

ClearPass 6.5.5



Release Notes

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About ClearPass 6.5.5	7
Related Documents	7
Use of Cookies	7
Contacting Support	8
System Requirements for ClearPass 6.5	9
End of Support	9
Virtual Appliance Requirements	10
Supported Hypervisors	10
ESX/ESXi Requirements	10
CP-VA-500 (500 Virtual Appliance OVF)	10
CP-VA-5K (5K Virtual Appliance OVF)	10
CP-VA-25K (25K Virtual Appliance OVF)	11
CP-SW-EVAL (Evaluation OVF)	11
Hyper-V Requirements	11
CP-VA-500 (500 Virtual Appliance VHDX)	11
CP-VA-5K (5K Virtual Appliance VHDX)	11
CP-VA-25K (25K Virtual Appliance VHDX)	11
CP-SW-EVAL (Evaluation VHDX)	12
Supported Browsers	12
ClearPass OnGuard Unified Agent Requirements	12
Supported Antivirus Versions, OnGuard	12
ClearPass OnGuard Dissolvable Agent Requirements	13
ClearPass OnGuard Native Agent Version Information	13
ClearPass OnGuard Java-Based Agent Version Information	15
ClearPass Onboard Requirements	16
Upgrade and Update Information	17
Upgrading to ClearPass 6.5 from 6.2.6, 6.3.6, or 6.4.x	17
Before You Upgrade	18
Sample Times Required for Upgrade	18
After You Upgrade	19
Restoring the Log DB Through the User Interface	19
Restoring the Log DB Through the CLI	20
Updating Within the Same Major Version	20

Installation Instructions Through the User Interface	21
Installation Instructions for an Offline Update	21
What's New in This Release	23
Release Overview	23
New Features and Enhancements in the 6.5.5 Release	23
Policy Manager	23
Guest	23
OnGuard	23
Issues Resolved in the 6.5.5 Release	24
Policy Manager	24
CLI	25
Endpoint Context Servers	26
Guest	26
Insight	27
Onboard	27
OnGuard	27
New Known Issues in the 6.5.5 Release	28
Policy Manager	28
OnGuard	28
Enhancements in Previous 6.5.x Releases	29
Features and Enhancements in Previous 6.5.x Releases	29
Policy Manager	29
Features Added in 6.5.2	29
Features Added in 6.5.1	30
Features Added in 6.5.0	30
CLI	38
Features Added in 6.5.4	38
Dissolvable Agent	39
Features Added in 6.5.0	39
Endpoint Context Servers	39
Features Added in 6.5.3	39
Features Added in 6.5.0	39
Guest	43
Features Added in 6.5.4	43
Features Added in 6.5.3	43
Features Added in 6.5.2	43
Features Added in 6.5.1	43

Features Added in 6.5.0	43
Insight	45
Features Added in 6.5.0	45
Onboard	46
Features Added in 6.5.0	46
OnGuard	47
Features Added in 6.5.3	49
Features Added in 6.5.2	49
Features Added in 6.5.1	50
Features Added in 6.5.0	50
Issues Fixed in Previous 6.5.x Releases	53
Fixed in 6.5.4	53
Policy Manager	53
CLI	54
Guest	54
Onboard	55
OnGuard	55
Fixed in 6.5.3	56
Policy Manager	56
Dissolvable Agent	57
Endpoint Context Servers	57
Guest	57
Insight	58
Onboard	58
OnGuard	58
Fixed in 6.5.2	59
Policy Manager	59
CLI	61
Endpoint Context Servers	61
Guest	61
Insight	62
Onboard	62
OnGuard	62
QuickConnect	63
Fixed in 6.5.1	63
Policy Manager	63
Dissolvable Agent	65

Endpoint Context Servers	65
Guest	65
Insight	66
Onboard	66
OnGuard	66
Fixed in 6.5.0	67
Policy Manager	67
AirGroup	70
CLI	70
Dissolvable Agent	71
Endpoint Context Servers	71
Guest	71
Insight	73
Onboard	74
OnGuard	75
QuickConnect	76
Known Issues Identified in Previous Releases	77
Policy Manager	77
Dissolvable Agent	82
Guest	84
Insight	84
Onboard	85
OnGuard	85
QuickConnect	90

ClearPass 6.5.5 is a patch release that introduces new features and provides fixes to previously outstanding issues. These release notes contain the following chapters:

- ["System Requirements for ClearPass 6.5" on page 9](#)—Provides important system requirements information for this release.
- ["Upgrade and Update Information" on page 17](#)—Provides considerations and instructions for version upgrades and patch updates.
- ["What's New in This Release" on page 23](#)—Describes new features and issues introduced in this 6.5.5 release as well as issues fixed in this 6.5.5 release.
- ["Enhancements in Previous 6.5.x Releases" on page 29](#)—Describes new features introduced in earlier 6.5 releases.
- ["Issues Fixed in Previous 6.5.x Releases" on page 53](#)—Lists issues fixed in earlier 6.5 releases.
- ["Known Issues Identified in Previous Releases" on page 77](#)—Lists currently existing issues identified in previous releases.

Related Documents

The following documents are part of the complete documentation set for the ClearPass 6.5.5 platform:

- *ClearPass Policy Manager 6.5 User Guide*
- *ClearPass Guest 6.5 User Guide*
- *ClearPass Insight 6.5 User Guide*
- *ClearPass Policy Manager 6.5 Getting Started Guide*
- *ClearPass Policy Manager Configuration API Guide*
- *ClearPass Policy Model: An Introduction*
- *Tech Note: Installing or Upgrading ClearPass 6.5 on a Virtual Machine*
- *Tech Note: Upgrading to ClearPass 6.5*
- *Tech Note: Cluster Upgrade Tool, ClearPass 6.5*

Use of Cookies

Cookies are small text files that are placed on a user's computer by Web sites the user visits. They are widely used in order to make Web sites work, or work more efficiently, as well as to provide information to the owners of a site. Session cookies are temporary cookies that last only for the duration of one user session.

When a user registers or logs in via an Aruba captive portal, Aruba uses session cookies solely to remember between clicks who a guest or operator is. Aruba uses this information in a way that does not identify any user-specific information, and does not make any attempt to find out the identities of those using its ClearPass products. Aruba does not associate any data gathered by the cookie with any personally identifiable information (PII) from any source. Aruba uses session cookies only during the user's active session and does

not store any permanent cookies on a user's computer. Session cookies are deleted when the user closes his/her Web browser.

Contacting Support

Main Site	arubanetworks.com
Support Site	support.arubanetworks.com
Airheads Social Forums and Knowledge Base	community.arubanetworks.com
North American Telephone	1-800-943-4526 (Toll Free) 1-408-754-1200
International Telephones	arubanetworks.com/support-services/support-program/contact-support/
Software Licensing Site	licensing.arubanetworks.com
End of Support information	arubanetworks.com/support-services/end-of-life-products/end-of-life-policy/
Security Incident Response Team (SIRT)	Site: arubanetworks.com/support-services/security-bulletins/ Email: sirt@arubanetworks.com

This chapter provides important system requirements information specific to this release. It should be read carefully before upgrading to ClearPass 6.5.

ClearPass Guest and ClearPass Onboard are part of the ClearPass Policy Manager platform. ClearPass comes pre-installed when you purchase an appliance. ClearPass can also be installed on a virtual appliance.

This chapter provides the following information:

- "End of Support" on page 9
- "Virtual Appliance Requirements" on page 10, including:
 - "Supported Hypervisors" on page 10
 - "ESX/ESXi Requirements " on page 10
 - "Hyper-V Requirements " on page 11
- "Supported Browsers" on page 12
- "ClearPass OnGuard Unified Agent Requirements" on page 12, including:
 - "Supported Antivirus Versions, OnGuard" on page 12
 - "ClearPass OnGuard Dissolvable Agent Requirements " on page 13
- "ClearPass Onboard Requirements" on page 16



The IP address to access the licensing server `clearpass.arubanetworks.com` changed from 199.127.104.89 to 104.36.248.89 on September 27th, 2014. If you have any firewall protections allowing access, please be sure to update the IP address information accordingly.

End of Support

Please be aware that the following vendors have officially stopped supporting their respective operating systems on the stated dates.

Aruba Networks will attempt to preserve compatibility with these legacy operating systems; however, recent versions of software agents (such as the ClearPass OnGuard Unified Agent) might not be able to provide the same level of functionality that they provide on newer operating systems.

We will not provide any further bug fixes or feature enhancements related to supporting these operating systems. Our TAC organization will also not be able to service customer support requests related to clients running these operating systems. Customers should consider these operating systems as unsupported with ClearPass:

- Microsoft Corporation:
 - Windows Server 2003 — July 14, 2015
 - Windows XP — April 8, 2014
- Apple, Inc:
 - Mac OS X 10.6 (Snow Leopard) — February 26, 2014

Virtual Appliance Requirements

Please carefully review all VA requirements, including functional IOP ratings, and verify that your system meets these requirements. These recommendations supersede earlier requirements that were published for ClearPass Policy Manager 6.x installations.

Virtual appliance recommendations have been adjusted to align with the shipping ClearPass hardware appliance specifications. If you do not have the VA resources to support a full workload, then you should consider ordering the ClearPass Policy Manager hardware appliance.

For VMware ESX/ESXi system requirements, see "[ESX/ESXi Requirements](#)" on page 10. For Microsoft Hyper-V™ system requirements, see "[Hyper-V Requirements](#)" on page 11. For complete information on installing and configuring either ESX or Hyper-V, see the *Tech Note: Installing or Upgrading ClearPass 6.5 on a Virtual Machine*.



Cloning a virtual machine to facilitate a ClearPass deployment is not recommended or supported.

Supported Hypervisors

The following hypervisors are supported. Hypervisors that run on a client computer such as VMware Player are not supported.

