP)	You must use a separate DHCP server.

## Application Enablement Services feature matrix

The following table lists the feature matrix of Application Enablement Services.

**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature name	Release 7.1, 7.1.1, and 7.1.2	Release 7.1.3	Release 8.0	Release 8.0.1
Support for Avaya Converged Platform 120 Server				Y
Support for Hyper-V in Software-Only environment				Y
Support for third-party software in Software-Only environment				Y
Support of Held Call ID on auto dial request by Application Enablement Services				Y
OVA signing	Y	Y	Y	Y
IPv6 support	Y	Y	Y	Y
Enhanced Access Security Gateway (EASG)	Y	Y	Y	Y
Compliance with DISA security STIGs	Y	Y	Y	Y
Multi factor authentication		Y	Y	Y
Support for TLS 1.2	Y	Y	Y	Y
Customer Root Access			Y	Y
Preserve security hardening modes on upgrade			Y	Y
Support for 16-digit dial plan			Y	Y
Support for Software-only deployment	Y	Y	Y	Y

# Chapter 11: What's new in Branch Gateway

This chapter provides an overview of the new and enhanced features of Branch Gateway Release 8.0.

For more information about these features and administration, see:

- *Avaya G430 Branch Gateway Overview and Specification*
- *Avaya G450 Branch Gateway Overview and Specification*
- *Administering Avaya G430 Branch Gateway*
- *Administering Avaya G450 Branch Gateway*
- *Avaya G430 Branch Gateway CLI Reference*
- *Avaya G450 Branch Gateway CLI Reference*

---

## New in Branch Gateway Release 8.0

Branch Gateway Release 8.0 supports the following new features and enhancements:

### **16-digit dial plan extension**

The Standard Local Survivability (SLS) feature is updated to support 16-digit extensions.

### **Login authentication password complexity**

Login authentication password complexity is enhanced to set the maximum number of consecutive repeated characters and consecutive characters of the same class (uppercase, lowercase, digits, symbols) in a password.

### **Inband DTMF digit processing**

Branch Gateway is enhanced to allow mobile users to dial the feature access code without putting the ongoing call on hold.

---

## Branch Gateway feature matrix

The following table lists the feature matrix of Branch Gateway.

**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature name	Release 7.1	Release 7.1.1	Release 7.1.2	Release 7.1.3	Release 8.0
Enhanced Access Security Gateway (EASG)			Y	Y	Y
16-digit dial plan extension					Y
Login authentication password complexity					Y

# Chapter 12: What's new in Avaya Aura<sup>®</sup> Media Server

This chapter provides an overview of the new and enhanced features of Avaya Aura<sup>®</sup> Media Server Release 8.0.

For more information about these features and administration, see:

- *Implementing and Administering Avaya Aura<sup>®</sup> Media Server*
- *Installing and Updating Avaya Aura<sup>®</sup> Media Server Application on Customer Supplied Hardware and OS*
- *Deploying and Updating Avaya Aura<sup>®</sup> Media Server Appliance*

For latest information, see Avaya Aura<sup>®</sup> Media Server Release 8.0 Release Notes on the Avaya Support website at <https://downloads.avaya.com/css/P8/documents/101053837>.

---

## New in Avaya Aura<sup>®</sup> Media Server Release 8.0

Avaya Aura<sup>®</sup> Media Server Release 8.0 supports the following new features and enhancements:

- Video Compositor (VCMP) is a new optional component that provides video transcoding and compositing capabilities. The Video Compositing Resource server profile provides a scalable video compositing feature by creating multiple video processing media servers.
- Web Collaboration (WCS) is a new optional component that provides advanced content sharing functionality.
- FIPS 140-2
- Embedded Virus Scanner
- AIDE (Advanced Intrusion Detection Environment)
- EM emergency login based on EM authentication instead of OS.

---

## Avaya Aura<sup>®</sup> Media Server feature matrix

The following table lists the feature matrix of Avaya Aura<sup>®</sup> Media Server.