- VMware ESX 4.0 (Recommended minimum version of software for CP-VA-500 and CP-VA-5K. It does not support greater than 8 virtual CPUs required for the CP-VA-25K.)
- VMware ESXi 5.0
- VMware ESXi 5.1
- VMware ESXi 5.5
- VMware ESXi 6.0
- Microsoft Hyper-V Server 2012 R2
- Hyper-V on Microsoft Windows Server 2012 R2

ESX/ESXi Requirements

CP-VA-500 (500 Virtual Appliance OVF)

- 2 Virtual CPUs
- 500 GB disk space
- 4 GB RAM
- 2 Gigabit virtual switched ports
- Functional IOP rating for a 40-60 read/write profile for 4K random read/write = 75

CP-VA-5K (5K Virtual Appliance OVF)

- 8 Virtual CPUs
- Disk space:
 - 500 GB disk space required for existing deployments (upgrading from 6.2.6, 6.3.6, or 6.4.x)
 - 1000 GB disk space recommended for new deployments
- 8 GB RAM

- 2 Gigabit virtual switched ports
- Functional IOP rating for a 40-60 read/write profile for 4K random read/write = 105

CP-VA-25K (25K Virtual Appliance OVF)

- 24 Virtual CPUs
- Disk space:
 - 1000 GB disk space required for existing deployments (upgrading from 6.2.6, 6.3.6, or 6.4.x)
 - 1800 GB disk space recommended for new deployments
- 64 GB RAM
- 2 Gigabit virtual switched ports
- Functional IOP rating for a 40-60 read/write profile for 4K random read/write = 350

CP-SW-EVAL (Evaluation OVF)

- 2 Virtual CPUs
- 80 GB disk space
- 4 GB RAM
- 2 Gigabit virtual switched ports

An evaluation version can be upgraded to a later evaluation version in a manner similar to a production upgrade.

Hyper-V Requirements

CP-VA-500 (500 Virtual Appliance VHDX)

- 2 Virtual CPUs
- 500 GB disk space required
- 4 GB RAM
- 2 Gigabit virtual switched ports
- Functional IOP rating for a 40-60 read/write profile for 4K random read/write = 75

CP-VA-5K (5K Virtual Appliance VHDX)

- 8 Virtual CPUs
- 1000 GB disk space required
- 8 GB RAM
- 2 Gigabit virtual switched ports
- Functional IOP rating for a 40-60 read/write profile for 4K random read/write = 105

CP-VA-25K (25K Virtual Appliance VHDX)

- 24 Virtual CPUs
- 1800 GB disk space required
- 64 GB RAM
- 2 Gigabit virtual switched ports

- Functional IOP rating for a 40-60 read/write profile for 4K random read/write = 350

CP-SW-EVAL (Evaluation VHDX)

- 2 Virtual CPUs
- 80 GB disk space required
- 4 GB RAM
- 2 Gigabit virtual switched ports

An evaluation version can be upgraded to a later evaluation version in a manner similar to a production upgrade.

Supported Browsers

For the best user experience, we recommend you update your browser to the latest version available. Supported browsers for ClearPass are:

- Mozilla Firefox on Windows Vista, Windows 7, Windows 8.x, Windows 10, and Mac OS X
- Google Chrome for Mac OS X and Windows
- Apple Safari 3.x and later on Mac OS X
- Mobile Safari 5.x on iOS
- Microsoft Internet Explorer 10 and later on Windows 7 and Windows 8.x
- Microsoft Edge on Windows 10

ClearPass OnGuard Unified Agent Requirements

Be sure that your client system meets the following requirements before installing the ClearPass OnGuard Unified Agent:

- 1 GB RAM recommended, 512 MB RAM minimum
- 200 MB Disk Space
- Mac OS X: Version 10.7 or higher (64-bit only)
- Windows XP: Service Pack 3 or higher
- Windows 2003: Service Pack 2 or higher
- Ubuntu: 12.04 LTS and 14.04 LTS

Windows Vista, Windows 7, Windows 8.x Pro, Windows 10, and Windows Server 2008 are all supported with no service pack requirements. OnGuard does not support Windows 8.x RT or Windows 8.x Phone.



CAUTION

Installing the Unified Agent will remove an existing VIA installation. To continue using VPN functionality, log in to CPPM as the administrator, go to **Administration > Agents and Software Updates > OnGuard Settings**, and select **Install and enable Aruba VPN component** from the **Installer Mode** drop-down list.

Supported Antivirus Versions, OnGuard



NOTE

For OnGuard to work properly, please whitelist the following executable files and installation folders in your antivirus products:

ClearPassOnGuard.exe
ClearPassAgentController.exe
C:\Program Files (x86)\Aruba Networks\ClearPassOnGuard\
C:\Program Files\Aruba Networks\ClearPassOnGuard\

In the lab, we use the following antivirus software for our validations. Due to the large number of products available, this list may change at any time:

- Avast
- AVG
- COMODO
- Kaspersky: IS-11 and above
- MacAfee
- Microsoft Forefront Endpoint Protection-2008
- Microsoft Security Essentials
- Microsoft Windows Firewall
- Sophos: 9 and above
- Trend Micro
- Windows Defender Firewall



Some third-party anti-malware products are not supported by ClearPass OnGuard. For a complete list of supported third-party products, in CPPM go to **Administration > Agents and Software Updates > OnGuard Settings**, click the **Help** link, and then click the **OnGuard Agent Support Charts** link.

ClearPass OnGuard Dissolvable Agent Requirements

This section provides version information for both the Native Dissolvable Agent and the Java-based Dissolvable Agent. For more information on the Dissolvable Agent, refer to the ClearPass Policy Manager online help.

ClearPass OnGuard Native Agent Version Information

In current laboratory tests for ClearPass 6.5.5, the browser versions shown in [Table 1](#) were verified for the ClearPass OnGuard Native Dissolvable Agents. There are considerations to be aware of with some browser versions. For more information, click the ID number next to the browser's name.

Table 1: *Native Agent Latest Supported Browser Versions for This Release*

Operating System	Browser
Windows 10 64-bit	Chrome 47.x (#24518, #24986)
	Firefox 42.x
	Internet Explorer 11.x
	Edge 20.x
Windows 10 32-bit	Chrome 47.x (#24518, #24986)

Table 1: Native Agent Latest Supported Browser Versions for This Release(Continued)

Operating System	Browser
	Firefox 42.x
	Internet Explorer 11.x (#25827)
	Edge 20.x
Windows 8.1 64-bit	Chrome 47.x (#24986)
	Firefox 42.x
	Internet Explorer 11.x
Windows 8 64-bit	Chrome 47.x (#24986)
	Firefox 42.x
	Internet Explorer 10.x
Windows 8 32-bit	Chrome 47.x (#24986)
	Firefox 42.x
	Internet Explorer 10.x
Windows 7 64-bit	Chrome 47.x (#24518, #24986)
	Firefox 42.x
	Internet Explorer 11.x (#25827)
Windows 7 32-bit	Chrome 47.x (#24518, #24986)
	Firefox 42.x
	Internet Explorer 11.x
Windows 2008 64-bit	Chrome 47.x (#24986)
	Firefox 41.x
	Internet Explorer 9.x (#24766)
Windows Vista	Chrome 45.x (#24986)
	Firefox 41.x (#29186)
	Internet Explorer 9.x (#29186)
Mac OS X 10.11	Safari 9.x
	Firefox 42.x
	Chrome 47.x (#24518, #24986)

Table 1: Native Agent Latest Supported Browser Versions for This Release(Continued)

Operating System	Browser
Mac OS X 10.10	Safari 9.x
	Firefox 42.x
	Chrome 47.x (#24518, #24986)
Mac OS X 10.9	Safari 7.x
	Firefox 42.x (#28398)
	Chrome 47.x (#24518, #24986)
Mac OS X 10.8	Safari 6.x (#28398)
	Firefox 42.x
	Chrome 47.x (#24986)
Mac OS X 10.7.5	Safari 6.x
	Firefox 42.x
	Chrome 47.x (#24986)
Ubuntu 12.04 64-bit LTS	Firefox 38.x
Ubuntu 12.04 32-bit LTS	Firefox 38.x
Ubuntu 14.04 64-bit LTS	Firefox 36.x
Ubuntu 14.04 32-bit LTS	Firefox 38.x (#28398)

ClearPass OnGuard Java-Based Agent Version Information

In current laboratory tests for ClearPass 6.5.5, the browser and Java versions shown in [Table 2](#) were verified for the ClearPass OnGuard Java-based dissolvable agents. There are considerations to be aware of with some browser versions. For information, click the ID number next to the browser's name.

The latest Java version is required in order to perform client health checks.



There is an issue with the Chrome browser in this release. Please see [#28737](#) in "Known Issues Identified in Previous Releases" on [page 77](#) for a description and workaround.

Table 2: Supported Browser and Java Versions

Operating System	Browser	Java Version
Windows 10 64-bit	Firefox 42.x (#7165)	JRE 1.8 Update 66
	Internet Explorer 11.x (#7165)	JRE 1.8 Update 66
Windows 10 32-bit	Firefox 42.x (#7165)	JRE 1.8 Update 66
	Internet Explorer 11.x (#7165)	JRE 1.8 Update 66

Table 2: Supported Browser and Java Versions(Continued)

Operating System	Browser	Java Version
Windows 8.1 64-bit	Firefox 42.x	JRE 1.8 Update 60
	Internet Explorer 11.x	JRE 1.8 Update 60
Windows 8 64-bit	Firefox 42.x (#7165)	JRE 1.8 Update 51
	Internet Explorer 10.x (#7165)	JRE 1.8 Update 51
Windows 8 32-bit	Firefox 40.x	JRE 1.8 Update 66
	Internet Explorer 10.x	JRE 1.8 Update 66
Windows 7 64-bit	Firefox 42.x (#7165)	JRE 1.8 Update 65
	Internet Explorer 11.x	JRE 1.8 Update 65
Windows 7 32-bit	Firefox 40.x	JRE 1.8 Update 66
	Internet Explorer 11.x	JRE 1.8 Update 66
Windows 2008 64-bit	Firefox 42.x (#7165)	JRE 1.8 Update 66
	Internet Explorer 7.x (#7165)	JRE 1.8 Update 66
Windows Vista	Firefox 36.x (#7165)	JRE 1.8 Update 66
	Internet Explorer 9.x (#7165)	JRE 1.8 Update 66
Mac OS X 10.11	Safari 9.x (#20191)	JRE 1.8 Update 66
	Firefox 42.x (#27871)	JRE 1.8 Update 66
Mac OS X 10.10	Safari 9.x (#20191)	JRE 1.8 Update 66
	Firefox 40.x (#27871)	JRE 1.8 Update 66
Mac OS X 10.9	Safari 7.x (#20191)	JRE 1.8 Update 66
	Firefox 42.x	JRE 1.8 Update 66
Mac OS X 10.8	Safari 6.x	JRE 1.8 Update 66
	Firefox 42.x (#20191)	JRE 1.8 Update 66
Mac OS X 10.7.5	Safari 6.x (#20191)	JRE 1.8 Update 66
	Firefox 40.x (#23340)	JRE 1.8 Update 66
Ubuntu	Firefox 38.x	JRE 1.8 Update 66

ClearPass Onboard Requirements

Onboard does not support Windows 8.x RT or Windows 8.x Phone.