**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature name	Release 8.0
Video Compositor (VCMP)	Y
Web Collaboration (WCS)	Y
FIPS 140-2	Y
Embedded Virus Scanner	Y
AIDE (Advanced Intrusion Detection Environment)	Y
EM emergency login based on EM authentication instead of OS	Y

# Chapter 13: What's new in Call Center Elite

This chapter provides an overview of the new and enhanced features of Call Center Elite Release 8.0.

---

## New in this release

Call Center Elite release 8.0 supports the following enhancements:

- The number of concurrently logged-in SIPCC agents is increased from 5,000 to 10,000.
- The number of SIP trunks that can be measured is increased from 24,000 to 30,000.
- The length of agent IDs and VDNs is extended to 16-digit extensions for those global markets where the full E.164 number is 14 to 15 digits.
- The number of supported trunks in a group is 9999.

 **Note:**

The SIPCC firmware must support 16-digit extensions before you can use a 16-digit extension for the 96x1 phone.

The H.323 endpoints do not support 16–digit extensions, however, these endpoints support a 16–digit agent ID, thus creating a mixed dial plan for the H.323 endpoints.

 **Important:**

You must use CMS release 18.1 to avail the following Call Center Elite release 8.0 enhancements mentioned above:

- Increased SIP trunks support
- 16-digit extensions support
- 9999 trunks support in a group

# Chapter 14: What's new in Avaya Device Adapter

This chapter provides an overview of the new and enhanced features of Avaya Device Adapter Release 8.0.

For more information about these features and administration, see *Avaya Device Adapter Snap-in Reference*.

---

## New in Avaya Device Adapter Release 8.0

Avaya Device Adapter Release 8.0 supports the following new features and enhancements:

### **Adaptation of UNISTim IP phones**

Avaya Device Adapter Snap-in is a modular, reusable solution that enables UNISTim IP phones working with Avaya Communication Server 1000 (CS 1000) to migrate to Avaya Aura® without significant investment on the existing infrastructure. Device Adapter offers a feasible solution to CS 1000 customers to take advantage of Avaya Aura® features while minimizing expenses on the cables and hardware.

Device Adapter is deployed on the Avaya Breeze® platform platform. A Device Adapter instance runs on an Avaya Breeze® platform cluster that can have one or more Avaya Breeze® platform servers. A standard deployment solution has one or more Avaya Breeze® platform clusters. Implementing Device Adapter does not introduce any new hardware. Device Adapter works as a part of the Avaya Breeze® platform solution.

In this deployment, phone sets are connected to Device Adapter by replacing CS 1000. For SIP signaling and terminal registration of phone sets, Device Adapter is connected to Avaya Aura® Session Manager. Session Manager communicates with Avaya Aura® Communication Manager to provide call-related services to the terminals. Device Adapter communicates with Avaya Aura® System Manager for management operations as available in a typical Avaya Aura® deployment.

---

## Avaya Device Adapter feature matrix

The following table lists the feature matrix of Avaya Device Adapter.

**\* Note:**

The features listed in the following table are not a comprehensive feature list. It only covers the new features.

Feature name	Release 8.0
OVA signing	Y
IPv6 support	Y
Enhanced Access Security Gateway (EASG)	Y
Compliance with DISA security STIGs	Y
Extended Security Hardening	Y
Support for TLS 1.2	Y
Customer Root Access	Y
Preserve security hardening modes on upgrade	Y
Making, answering, and releasing a basic call	Y
End-to-end signaling (DTMF)	Y
Fixed feature key access (not FFC based)	Y
Context sensitive key access: Idle, Off hook, Dialed, Ringing, and Active call state	Y
Time and date, call timer, and other similar set display features	Y
Display of calling or called numbers and redirecting name and number	Y
Blind and consultative transfer	Y
Communication Manager style ad hoc conferencing	Y
Call forwarding of all calls, busy calls, or no answer calls	Y
Caller and redial lists and Personal Directory	Y
Release key to disconnect a call	Y
Hold and retrieve	Y
Make set busy	Y
Message waiting using Avaya Aura® Messaging	Y
Directed, group, and ringing number call pickup	Y
Speed dial	Y
Call park and pickup	Y
Hot line 2-way	Y
Message waiting key and indicator for voice mail	Y
Ring again	Y

*Table continues...*

Feature name	Release 8.0
Last number redial	Y
Autodial	Y
Call waiting	Y
Multiple Appearance Directory Numbers	Y

# Chapter 15: Resources

## Documentation

The following table lists the documents related to the components of Avaya Aura® Release 8.0.1. Download the documents from the Avaya Support website at <https://support.avaya.com>.

Title	Description	Audience
Implementation		
<i>Deploying Avaya Aura® System Manager in Virtualized Environment</i>	Deploy the Avaya Aura® System Manager application in a virtualized environment.	Implementation personnel
<i>Deploying Avaya Aura® System Manager in Virtual Appliance</i>	Deploy the Avaya Aura® System Manager application in a virtual appliance environment.	Implementation personnel
<i>Deploying Avaya Aura® System Manager in Infrastructure as a Service Environment</i>	Deploy the Avaya Aura® System Manager application on cloud services.	Implementation personnel
<i>Deploying Avaya Aura® System Manager in Software-Only Environment</i>	Deploy the Avaya Aura® System Manager application in a software only environment.	Implementation personnel
<i>Upgrading Avaya Aura® System Manager</i>	Upgrade the Avaya Aura® System Manager virtual application to Release 8.0.	System administrators and IT personnel
<i>Deploying Avaya Aura® Communication Manager in Virtualized Environment</i>	Describes the implementation instructions while deploying Communication Manager on VMware and Kernel-based Virtual Machine (KVM).	Implementation personnel
<i>Deploying Avaya Aura® Communication Manager in Virtual Appliance</i>	Describes the implementation instructions while deploying Communication Manager on Appliance Virtualization Platform.	Implementation personnel
<i>Deploying Avaya Aura® Communication Manager in Infrastructure as a Service Environment</i>	Describes the implementation instructions while deploying Communication Manager on Amazon Web Services, Microsoft Azure, Google Cloud Network.	Implementation personnel

Table continues...

<b>Title</b>	<b>Description</b>	<b>Audience</b>
<i>Deploying Avaya Aura® Communication Manager in Software-Only Environment</i>	Describes the implementation instructions while deploying Communication Manager on a software-only environment.	Implementation personnel
<i>Upgrading Avaya Aura® Communication Manager</i>	Describes instructions while upgrading Communication Manager.	System administrators and IT personnel
<i>Deploying Avaya Aura® Session Manager and Avaya Aura® Branch Session Manager in Virtualized Environment</i>	Describes how to deploy the Session Manager virtual application in a virtualized environment.	Implementation personnel
<i>Deploying Avaya Aura® Session Manager in Infrastructure as a Service Environment</i>	Describes how to deploy the Session Manager in the Infrastructure as a Service (IaaS) environment.	Implementation personnel
<i>Deploying Avaya Aura® Session Manager and Avaya Aura® Branch Session Manager in Software-Only Environment</i>	Describes how to deploy the Session Manager in the Software-Only environment.	Implementation personnel
<i>Deploying Avaya Aura® Session Manager and Avaya Aura® Branch Session Manager in Virtual Appliance</i>	Describes how to deploy the Session Manager in Virtual Appliance.	Implementation personnel
<i>Upgrading Avaya Aura® Session Manager</i>	Provides common administration scenarios.	System administrators and IT personnel
<i>Deploying Avaya Aura® Application Enablement Services in Virtual Appliance</i>	Deploy Application Enablement Services applications in Virtual Appliance	Implementation personnel
<i>Deploying Avaya Aura® Application Enablement Services in Virtualized Environment</i>	Deploy Application Enablement Services applications in Virtualized Environment	Implementation personnel
<i>Deploying Avaya Aura® Application Enablement Services in Infrastructure as a Service Environment</i>	Deploy Application Enablement Services applications in Infrastructure as a Service Environment	Implementation personnel
<i>Deploying Avaya Aura® Application Enablement Services in a Software-Only Environment</i>	Deploy Application Enablement Services applications in Software-Only Environment	Implementation personnel
<i>Upgrading Avaya Aura® Application Enablement Services</i>	Upgrading Application Enablement Services applications.	System administrators and IT personnel
<i>Deploying standalone Avaya WebLM in Virtual Appliance</i>	Deploy the application in virtual appliance environment by using Solution Deployment Manager	Implementation personnel
<i>Deploying standalone Avaya WebLM in Virtualized Environment</i>	Deploy the application in virtualized environment.	Implementation personnel