This chapter provides considerations and instructions for upgrading or updating your ClearPass application:

- The term “upgrade” refers to moving from one major release version to another—for example, from 6.4.x to 6.5. For information on upgrading from a version prior to 6.5, see ["Upgrading to ClearPass 6.5 from 6.2.6, 6.3.6, or 6.4.x" on page 17](#).
- The term “update” refers to applying a patch release within the same major version—for example, from 6.4.6 to 6.4.7, or from 6.5.4 to 6.5.5. For information on updating from an earlier 6.5.x release to 6.5.5, see ["Updating Within the Same Major Version" on page 20](#).

Upgrading to ClearPass 6.5 from 6.2.6, 6.3.6, or 6.4.x

An upgrade is the process of moving from one major release version to another—for example, from 6.4.x to 6.5. This section describes accessing upgrade images, considerations to be aware of, and instructions for restoring the log database after the upgrade (optional).

You can upgrade to ClearPass 6.5 from ClearPass 6.2.6, 6.3.6, or 6.4.x. Before you proceed with the upgrade, we recommend that you apply the latest available patch updates to your current release. For information on the patch update procedure, see ["Updating Within the Same Major Version" on page 20](#).



Upgrading to 6.5 from prior releases is not applicable to Hyper-V, since support for Hyper-V was introduced in 6.5.

- For 6.4.x upgrades through the Software Updates portal in the Policy Manager user interface, or through the Web service, upgrade is supported for any 6.4.x version.
- For 6.4.x upgrades through the CLI, there are two options:
 - If you are on 6.4.2 or later, you can upgrade directly to 6.5 through the CLI.
 - If you are on 6.4.0 or 6.4.1, you must first download and install the 6.4.0 CLI updates patch. At support.arubanetworks.com, go to **Download Software > ClearPass > Policy Manager > Current Release** and select **CPPM-x86_64-20140919-cli-der-support-patch**. After you have installed the patch, update to 6.4.2 or higher. You can then upgrade to 6.5 through the CLI.
- For 6.3.x, upgrade is only supported from the latest cumulative patch. You must update to 6.3.6 before upgrading to 6.5.
- For 6.2.x, upgrade is only supported from the latest cumulative patch. You must update to 6.2.6 before upgrading to 6.5.
- For 6.1.x, direct upgrades are not supported. Customers on 6.1.x must intermediately upgrade to 6.2.6, 6.3.6, or 6.4.x first before upgrading to 6.5.
- For appliance upgrades from 5.2.0, you must upgrade to 6.2.6, 6.3.6, or 6.4.x before upgrading to 6.5.
- Upgrade images are available within ClearPass Policy Manager from the Software Updates portal at **Administration > Agents and Software Updates > Software Updates**.
- Upgrade images are also available for download on the Support site under **ClearPass > Policy Manager > Archives**.



If you are upgrading from 6.4.0, the Software Updates portal incorrectly shows a warning during upgrade asking for two hard drives. This message can be ignored. (#27736)



MySQL is supported in CPPM 6.0.x and greater. Aruba does not ship drivers for MySQL by default. Customers who require MySQL can contact Aruba support to get the required patch. Users should be aware that this patch does not persist across upgrades, so customers using MySQL should contact support before they upgrade.

Before You Upgrade

Before you begin the upgrade process, please review the following important items:

- Plan downtime accordingly. Upgrades can take longer (several hours) depending on the size of your configuration database. A large number of audit records (hundreds of thousands) due to MDM integration can significantly increase upgrade times. Refer to the sample times shown in [Table 3](#) under "[Sample Times Required for Upgrade](#)" on page 18.
- Review the ESX/ESXi disk requirements. These are described in "[Virtual Appliance Requirements](#)" on page 10 of the "[System Requirements for ClearPass 6.5](#)" chapter.
- Any log settings that were modified prior to the upgrade are not retained, and are reset to the default. The administrator should configure any custom log settings again after the upgrade.



Log Database and Access Tracker records are not restored as part of the upgrade. If required, you can manually restore them after the upgrade. For more information, please review "[After You Upgrade](#)" on page 19.

- Before initiating the Upgrade process in CPPM, we recommend you set the **Auto Backup Configuration Options** to **Off** (if it was set to other values such as Config or Config|Session). The reason for disabling this setting is to avoid interference between the Auto Backup process and the Migration process.

To change this setting:

Navigate to **Administration > Cluster Wide Parameters > General > Auto Backup Configuration Options = Off**.

- If you have a custom authentication source configured to use the session log database, additional steps are required after upgrade. You have such an authentication source configured if you have a source of type **Generic SQL DB** in **ClearPass Policy Manager > Configuration > Sources** with server name **localhost** or **127.0.0.1** and with the database name **tipsLogDb**. In such cases, manually restoring the session log database is required after the upgrade completes (see "[After You Upgrade](#)" on page 19). Please contact Customer Support for configuration recommendations to move away from using the session log database as an authentication source.
- VM only: If you have two disks already loaded with previous ClearPass versions—for example, 6.2 on SCSI 0:1 and 6.3 on SCSI 0:2—then drop the inactive disk before upgrading. You must then add a newer disk based on the 6.5 disk requirements. Earlier releases used separate disks to store the current and previous ClearPass release; newer releases use just a single drive to store both installations. For current requirements, see "[Virtual Appliance Requirements](#)" on page 10.



Never remove SCSI 0:0

Sample Times Required for Upgrade

To help you estimate how much time the upgrade might take, Table 1 shows representative numbers for upgrade times under test conditions. Remember that the figures here are only examples. The actual time

required for your upgrade depends on several factors:

- Your hardware or virtual appliance model. In the case of VM installations, upgrade times vary significantly based on the IOPS performance of your VM infrastructure.
- The size of the configuration database to be migrated.
- For Insight nodes, the size of the Insight database.
- For subscriber nodes, the bandwidth and latency of the network link between the subscriber and the publisher.

Table 3: Sample Times Required for Upgrade

Hardware Model	Config DB Size	Insight DB Size	Publisher Upgrade Time	Subscriber Upgrade Time	Insight Restoration Time in Publisher OR Subscriber
CP-500	100 MB	5 GB	50 minutes	50 minutes	20 minutes
	200 MB	5 GB	60 minutes	60 minutes	20 minutes
CP-5K	100 MB	5 GB	50 minutes	50 minutes	15 minutes
	200 MB	5 GB	60 minutes	60 minutes	15 minutes
CP-25K	200 MB	5 GB	30 minutes	30 minutes	15 minutes
	500 MB	10 GB	40 minutes	40 minutes	20 minutes

After You Upgrade

To reduce downtime, the default upgrade behavior will now back up Log Database and Access Tracker records but will not restore them as part of the upgrade. If required, you can manually restore them after the upgrade through either the application or the CLI. The session log database contains:

- Access Tracker and Accounting records
- Event Viewer
- ClearPass Guest Application Log



The Insight database is not part of the session log database, and will be migrated as part of the upgrade.

Restoring the Log DB Through the User Interface

To restore the Log DB after upgrade through the UI, restore from the auto-generated **upgrade-backup.tar.gz** file (available at **Administration > Server Manager > Local Shared Folders**).

The restoration process could take several hours, depending on the size of your session log database. All services are accessible and will handle requests during the restoration, but there will be a performance impact while the restoration is in progress. We recommend that you perform this operation during a planned change window.

The restoration process will continue in the background even if the UI is closed or the session times out. A “Restore complete” event is logged in the Event Viewer when the restoration is complete.

This process needs to be repeated on each server in the cluster that should retain the session log database.

1. Go to **Administration > Server Manager > Server Configuration** and click **Restore** for the server.
2. In the **Restore Policy Manager Database** window, select the **File is on server** option, and select the **upgrade-backup.tar.gz** file.
3. Also select the following options:
 - **Restore CPPM session log data (if it exists on the backup)**
 - **Ignore version mismatch and attempt data migration**
 - **Do not back up the existing databases before this operation**
4. Uncheck the **Restore CPPM configuration data** option.
5. Click **Start**.

Restoring the Log DB Through the CLI

To restore the Log Database after the upgrade process is complete, use the `restore` command. Go to **Administration > Server Manager > Local Shared Folders** and download the **upgrade-backup.tar.gz** file. Host the file at an `scp` or `http` location accessible from the ClearPass server and execute the command `restore <location/upgrade-backup.tar.gz> -l -i -b`.

The restoration process could take several hours depending on the size of your session log database. All services are accessible and handling requests during the restoration, but there will be a performance impact while the restoration is in progress. We recommend that you perform this operation during a planned change window.



The restoration process will abort if the CLI session is closed or times out. We recommend that you initiate the restoration from the User Interface, especially if you have a large number of Access Tracker and Accounting records.

This process needs to be repeated on each server in the cluster that should retain the session log database.

The `restore` command syntax is as follows:

Usage:

```
restore user@hostname:<backup-filename> [-l] [-i] [-b] [-c] [-r] [-n|-N] [-s]
restore http://hostname/<backup-filename>[-l] [-i] [-b] [-c] [-e] [-n|-N] [-s]
restore <backup-filename> [-l] [-i] [-b] [-c] [-r] [-n|-N] [-s]
```

```
-b -- do not backup current config before restore
-c -- restore CPPM configuration data
-l -- restore CPPM session log data as well if it exists in the backup
-r -- restore Insight data as well if it exists in the backup
-i -- ignore version mismatch and attempt data migration
-n -- retain local node config like certificates etc. after restore (default)
-N -- do not retain local node config after restore
-s -- restore cluster server/node entries from backup.
    The node entries will be in disabled state on restore
```

Updating Within the Same Major Version

An update is the process of applying a minor patch release within the same major version—for example, from 6.5.4 to 6.5.5. Updates are available from the Software Updates page in ClearPass Policy Manager. This section describes how to install a patch update either through the user interface or as an offline update.