*Table continues...*

<b>Title</b>	<b>Description</b>	<b>Audience</b>
<i>Deploying standalone Avaya WebLM in Infrastructure as a Service Environment</i>	Deploy the application on cloud services.	Implementation personnel
<i>Deploying standalone Avaya WebLM in Software-Only Environment</i>	Deploy the application in software-only environment.	Implementation personnel
<i>Upgrading standalone Avaya WebLM</i>	Upgrade the application.	System administrators and IT personnel
<b>Administration</b>		
<i>Administering Network Connectivity on Avaya Aura® Communication Manager</i>	Describes the network components of Communication Manager, such as gateways, trunks, FAX, modem, TTY, and Clear-Channel calls.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel
<i>Administering Avaya Aura® Communication Manager</i>	Describes the procedures and screens used for administering Communication Manager.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel
<i>Administering Avaya Aura® System Manager</i>	Describes the procedures for configuring System Manager Release 8.0.1 and the Avaya Aura® applications and systems managed by System Manager.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel
<i>Avaya Aura® Presence Services Snap-in Reference</i>	Describes the steps to deploy and configure Presence Services.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel
<b>Using</b>		
<i>Using the Solution Deployment Manager client</i>	Deploy and install patches on Avaya Aura® applications.	System administrators
<b>Understanding</b>		
<i>Avaya Aura® Communication Manager Feature Description and Implementation</i>	Describes the features that you can administer using Communication Manager.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel
<i>Avaya Aura® Communication Manager Screen Reference</i>	Describes the screen and detailed field descriptions of Communication Manager.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel

*Table continues...*



Title	Description	Audience
<i>Administering Avaya Aura® Session Manager</i>	Describes how to administer Session Manager by using System Manager.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel
<i>Avaya Aura® Communication Manager Hardware Description and Reference</i>	Describes the hardware devices that can be incorporated in a Communication Manager telephony configuration.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel
Maintenance and Troubleshooting		
<i>Maintenance Commands for Avaya Aura® Communication Manager, Branch Gateway and Servers</i>	Provides commands to monitor, test, and maintain hardware components of Avaya servers and gateways.	Solution Architects, Implementation Engineers, Sales Engineers, Support Personnel

---

## 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 an appropriate release number.
6. In the **Content Type** filter, click a document type, or click **Select All** to see a list of all available documents.

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

7. Click **Enter**.

---

## Avaya Documentation Portal navigation

Customer documentation for some programs is now available on the Avaya Documentation Portal at <https://documentation.avaya.com/>.

 **Important:**

For documents that are not available on the Avaya Documentation Portal, click **Support** on the top menu to open <https://support.avaya.com/>.

Using the Avaya Documentation Portal, you can:

- Search for content in one of the following ways:
  - Type a keyword in the **Search** field.
  - Type a keyword in **Search**, and click **Filters** to search for content by product, release, and document type.
  - Select a product or solution and then select the appropriate document from the list.
- Find a document from the **Publications** menu.
- Publish a PDF of the current section in a document, the section and its subsections, or the entire document.
- Add content to your collection by using **My Docs** (☆).

Navigate to the **My Content > My Docs** menu, and do any of the following:

- Create, rename, and delete a collection.
  - Add content from various documents to a collection.
  - Save a PDF of selected content in a collection and download it to your computer.
  - Share content in a collection with others through email.
  - Receive content that others have shared with you.
- Add yourself as a watcher by using the **Watch** icon (👁).