When you install the patch on a cluster, update the publisher first before applying the update on subscriber nodes.

During a patch update, the log database is retained. No extra steps are needed to retain the session log history during a patch update.

Installation Instructions Through the User Interface

If access is allowed to the Web service, ClearPass servers will show the latest patch update on the Software Updates portal:

1. In ClearPass Policy Manager, go to **Administration > Agents and Software Updates > Software Updates**.
2. In the **Firmware and Patch Updates** area, find the latest patch update and click the **Download** button in its row.
3. After the patch is downloaded, click **Install**.
4. When the installation is complete, if the status on the **Software Updates** page is shown as Needs Restart, click the **Needs Restart** button to restart ClearPass. The status for the patch is then shown as **Installed**.

Installation Instructions for an Offline Update

If you do not have access to the Web service and you need to do an offline update, you may download the signed patch from the Support site, upload it to the CPPM server, and then install it through the user interface:

1. Download the appropriate patch update from the Support site (<http://support.arubanetworks.com>).
2. Open ClearPass Policy Manager and go to **Administration > Agents and Software Updates > Software Updates**.
3. At the bottom of the **Firmware and Patch Updates** area, click **Import Updates** and browse to the downloaded patch file.
4. Click **Install**. When the installation is complete, if the status on the **Software Updates** page is shown as Needs Restart, click the **Needs Restart** button to restart ClearPass. The status for the patch is then shown as **Installed**.

This chapter provides a summary of the new features and changes in the ClearPass 6.5.5 release.

This chapter contains the following sections:

- ["Release Overview" on page 23](#)
- ["New Features and Enhancements in the 6.5.5 Release" on page 23](#)
- ["Issues Resolved in the 6.5.5 Release" on page 24](#)
- ["New Known Issues in the 6.5.5 Release" on page 28](#)

Release Overview

ClearPass 6.5.5 is a patch release that introduces new features and provides fixes for known issues. The 6.5.5 cumulative patch update is available in ClearPass Policy Manager under **Administration > Agents and Software Updates > Software Updates**.

New Features and Enhancements in the 6.5.5 Release

The following new features were introduced in the ClearPass 6.5.5 release. For a list of features introduced in previous 6.5.x releases, see ["Enhancements in Previous 6.5.x Releases" on page 29](#).

Policy Manager

- Two new attributes, HP-Port-Bounce-Host (attribute id 23) and HP-Captive-Portal-URL (attribute id 24), were added to the HP dictionary. (#31771)
- A new default RADIUS CoA enforcement profile, [HP Bounce Host-Port], was added. (#31773)

Guest

Support for the following items was added to the **Vendor Settings** drop-down lists on the **Web Login Editor** form and the **NAS Vendor Settings** area of the **Customize Guest Registration** form: (#31973)

- **Hewlett Packard Enterprise:**
 - Server-initiated login with optional URL hash key
- **Hewlett Packard Enterprise (Multiservice Mobility Controller)**
- **Hewlett Packard Enterprise (Unified Wired-WLAN Appliance)**

OnGuard

- Support was added for the following products: (#31279)
 - Avast Internet Security 11.x (Windows)
 - AVG AntiVirus 2016.x (Windows)
 - AVG AntiVirus Free Edition 2016.x (Windows)
 - AVG Internet Security 2016.x (Windows)
 - Bit9 Agent 7.x (Windows)

- ESET Endpoint Antivirus 6.x (Mac OS X)

Support was enhanced for the following products:

- AVG AntiVirus 2015.x (Mac OS X)
- AVG AntiVirus 2015.x (Windows)
- AVG AntiVirus Free Edition 2015.x (Windows)
- ESET NOD32 Antivirus 9.x (Windows)
- FileVault 10.11 (Mac OS X)
- Microsoft System Center Endpoint Protection 4.x (Windows)
- Sophos Anti-Virus 9.x (Mac OS X)
- System Center Configuration Manager 5.x (Windows)
- System Center Endpoint Protection for Mac 4.x (Mac OS X)
- VMware Fusion 8.x (Mac OS X)

Issues Resolved in the 6.5.5 Release



The 6.5.5 release resolved specific vulnerability issues. For details, refer to issues #31349 and #31630.

The following issues have been fixed in the ClearPass 6.5.5 release. For a list of issues fixed in previous 6.5.x releases, see "[Issues Fixed in Previous 6.5.x Releases](#)" on page 53.

This section includes the following:

- "[Policy Manager](#)" on page 24
- "[CLI](#)" on page 25
- "[Endpoint Context Servers](#)" on page 26
- "[Guest](#)" on page 26
- "[Insight](#)" on page 27
- "[Onboard](#)" on page 27
- "[OnGuard](#)" on page 27

Policy Manager

Table 4: *Policy Manager Issues Fixed in 6.5.5*

Bug ID	Description
#30439	Corrected an issue that caused high memory usage during PEAP authentication.
#30451	At Monitoring > Live Monitoring > Access Tracker > Summary , the Online Status was sometimes shown as Unknown or Offline even when the client was connected.
#30461	Some custom attributes added to the local user repository were missing from Access Tracker > Input > Computed Attributes if the user's login name was created in uppercase characters and then deleted and recreated in lowercase characters.

Table 4: Policy Manager Issues Fixed in 6.5.5 (Continued)

Bug ID	Description
#30800 #31263	The ClearPass user interface could not be accessed and the error message "Too many open files" was displayed.
#30869	EAP-TTLS + EAP-MSCHAPv2 authentication failures occurred if TLS 1.2 was negotiated between the supplicant and ClearPass.
#30964	Spaces in username, device category, or NetBIOS attributes were replaced with underscores when used in a post-auth action to Palo Alto Networks firewalls.
#30983	The ClearPass server failed to fetch endpoint attributes for random user authentications.
#31003 #31008	A ClearPass server sometimes experienced high memory utilization and intermittent communication issues when configured with post-auth actions.
#31107	When a standby publisher promotes itself to publisher, the connection is now checked fewer times, thus reducing the overall time of the promotion operation.
#31168	Under certain conditions, the anonymous identity/outer tunnel username was displayed as the username in Access Tracker. The inner identity username is now correctly displayed in Access Tracker during the PEAP session.
#31349	The PostgreSQL version was upgraded to 9.1.19. This includes fixes for CVE-2015-5288.
#31417	When ClearPass is integrated with AirWatch, computed input attributes learned from AirWatch might not be displayed in Access Tracker.
#31419	Corrected an issue where using an XML import to update an endpoint removed the MAC vendor details.
#31438	The Event-Timestamp was not properly populated in the [HP - Terminate Session] enforcement profile, causing Change of Authorization (CoA) to fail if the ArubaOS Switch/ProVision switch had the RADIUS server time-window set to a value other than zero.
#31630	This release includes fixes for the NTP vulnerability described in CVE-2015-7704.
#31986	Publisher failover did not work if the standby publisher's connectivity to the primary publisher was through its DATA interface and it was on a different subnet.
#32060	The RADIUS server crashed if it received a badly formatted EAP Identity packet during EAP-FAST authentication.

CLI

Table 5: CLI Issues Fixed in 6.5.5

Bug ID	Description
#31576	Corrected an issue where IPv6 netmask validation in the "network ip6 add" command failed for the source IP.

Endpoint Context Servers

Table 6: *Endpoint Context Server Issues Fixed in 6.5.5*

Bug ID	Description
#30259	Role mapping failed after updating from 6.5.0 to 6.5.2 for devices enrolled in JAMF, making clients unable to connect. This was caused by endpoint update issues from JAMF if one of the endpoints had an empty attribute value.
#30998	When ClearPass is integrated with MobileIron, manually changed attributes were not updated by data from MobileIron when compliance code attributes were used (for example, Require App, Disallowed App, and App Control Policy).
#31136	ClearPass did not retrieve endpoints from SOTI running version 12.3.
#31232	When ClearPass is integrated with MobileIron, endpoints from MobileIron were not discovered if any of the attribute values were empty.

Guest

Table 7: *Guest Issues Fixed in 6.5.5*

Bug ID	Description
#31097	Corrected an issue that allowed the creation of duplicate guest user accounts because of a missing database constraint. In some deployments, this led to cluster synchronization problems if the publisher allowed the duplicate guest account creation but the subscriber had an updated schema that did not allow duplicate account creation.
#31231	Corrected an issue with some Wirecard transaction processor deployments.
#31337	For Web logins configured to require a Universal Access Method (UAM) challenge, the challenge was not sent.
#31339	Corrected an issue where an out-of-date message could be displayed in the List Accounts view.
#31874	The MAC address was not normalized during import. MAC addresses are now formatted to the system standard when imported into Guest.
#31875	Forcing a default destination in a Cisco Wi-Fi environment did not redirect to the specified address.
#31876	Guest account attributes could have been overwritten when using the expired_notify_status field.
#31878	Corrected some visual issues with the color picker control that could occur on certain skins.
#31952	Partial configuration backups could fail if not all selections were made in the list of items to back up.
#32018	The "Permit login on validation error - validation errors will be logged" option is now removed from Security Hash drop-down list on the Configuration > Pages > Web Logins form or the Guest Self-Registrations > Advanced editor form. If you had this option set, please re-save the configuration with a valid option.

Insight

Table 8: *Insight Issues Fixed in 6.5.5*

Bug ID	Description
#31043	If certain rules were configured in an Insight report, the report creation failed and displayed the error "Proxy Error: The proxy server received an invalid response from an upstream server."

Onboard

Table 9: *Onboard Issues Fixed in 6.5.5*

Bug ID	Description
#30335	During migration, Onboard credentials were lost when restoring backups from 6.2 to 6.5.
#31434	Corrected an issue where certificate expiry warnings were sent multiple times.
#31872	The list of iOS trusted certificates in Onboard is updated.
#31881	Onboard was unable to re-connect iOS clients after provisioning on a subscriber node.

OnGuard

Table 10: *OnGuard Issues Fixed in 6.5.5*

Bug ID	Description
#31262	The ClearPass OnGuard Unified Agent wrote an empty <code>agent.conf</code> file if the file size was more than 1024 bytes.
#31293	Uninstalling the ClearPass OnGuard Unified Agent corrupted the Windows Network Provider registry keys.
#31681	The ClearPass OnGuard Unified Agent did not disconnect the wireless interface as part of auto-remediation for the Network Connections health class.
#31682	The ClearPass OnGuard Unified Agent sometimes did not contact the ClearPass server from the correct zone if an override IP server was configured.
#31712	The ClearPass OnGuard Unified Agent did not perform health checks after sending a previous health check request that failed.
#31731	The ClearPass OnGuard Unified Agent would sometimes hang at the "Connecting" stage in a switch-user use case.
#31740	The ClearPass OnGuard Unified Agent displayed the error message "ClearPass Server is not reachable" for virtual interfaces such as VMnet0 once every 30 seconds. The OnGuard Agent now displays the warning message "Interface is not Managed" once every five minutes.
#32014	The ClearPass OnGuard Unified Agent for Windows sometimes crashed in a switch-user use case.
#32296	The ClearPass OnGuard Unified Agent for Windows sometimes did not bounce the network interface.

New Known Issues in the 6.5.5 Release

The following known issues were identified in the ClearPass 6.5.5 release. For a list of known issues identified in previous releases, see ["Known Issues Identified in Previous Releases"](#) on page 77.

This section includes the following:

- ["Policy Manager"](#) on page 28
- ["OnGuard"](#) on page 28

Policy Manager

Table 11: *Policy Manager Known Issues in 6.5.5*

Bug ID	Description
#28693	Symptom/Scenario: When zones are created with certain special characters, the CPU Usage and CPU Load graphs are not displayed on the Monitoring > Live Monitoring > System Monitor page. Workaround: Do not use any of the following unsupported characters in zone names: ` - ~ ! @ # \$ % ^ & * () + = [{] } \ " ' < > . , ? / and spaces.
#32244	Symptom/Scenario: A Change of Authorization (CoA) to an ArubaOS Switch/ProVision switch might fail if there is a delay in the start/stop accounting packets.

OnGuard

Table 12: *OnGuard Known Issues in 6.5.5*

Bug ID	Description
#31734	Symptom/Scenario: When both the wired and wireless interfaces are connected, the ClearPass OnGuard Dissolvable Agent sometimes picks the wrong interface to perform health checks.

This chapter provides a brief summary of the features and enhancements introduced in previous ClearPass 6.5.x releases. For a list of new features introduced in the 6.5.5 release, see the [What's New in This Release](#) chapter.

Features and Enhancements in Previous 6.5.x Releases

This section provides detailed information about changes to each functionality area. Issue tracking IDs are included when available.

This section includes:

- "Policy Manager" on page 29
- "Dissolvable Agent" on page 39
- "Endpoint Context Servers" on page 39
- "Guest" on page 43
- "Insight" on page 45
- "Onboard" on page 46
- "OnGuard" on page 47

Policy Manager

Features Added in 6.5.2

- ClearPass now supports TLS version 1.2 in addition to 1.0 and 1.1 in TLS-based EAP methods. (#28012)
- A new configuration parameter, **Authorize Attribute Status**, was added in the TACACS+ based enforcement profile. This parameter lets you change the "Auth Status" flag value in the TACACS+ authorization response. (#28619)
- The Java installers provided in the Help documentation of the Java-based WebAgent were updated to JRE 8u45. (#28755)
- ClearPass now supports iboss Post-Auth enforcement. (#28761)
- A new cluster-wide parameter, "Store Local User passwords using reversible encryption", was added. When set to TRUE, local user passwords are stored using reversible encryption. This maintains backward compatibility with 6.4 and older releases. If cleartext-password-based authentication against a local user repository is required, the Authentication filter of the local user repository must be modified manually to retrieve the cleartext password by adding the following to the SELECT query:
"user_credential(password) AS User_Password". (#28895)

Examples of the default SELECT query and of the required change to take advantage of this enhancement are provided below.

Example of default query:

```
SELECT user_credential(password_hash) AS Password_Hash, user_credential  
(password_ntlm_hash) AS Password_Ntlm_Hash, CASE WHEN enabled = FALSE THEN 225  
WHEN ((expire_time is not null AND expire_time <= now()) OR
```

```
(passwordPolicy.expiry_days > 0 AND (PASSWORD_UPDATED_AT <= (now() - interval '1
days' * passwordPolicy.expiry_days))) ) THEN 226 ELSE 0 END AS Account_Status,
tips_role.name as Role_Name, case when enabled=true then 'true' else 'false' end
as enabled FROM tips_auth_local_users JOIN tips_role ON (tips_auth_local_
users.user_role = tips_role.id), password_policy passwordPolicy WHERE
passwordPolicy.usertype='LOCAL_USERS' AND user_id = '%{Authentication:Username}'
```

Example with enhancement:

```
SELECT user_credential(password_hash) AS Password_Hash, user_credential
(password_ntlm_hash) AS Password_Ntlm_Hash, user_credential (password) AS User_
Password, CASE WHEN enabled = FALSE THEN 225 WHEN ((expire_time is not null AND
expire_time <= now()) OR (passwordPolicy.expiry_days > 0 AND (PASSWORD_UPDATED_
AT <= (now() - interval '1 days' * passwordPolicy.expiry_days))) ) THEN 226 ELSE
0 END AS Account_Status, tips_role.name as Role_Name, case when enabled=true
then 'true' else 'false' end as enabled FROM tips_auth_local_users JOIN tips_
role ON (tips_auth_local_users.user_role = tips_role.id), password_policy
passwordPolicy WHERE passwordPolicy.usertype='LOCAL_USERS' AND user_id = '%
{Authentication:Username}'
```

- A new RADIUS service parameter, “Disable TLS 1.2”, was added. This option lets you enable or disable TLS 1.2 support in TLS-based EAP methods. (#29052)

Features Added in 6.5.1

- ClearPass installations are now supported on Hyper-V platforms (Windows Server 2012 R2 and higher). If you wish to use this feature, files are available on the **Support** site under **Download Software > ClearPass > Policy Manager > Current Release > Hyper-V**. After installing the 6.5.0 Hyper-V image, apply this 6.5.1 patch update. For system requirements information, see the [Hyper-V Requirements](#) section under ["Virtual Appliance Requirements" on page 10](#). For installation and configuration information, see the Tech Note ["Installing or Upgrading ClearPass 6.5 on a Virtual Machine"](#). (#9380)
- During PEAP authentication, ClearPass now always sends a TLS start with a flag value of 1 (PEAPv1), allowing certain clients to negotiate from PEAPv2. (#27931)
- At **Monitoring > Live Monitoring > Access Tracker**, the **Status Message** that is logged when a RADIUS CoA is sent to a network access device (NAD) is now more detailed. (#27951, #27359)
- ClearPass 6.5.1 supports TLS versions 1.0, and 1.1 in TLS-based EAP methods. (#28597)
- To improve performance, a new cluster-wide parameter, **Multi Master Cache Durability**, was added at **Administration > Server Manager > Server Configuration**. The admin can use this parameter to configure the durability of the BatteryDb, setting it to OFF, NORMAL, or FULL mode. The default setting is OFF mode. (#28164, #28177)

Features Added in 6.5.0

- Support was added for terminating IPSec VPN tunnels. To use this feature, go to **Administration > Server Manager > Server Configuration** and click the server in the list. On the **Network** tab, click the **Create IPSec Tunnel** button. Items that can be configured for an IPSec tunnel include: (#8378)
 - Local Interface
 - Remote IP Address
 - IPSec Mode
 - IKE Version
 - IKE Phase1 Mode
 - Encryption Algorithm

- Hash Algorithm
- Diffie Hellman Group
- Authentication Type
- IKE Shared Secret
- Support was added for broadcasting a RADIUS accounting request to proxy targets configured in the service. A new **Accounting Proxy** option is available when you configure new or modify existing RADIUS services, providing the ability to proxy RADIUS accounting events. (#15002, #25647)

To use this feature, go to **Configuration > Services** and select or add a RADIUS service. On its configuration form, click the **Service** tab. Complete the fields as needed and, in the **More Options** field, select the **Accounting Proxy** check box. An **Accounting Proxy** tab is added to the form. Fields on this tab let you configure a hierarchical list of proxy targets to which the RADIUS server should be forwarded, and configure attributes to include in the accounting packet. Attribute values can be static or any parameterized value.

- RADIUS is now supported as an authentication and authorization source, allowing ClearPass to query third-party RADIUS servers. When you add a new authentication source, the new **RADIUS Server** source type is available in the **Type** drop-down list at **Configuration > Authentication > Sources > General tab**. The RADIUS Server source type can be used with any RADIUS-based authentication service. Extra RADIUS attributes can be added before sending the RADIUS request to a RADIUS-based remote server, and the response attributes can be used as role or authorization attributes. (#20550, #25646)
- Four service templates were enhanced to streamline workflows for some common ClearPass configurations. To use these features, go to **Configuration > Start Here** and select the following service template links: (#20659)
 - **802.1X Wired** — A **Posture Settings** tab was added. Options on this tab let you enable or disable posture checks, specify host operating systems (Windows, Linux, or Mac OS X), and provide a quarantine message.
 - **802.1X Wireless** — A **Posture Settings** tab was added. Options on this tab let you enable or disable posture checks, specify host operating systems (Windows, Linux, or Mac OS X), and provide a quarantine message.
 - **Guest Access - Web Login** — The **Service Rule** tab now includes a link to open the **ClearPass Guest > Configuration > Web Logins** page, where you can create a new guest Web login page.
 - **Onboard** — The **Provisioning Wireless Network Settings** tab now includes a link to open the **Onboard > Configuration > Network Settings** page, where you can add new Onboard network settings.
- Enhancements to the Access Tracker provide additional information. To see this feature, go to **Monitoring > Live Monitoring > Access Tracker** and click a server in the list. The **Request Details** form opens. Changes to this form include: (#20660, #26127)
 - The **Input** tab now shows the category, family, and OS of the device, and the name of the vendor. This tab also includes a new **Show Configuration** button, which adds a tab to the Request Details form.
 - When you click the **Show Configuration** button on the **Input** tab, the **Configuration** tab is added to the **Request Details** form. This tab provides **Service Rule, Role Mapping Policy Details, and Enforcement Policy Details** information.
- Three new widgets were added to the Dashboard: (#20664)
 - Endpoint Profiler Summary
 - MDM Discovery Summary