Navigate to the **My Content > Watch list** menu, and do the following:

- Set how frequently you want to be notified, starting from every day to every 60 days.
- Unwatch selected content, all content in a document, or all content on the Watch list page.

As a watcher, you are notified when content is updated or deleted from a document, or the document is removed from the portal.

- Share a section on social media platforms, such as Facebook, LinkedIn, Twitter, and Google +.
- Send feedback on a section and rate the content.

 **Note:**

Some functionality is only available when you log in to the portal. The available functionality depends on the role with which you are logged in.

## Training

The following courses are available on the Avaya Learning website at [www.avaya-learning.com](http://www.avaya-learning.com). After logging into the website, enter the course code or the course title in the **Search** field and click **Go** to search for the course.

Course code	Course title
20460W	Virtualization and Installation Basics for Avaya Team Engagement Solutions
20970W	Introducing Avaya Device Adapter
20980W	What's New with Avaya Aura® Release 8.0
71200V	Integrating Avaya Aura® Core Components
72200V	Supporting Avaya Aura® Core Components
20130V	Administering Avaya Aura® System Manager Release 8.0
21450V	Administering Avaya Aura® Communication Manager Release 8.0

## Viewing Avaya Mentor videos

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

### About this task

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

### Procedure

- To find videos on the Avaya Support website, go to <https://support.avaya.com/> and do one of the following:
  - In **Search**, type `Avaya Mentor Videos` to see a list of the available videos.
  - In **Search**, type the product name. On the Search Results page, select **Video** in the **Content Type** column on the left.
- To find the Avaya Mentor videos on YouTube, go to [www.youtube.com/AvayaMentor](http://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 the name of a topic to see the available list of videos posted on the website.

#### **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 <http://www.avaya.com/support>.
2. Log on to the Avaya website with a valid Avaya user ID and password.  
The system displays the Avaya Support page.
3. Click **Support by Product > Product Specific Support**.
4. In **Enter Product Name**, enter the product, and press `Enter`.
5. Select the product from the list, and select a release.
6. Click the **Technical Solutions** tab to see articles.
7. Select relevant articles.

# Appendix A: PCN and PSN notifications

---

## PCN and PSN notifications

Avaya issues a product-change notice (PCN) for any software update. For example, a PCN must accompany a service pack or an update that must be applied universally. Avaya issues a product-support notice (PSN) when there is no update, service pack, or release fix, but the business unit or Avaya Services need to alert Avaya Direct, Business Partners, and customers of a problem or a change in a product. A PSN can also be used to provide a work around for a known problem, steps to recover logs, or steps to recover software. Both these notices alert you to important issues that directly impact Avaya products.

---

## Viewing PCNs and PSNs

### About this task

To view PCNs and PSNs, perform the following steps:

### Procedure

1. Go to the Avaya Support website at <https://support.avaya.com>.  
If the Avaya Support website displays the login page, enter your SSO login credentials.
2. On the top of the page, click **DOCUMENTS**.
3. On the Documents page, in the **Enter Your Product Here** field, type the name of the product.
4. In the **Choose Release** field, select the specific release from the drop-down list.
5. Select the appropriate filters as per your search requirement.

For example, if you select Product Support Notices, the system displays only PSNs in the documents list.

You can apply multiple filters to search for the required documents.

---

## Signing up for PCNs and PSNs

### About this task

Manually viewing PCNs and PSNs is helpful, but you can also sign up for receiving notifications of new PCNs and PSNs. Signing up for notifications alerts you to specific issues you must be aware of. These notifications also alert you when new product documentation, new product patches, or new services packs are available. The Avaya Notifications process manages this proactive notification system.

To sign up for notifications:

### Procedure

1. Go to the Avaya Support Web Tips and Troubleshooting: E-Notifications Management page at <https://support.avaya.com/ext/index?page=content&id=PRCS100274#>.
2. Set up e-notifications.

For detailed information, see the **How to set up your E-Notifications** procedure.

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