- OnGuard Client Summary
- Several enhancements were made related to Common Criteria Protection Profile and FIPS 140. Changes were made in the areas of password complexity policies, idle session timeout configuration, admin passwords, and performance monitor rendering. As part of this feature: (#20667, #23819, #24191, #26272, #26273, #26274, #27208, #27475)
 - Password security was strengthened.
 - A new **Password Policy Settings** form was added for both local users and admin users. To use this feature, go to either **Administration > Users and Privileges > Admin Users > Password Policy or Configuration > Identity > Local Users > Password Policy**. Options that can be configured for the password include length, complexity, disallowed characters, disallowed words, disallowed user ID or repeated characters, and the number of days to expiration.
 - A new cluster-wide parameter, **Admin Session Idle Timeout**, allows administrators to configure the maximum idle time permitted for a session before it times out. To use this feature, go to **Administration > Server Manager > Server Configuration > Cluster-Wide Parameters > General tab**. Scroll to the **Admin Session Idle Timeout** row and enter the number of minutes to allow before timeout. The default value is 30 minutes.
 - A new cluster-wide parameter, **Performance Monitor Rendering Port**, controls performance metrics rendering among the nodes in the cluster. The port can be altered depending on the firewall requirements in deployments.
- Default values have changed for two items in the Administration module: (#25998)
 - The default value of **Old Audit records cleanup interval** is changed from 30 days to 7 days under the **Administration > Server Manager > Server Configuration > Cluster-Wide Parameters > Cleanup Intervals** tab.
 - The default value of the **Limit each log file size** parameter under **Administration > Log Configuration > System Level** is changed from 25 MB to 50 MB.
- ClearPass now provides the ability to add a number of devices that have contiguous IP addresses. To use this feature, go to **Configuration > Network > Devices > Add Device**. In the **IP Address or Subnet** field, use a hyphen to indicate the range of device IP addresses, following the format **a.b.c.d-e** (for example, 192.168.1.1-20). (#20841, #26134)
- A new option lets you clear the machine authentication cache on all the nodes. This option is available at **Administration > Server Manager > Server Configuration > Clear Machine Authentication Cache**. (#20959)
- Information retrieved by API queries to the Endpoints table now includes endpoint profile information. (#21004)
- A new RADIUS service parameter, **Enable signing for OCSF Request**, was added for specifying whether ClearPass should sign an OCSF request with a RADIUS server certificate. To use this feature, go to **Administration > Server Manager > Server Configuration** and click the server in the list. On the **Service Parameters** tab, select **RADIUS server** in the **Select Service** drop-down list. Scroll to the **Enable signing for OCSF Request** row and set the value to either TRUE or FALSE. The default value is FALSE to disable the signing process. (#21677)
- Administrators and guest operators can now log in to ClearPass using smart cards and TLS certificates. To use this feature: (#23050)
 1. In **ClearPass Policy Manager**, go to **Configuration > Start Here**, click **Certificate/Two-factor Authentication for ClearPass Application Login**, and configure the service template and add it. It will then be available in the list at **Configuration > Services**.

2. In **ClearPass Guest**, go to **Configuration > Pages > Web Logins** to create a Web login page. In the **Vendor Settings** drop-down list, select **Single Sign-On - SAML Identity Provider**. In the **Login Form** area, select the appropriate values in the **Client Certificate** and **Authentication** fields to allow admins and guests to log in via smart cards and TLS certificates.
- The following additional OIDs are now exposed for reporting CPU load averages for one minute, five minutes, and fifteen minutes: (#24057)
 - .1.3.6.1.4.1.2021.10.1.3.1
 - .1.3.6.1.4.1.2021.10.1.3.2
 - .1.3.6.1.4.1.2021.10.1.3.3
 - A new attribute, **Mac-Address-Upper-Hyphen**, was added to the Connection namespace. This attribute contains the client's MAC address in uppercase with a hyphen delimiter. (#24074)
 - Support was added for the EAP-PWD authentication method. To use this feature, go to **Configuration > Authentication > Methods** and scroll to the **[EAP PWD]** method in the list. The EAP-pwd protocol method uses a shared password for authentication. For more information, see <http://www.rfc-base.org/rfc-5931.html>. (#24149)
 - The Cisco Adaptive Security Appliance (ASA) RADIUS dictionary was added. When you upgrade or restore from a previous version, the Cisco ASA dictionary automatically replaces the Cisco VPN3000 RADIUS dictionary. If you require the Cisco VPN3000 dictionary, you may import it. (#24337)
 - A new service parameter, **Include Nonce in OCSF request**, was added for specifying whether an OCSF request should contain a nonce or not. A nonce is a unique identifier for an OCSF request. To use this feature, go to **Administration > Server Manager > Server Configuration** and click the server in the list. On the **Service Parameters** tab, select **RADIUS server** in the **Select Service** drop-down list. Scroll to the **Include Nonce in OCSF request** row and set the value to either TRUE or FALSE. The default value is TRUE. If the OCSF server does not support nonce, set the value of this parameter to FALSE to avoid an EAP-TLS authentication failure. (#24443)
 - ClearPass now provides the ability to authenticate users belonging to trusted domains when the Global Catalog server is configured as an authentication source and the username does not contain the domain name. (#24731)
 - ClearPass now displays information from the SNMP Management Information Base (MIB). On an SNMP query, the information is exposed beginning one minute after changes are made to the configuration. Details include: (#24850)
 - System information
 - Authentication counters
 - Authorization counters
 - Network traffic counters
 - Traps for various system and application events
- For more information, see <http://support.arubanetworks.com/DownloadSoftware/tabid/75/DMXModule/510/Default.aspx?EntryId=16480>.
- A new service template was added for to provide authentication sources for social logins. To see this feature, go to **Configuration > Start Here** and select **Guest Social Media Authentication**. (#25183)
 - Data about the various posture classes and their status for endpoints, as derived by the OnGuard agent, can now be sent to Palo Alto Networks devices. To use this feature, when configuring a Palo Alto firewall or panorama device as an external context server, go to **Administration > Server Manager > Server**

Configuration, open the server's configuration form, and click the **Service Parameters** tab. Set the **Send Posture Data** option to **TRUE**, and enter a value higher than two minutes for the **Eager handler polling interval** option. Because this feature can be resource-intensive, the eager handler-polling interval must be two minutes or more. (#25217)

- A new option, **Join Server Back to Cluster**, was added to the **Server Configuration** page for nodes whose replication status is **DISABLED**. This option is only available to users with the Admin role. The Join Server Back to Cluster option lets administrators join a failed node back to the cluster. The node can also be promoted to publisher. This option can only be triggered from a node that is currently active in the cluster. To use this option, go to **Administration > Server Manager > Server Configuration** and click the node whose replication status is **DISABLED**. (#25304)
- The **Certificate Trust List** at **Administration > Certificates > Trust List** now includes DoD (Department of Defense) certificates. These are disabled by default, and can be enabled as needed. A DoD certificate allows a browser to trust Web sites whose secure communications are authenticated by a Department of Defense agency. (#25329)
- For wired network profiling, MAC OUI (Organizationally Unique Identifier) information is now populated for all endpoints even when no other profiling information is available for an endpoint. This feature is available at **Configuration > Identity > Endpoints > Edit Endpoint**. (#25377)
- For wired network profiling, a list of multiple SNMP community strings can now be configured and used to query static IP devices discovered by the Profiler. If a static IP device does not respond to queries from the default public community string, the SNMP service can use the credentials from this custom list to query the device. This feature is available at **Configuration > Profile Settings > SNMP Configuration**. (#25417, #25837)
- For wired network profiling, a one-time scan can now be triggered to discover and profile devices in specified network IP subnets. To use this feature, go to **Configuration > Profile Settings > Subnet Scans** and click the **On-Demand Subnet Scan** link. Enter the subnets to scan and click **Submit**. (#25418)
- Insight now records the last connected location for an endpoint when such information is available. This information is determined from RADIUS authentication and accounting information, and from SNMP queries of network devices that have been set up for SNMP read and trap notification. Insight reports based on the Endpoints template can report on the following columns related to device location: (#25421)
 - NadIp (switch or controller IP)
 - NadPort (port information for wired devices)
 - Access Point (AP for wireless devices)
 - Ssid (SSID for wireless devices)
- For wired network profiling, an SNMP scan of an endpoint can now be triggered from its **Access Tracker** authentication record or **Endpoints** configuration in order to profile the endpoint. The option for the SNMP scan of the endpoint is only available if the client IP address is available. Only one endpoint can be scanned at a time. (#25456, #25420)
 - To use this feature from **Monitoring > Live Monitoring > Access Tracker**, click the server in the list to open the **Request Details** form. On the **Summary** tab, click **Change Status**. On the **Access Control Capabilities** tab, select the **Server Action** radio button. Select **SNMP Scan** in the **Server Action** drop-down list, and then click **Submit**.
 - To use this feature from **Configuration > Identity > Endpoints**, mark the check box for the endpoint in the list and click **Trigger Server Action**. In the **Server Action** drop-down list select **SNMP Scan**, and then click **Submit**.

- A new cluster-wide service parameter, **Replication Batch Interval**, was added. This parameter can be used to change the number of seconds for the minimum replication time. This parameter should only be modified as instructed by Support. (#25461)
- The Policy Server now logs an alert message if an authentication source filter takes a long time (more than 6 to 10 seconds) or times out. The alert message can be viewed in the logs at **Monitoring > Live Monitoring > Access Tracker**. (#25508)
- Ubuntu was added to the list of Linux Posture configuration settings at **Configuration > Posture > Posture Policies > Posture Plugins**. (#25676)
- ClearPass now supports two new event type formats, CEF (Common Event Format) and LEEF (Log Event Extended Format). On the **Administration > External Servers > Syslog Export Filters** configuration form, the **Export Event Format Type** field includes the **LEEF** and **CEF** options in addition to the **Standard** option. (#25764)
- The **Certificate Trust List** at **Administration > Certificates > Trust List** now includes Alcatel root certificates. These are disabled by default, and can be enabled as needed. An Alcatel root certificate allows Alcatel Lucent IP phones to authenticate via EAP-TLS. (#25782)
- The Linux Posture plugin was modified to simplify AV health class configuration under each Linux distribution. (#25792)
- The following Graphite counters were added to the RADIUS server: (#25862)
 - Kerberos Authentication Time
 - Number of RADIUS Accounting Packets Processed
 - Number of Timed Out Requests
 - RADIUS Accounting Packets Processed
 - RADIUS Duplicate Packets Received
 - RADIUS Policy Evaluation Time
 - RADIUS Service Evaluation Time
 - Time Taken for a RADIUS Request Process
 - Time Taken to Verify the Certificate Against OCSP Server
- A new MAC Caching service template was added. Instead of using Insight as the authorization source, this service uses an endpoint attribute containing the MAC cache expiry date, and checks this attribute against the authentication date. If the authentication date is earlier than the expiry date, access is granted. To see this feature, go to **Configuration > Start Here** and select the **User Authentication with MAC Caching** template. (#25900)
- An Nmap scan of an endpoint can now be triggered from its **Access Tracker** authentication record or **Endpoints** configuration in order to profile the endpoint. The option for the Nmap scan is only available if the endpoint's IP address is available. Only one endpoint can be scanned at a time. (#25943)
 - To use this feature from **Monitoring > Live Monitoring > Access Tracker**, click the server in the list to open the **Request Details** form. On the **Summary** tab, click **Change Status**. On the **Access Control Capabilities** tab, select the **Server Action** radio button. Select **Nmap Scan** in the **Select Action** drop-down list, and then click **Submit**.
 - To use this feature from **Configuration > Identity > Endpoints**, mark the check box for the endpoint in the list and click **Trigger Server Action**. In the **Server Action** drop-down list select **Nmap Scan**, and then click **Submit**.

- An alert is now shown in the Access Tracker if an enforcement action fails with an error code returned from the external context server. Alerts indicate the details of the HTTP request, and are shown on the **Alerts** tab of the **Request Details** form when you select a server in the list at **Monitoring > Live Monitoring > Access Tracker**. (An example of an enforcement action would be an HTTP enforcement invoking a GET/POST/PUT to an external context server such as a generic HTTP server or an MDM context server) (#25972)
- ClearPass Profile can now determine device type using TCP OS Fingerprinting. It also uses ARP (Address Resolution Protocol) packets to get the MAC:IP binding. To support TCP fingerprinting, the **Administration > Server Manager > Server Configuration > System tab > Span Port field** now includes an **Enable TCP fingerprinting** check box. This option is disabled by default. When the check box is selected to enable TCP fingerprinting, a warning message is displayed that advises the user of the potential impact on system performance. TCP session-based fingerprinting is a CPU-intensive operation, and the server should not be used for request processing while this option is enabled. (#25984, #26168)
- A new service template, Device MAC Authentication, was added. This service template can be used for plain device accounts that do not have a user directly associated with them. (#26033)
- Support was added for notifications to registered subscribers when a device profile changes. (#26106)
- New UI options and CLI commands let users perform on-demand cleanup operations. In addition, the system checks disk utilization every hour and purges data if the configured disk threshold is met: (#26121, #24005)
 - To use this feature in the UI, go to **Administration > Server Manager > Server Configuration**, select the radio button in the rows of the servers you wish to clean up, and click the **Cleanup** button. A pop-up window lets you specify, in days, the age of the files to remove. File types that are removed include:
 - System and application log files
 - Past authentication records
 - Audit records
 - Expired guest accounts
 - Past auto and manual backups
 - Stored reports
 - To use this feature in the CLI, the new **system cleanup** command performs on-demand cleanup. The new **system sysinfo** command provides information on disk and memory utilization.
- New endpoint attributes capture information about endpoints that have generated threat events. Administrators can create policies based on a threat's category, risk, or severity level, or a combination thereof. A device's threat resolution status can also be captured for logging purposes. The attributes are shown in [Table 13](#), and are available in the Attributes dictionary (**Administration > Dictionaries > Attributes**) (#26222)

Table 13: *New Endpoint Attributes for Threat Information*

Endpoint Attribute	Data Type
[Threat Category]	String
[Threat Detection Device IP]	IPv4Address
[Threat Detection Device Name]	String

Table 13: New Endpoint Attributes for Threat Information(Continued)

Endpoint Attribute	Data Type
[Threat Name]	String
[Threat Risk]	Integer32
[Threat Severity]	List
[Threat Status]	List
[Threat Timestamp]	Date-Time

- User passwords are now stored as password hashes instead of the reversible AES-256 encrypted form. This feature also supports MSCHAPv2 authentication. As part of this feature: (#26288, #26310, #26324, #26325, #26346)
 - Support was added for password hash-based user authentication for SQL authentication sources.
 - Async netd modifications were made to support hashed admin user passwords.
 - PostAuth modifications were made to support hashed user passwords.
 - API modifications were made to support exporting password hash fields.
 - An option is provided to store password hashes in a format compatible with MSCHAP authentication. This can be controlled from a cluster-wide parameter.



If you disable this feature, RADIUS MSCHAP authentications against the Local User and Admin User repositories are not possible because NTLM hashes are reset for all local and admin users. To re-enable RADIUS MSCHAP authentication against the user repositories, you must reset all the affected passwords in addition to enabling this feature.

- The RADIUS server was modified to integrate with Vasco IdentiKey Authentication Server. The changes also ensure that the State attribute does not contain any non-printable (non-ASCII) characters. (#26320, #27103)
- New System Monitoring graphs are available. To view these graphs, go to **Monitoring > Live Monitoring > System Monitor** and click the **ClearPass** tab. Select the new **Advanced** option, and then select the **Type**. The following graph types were added: (#26362)
 - RADIUS Accounting Packets processed
 - RADIUS Duplicate Packets received
 - Time taken to verify the certificate against OCSP server
 - RADIUS Policy Evaluation Time
 - RADIUS Service Evaluation Time
 - Number of RADIUS timed out requests
- The following RADIUS counters are now logged at the INFO level instead of the DEBUG level: (#26419)
 - Service Categorization Time
 - User Lookup time in rlm_ldap and rlm_sql modules
 - User authentication time in rlm_mschap module
 - Policy Evaluation time

- End-to-End request processing time
- A new Service Template, **Guest Social Media Authentication**, was added to provide a step-wise wizard for easy setup of CPPM policies that allow social logins for Guest access. (#26434)
- The RADIUS dictionary was updated with the latest information for all CheckPoint platforms. (#26616)
- For users who connect to a Microsoft SQL server using Integrated Authentication, the login username in the authentication source now allows the backslash (\) and at-sign (@) characters in addition to the hyphen and underscore characters. Only the DOMAIN\Username format is supported for Integrated Authentication (UPN format is not supported). To use this feature, go to **Configuration > Authentication > Sources > Add** and create a new source of type **Generic SQL DB**. On the **Primary** tab, enter the username in the format DOMAIN\Username in the **Login Username** field, and select **MSSQL** in the **ODBC Driver** field. (#26670)
- A new **Endpoint Details API** can be used to query the endpoint attributes for a given IP address or MAC address. The admin should always use this API on nodes where Insight is enabled, and make sure that RADIUS accounting is enabled. The following endpoint attributes can be retrieved using this API: (#26778)
 - mac
 - ip
 - user
 - device_category
 - device_family
 - device_name
 - is_online
 - updated_at
- To improve the efficiency of error handling, ClearPass now excludes the following errors from the Active Directory errors that are used for recovery actions: (#26946)
 - 0xC000006D - STATUS_LOGON_FAILURE
 - 0xC000006E - STATUS_ACCOUNT_RESTRICTION
 - 0xC000006F - STATUS_INVALID_LOGON_HOURS
 - 0xC0000071 - STATUS_PASSWORD_EXPIRED
 - 0xC0000072 - STATUS_ACCOUNT_DISABLED
 - 0xC0000064 - STATUS_NO_SUCH_USER
 - 0xC000006C - STATUS_PASSWORD_RESTRICTION
 - 0xC000006A - STATUS_WRONG_PASSWORD
 - 0xC0000193 - STATUS_ACCOUNT_EXPIRED
 - 0xC0000234 - STATUS_ACCOUNT_LOCKED_OUT
 - 0xC0000224 - STATUS_PASSWORD_MUST_CHANGE

CLI

Features Added in 6.5.4

- The maximum number of authentication attempts into the ClearPass CLI using SSH is now limited to three instead of six. (#30287)
- The SSH algorithms used by the ClearPass CLI are now modified to only use the following: (#30288)

- Ciphers: aes128-cbc, aes256-cbc
- MACs: hmac-sha1, hmac-sha-256
- KexAlgorithms: diffie-hellman-group14-sha1

Dissolvable Agent

Features Added in 6.5.0

- The `OnGuard Mac Health Checker.dmg` file for the Mac OS X Native Dissolvable Agent now uses the Native Agent Installer instead of the Native Agent App. This allows users to easily uninstall the agent. (#25063)
- The Native Dissolvable Agent is now supported for the Ubuntu operating system with the Firefox browser (it is not supported for the Chrome browser). The following Ubuntu OS versions are supported:
 - 12.04 32-bit LTS
 - 12.04 64-bit LTS
 - 14.04 32-bit LTS
 - 14.04 64-bit LTS

For more information, see #20656 under "OnGuard" on page 47. (#25271)

- To uninstall the Native Agent from Mac OS X, you can now run the following command: (#27163)


```
open ~/Library/Application\ Support/ClearPassWebAgent/Uninstaller.app/
```

Endpoint Context Servers

Features Added in 6.5.3

Additional attributes are now available for endpoint context servers. The `machine-os` and `host-type` attributes can be used to indicate the device type and device family to use in the Check Point Login payload. These attributes are not added by default, and must be configured by the administrator. To configure the attributes, go to **Administration > Dictionaries > Context Server Actions** and click the row for the **Check Point Login** action. In the **Endpoint Context Server Details** form, click the **Content** tab. Add the `machine-os` and `host-type` attributes and their values. After these attributes are configured here, they will be available for endpoint configuration. (#29363)

Features Added in 6.5.0

- ClearPass now provides the ability to turn off HTTP Basic authentication for context server actions, and to specify user credentials as Action Attributes. To see this feature, go to **Administration > Dictionaries > Context Server Actions** and either click a server type in the list or click **Add** to add a new server. The **Endpoint Context Server Details** window opens. (#18919)
 - To use the HTTP Basic authentication option, on the **Action** tab, use the check box in the **Skip HTTP Auth** field to enable or disable HTTP Basic authentication.
 - To use the Action Attributes option, on the **Attributes** tab, add the attributes in the following formats:

Table 14: Options for HTTP Basic Authentication and User Credentials as Action Attributes

Attribute Name	Attribute Value
Server Name	%{Server.Name}
User Name	%{Server.UserName}
Password	%{Server.Password}

- The Event Viewer at **Administration > External Servers > Endpoint Context Servers** now includes a **Poll Status** tab for MDM polling information. This tab is available when editing the context server if MDM is enabled for polling and if at least one poll has been completed. (#24225)

Information shown on the Poll Status tab for a successful poll includes:

- Last poll status
- Last successful poll time
- Total elapsed time for polling MDM and posting endpoints to ClearPass
- Number of endpoints (fetched from MDM)
- Number of invalid endpoints (invalid MAC addresses or duplicates)
- Number of endpoints updated to ClearPass
- Number of incomplete device profiles (missing category or family information, or device model not present in dictionary)
- Number of device profiles updated in ClearPass

Information shown on the Poll Status tab if the poll fails includes:

- Last poll status
- Last successful poll time
- URL that MDM was trying to access
- HTTP status code
- Reason for failure

- ClearPass now supports the Google Administration Console as an MDM External Context Server. To use this feature, a project must first be created in the Google Developer Console, and then the Google Admin Console can be added as a context server in ClearPass Policy Manager. The procedures are described below. (#24499)

Steps in the Google Developer Console:

1. Make sure to enable **Admin SDK API**.
2. Create a new **Client ID** and **Client Secret** (select **Web Application** as the **Application Type**).
3. Create a **Consent Screen** with the desired logo and text (This screen is seen by the ClearPass administrator when authorizing ClearPass Policy Manager - more below).
4. Add **Redirect URIs**. This is of the format **https://<clearpass-server>/async_netd/mdm/oauth/google**, where “clearpass-server” should be a fully qualified domain name (FQDN) and not an IP address. This server should be reachable by that FQDN by the device the administrator is using to access the ClearPass Admin UI over a Web browser.
5. Configure the domain's security setting to allow API access.

Steps in ClearPass Policy Manager:

1. Go to **Administration > External Servers > Endpoint Context Servers > Add**. On the **Server** tab, select **Google Admin Console** in the **Select Server Type** drop-down list.
2. Enter the valid **Client ID** and **Client Secret** that were configured in the Google Developer Console.
3. Click **Save** to save the Client ID and Client Secret. This also enables the Authorize ClearPass button.
4. Click **Authorize ClearPass**. The Google page for entering the username and password for the Google domain (account) opens in a new tab or window.
5. Enter the credentials. A consent screen (the one that was set up in the Google Console steps) is displayed, where you will be given the choice to authorize ClearPass to communicate with the Google Admin Console to fetch the MDM data for the Google Chrome Devices registered with the domain.
6. After the approval, the status of the operation is displayed — either that a “Refresh Token has been fetched and saved”, or an error message.
7. You can return to the main ClearPass Admin UI window and make additional selections (such as enabling ClearPass to poll for MDM data) before you click Save to save the settings.

When all configuration is complete in the Google Developers Console and in CPPM, subsequent MDM polling cycles will fetch the MDM data for the Google Chrome Devices and add that to the endpoints, profiling data to use with functionality of ClearPass Policy Manager, such as in creating and configuring policies and services. The details of the devices fetched can be seen from several places in the UI. The figures below show details of a Google Chrome Device whose MDM data was fetched by ClearPass from the Google Admin Console. This information is displayed when an endpoint row is clicked at **Configuration > Identity > Endpoints**. The list of devices (rows) on can be filtered by using the filter attribute **Source > contains > Google Admin Console**.

- A new enforcement profile, **Session Notification Enforcement**, is introduced in 6.5.0. Notification of a change in IP address can now be sent to any external context server (such as a firewall) by configuring that server as a generic HTTP server and adding the appropriate generic HTTP context server actions. The content of the payload to be posted by CPPM to the external server is based on the REST API defined by the external server for communication. (#24508, #24509)

Prior to 6.5, session restrictions enforcement allowed a Palo Alto Firewall device to be added as a value for an attribute of type “Session-Check” and name “IP-Change-Notify”. When used as part of a policy and service, that profile let CPPM notify the firewall when users logged in or out of the network. In the 6.5.0 release, the new enforcement profile type, **Session Notification Enforcement**, provides the same functionality not only for Palo Alto firewalls but also for firewalls for other vendors. It replaces the IP-Change-Notify attribute, which will no longer be supported. Any pre-6.5.0 configuration will be migrated to the new enforcement type during upgrade to 6.5. Three different configuration options are described in the tables below.

Table 15: *Session Notification Enforcement Configuration: PANW Integration*

Field	Configuration
Session-Notify Server Type	Palo Alto Networks Firewall
Session-Notify Server IP	<IP ADDRESS>

Table 16: Session Notification Enforcement Configuration: PANW Integration Extended to Guest MAC Caching

Field	Configuration
Session-Notify Server Type	Palo Alto Networks Firewall
Session-Notify Server IP	<IP ADDRESS>
Session-Check Username	%{Endpoint:Username}

Table 17: Session Notification Enforcement Configuration: Generic HTTP Servers (Check Point)

Field	Configuration
Session-Notify Server Type	Generic HTTP
Session-Notify Server IP	<IP ADDRESS>
Session-Notify Login Action	Check Point Login
Session-Notify Logout Action	Check Point Logout

To use this new enforcement profile type, go to **Configuration > Enforcement > Profiles > Add**. On the **Profile** tab, select **Session Notification Enforcement** in the **Template** drop-down list. On the **Attributes** tab, select the **Session-Notify** type.

- MobileIron MDM integration was updated to the 5.5 VSP release API specification, improving the device discovery logic for large deployments (tens of thousands of managed devices). Device discovery is now much faster and timeout issues are eliminated. (#24690)
- The server configuration form at **Administration > External Servers > Endpoint Context Servers** now includes a **Bypass Proxy** option. An administrator can select this option to specify that the endpoint context server should not use the configured proxy settings (if a proxy is used). ClearPass would then bypass the proxy for functions such as MDM API, Endpoint Context Server Actions, or Generic HTTP outbound enforcement. (#25686)
- ClearPass now lets you configure multiple endpoint context servers of the same server type. To use this feature, go to **Administration > External Servers > Endpoint Context Server > Add** and select the **Server Type**. A new attribute to identify the server from which the endpoints are fetched was added to the dictionary at **Administration > Dictionaries > Attributes**. This attribute, **Context Server**, is populated with the Server Name value of the endpoint context server the endpoint is fetched from. (#25826)
- New generic HTTP context server actions are available. They can be used in conjunction with CheckPoint and Fortinet firewalls that are configured as external context servers in order to communicate end user logins and logouts in the form of session notification enforcement. To use this feature, go to **Administration > Dictionaries > Context Server Actions**. In the **Filter** drop-down lists, select **Action Name > contains > Log** and click **Go**. The following server actions were added: (#26682)
 - Check Point Login
 - Check Point Logout
 - Fortinet Login
 - Fortinet Logout

Guest

Features Added in 6.5.4

- Paypal Express is now added to the list of transaction processors. (#30441)
- Wirecard is now added to the list of transaction processors. (#30442)

Features Added in 6.5.3

- A new API is enabled to support guest sponsor actions (`/api/guest/:guest_id/sponsor`). (#29147)
- In API Services, results returned by the Guest and Device queries are now sorted with the newest items at the top of the list by default. (#29461)

Features Added in 6.5.2

- The `/api/guest/:guest_id/sponsor` action was added to the API. (#29465)
- In the API, the lists returned by the Guest and Device queries are now sorted with the newest items at the top by default. (#29466)

Features Added in 6.5.1

ClearPass Guest now provides the ability to whitelist User-Agents from the meta-refresh redirect behavior in the captive portal (they will be shown the captive portal without any redirects), and to blacklist them from receiving the captive portal. Whitelists and blacklists for captive portals can be configured in at

Administration > Plugin Manager > Platform Services > Configuration. (#27990)

Features Added in 6.5.0

- Support was added to Transaction Services for the following Property Management Systems (PMS): (#19271, #23108, #25239)
 - Agilysys hotel PMS
 - Protel PMS
- A new Web Analytics plugin was added. This plugin can be used to inject a Web analytics tracking code into guest-facing application pages. This functionality does *not* collect any user information. (#20552)
- The sponsor can now confirm or reject a guest account or device account directly from the **Guest > Manage Accounts** or **Guest > Manage Devices** page, respectively, instead of by email. To configure this option, go to **Configuration > Pages > Guest Self-Registrations** and click the **Edit** link for a Guest Self-Registration (GSR). In the diagram, click the **Sponsor Confirmation** link. Select the **Enabled** check box for sponsorship confirmation and save your changes. Register the guest account. On the **Guest > Manage Accounts** list, the account's row will include the **Sponsor** link. (#20633)
- The PHP opcode cache was updated to OPcache 7. (#21188)
- **Web Pages** was added to **Configuration > Pages**. You can manage your list of custom Web pages and create simple new custom pages. The Web Pages list also provides four page templates: **Browser Unsupported**, **Jailbroken Device**, **Posture Check**, and **Service Unavailable**. (#24439)



If you have configured Bulk SMS as your SMS provider, the outgoing port has changed from TCP port 5567 to TCP port 80. Please review any firewall settings you may have configured. An override is available in the **Configuration > SMS Services > Gateways** configuration form to override the default port. (#24453)

- The **Self-Service Portal** summary page now displays the NAT IP if it is available in the authentication session of the user. (#25165)

- Transaction processors using the FIAS protocol will now adhere to the No Post NP flag and deny access. Previously guests were still able to attempt a charge or otherwise be granted access. (#25240)
- Support was added for the Media4u SMS gateway (Japan). (#25551)
- The **Administration > API Services > API Clients** page includes a new link, **API Explorer**, that provides access to the various APIs used for configurations in Guest and Onboard. (#25556)
- The **Guest > Active Sessions > Show Details** window now includes the ClearPass Policy Manager service and the session ID of the user's connection. The **Service Type** and **SSID** fields can be added to the **Guest > Active Sessions** list as a custom view. To add these columns, click the **More Options** link above the table, click **Choose Columns**, click the field name you want to add, and then click **Enable Field**. (#25633)
- Two new skins have been added to the list of available skins at **Administration > Plugin Manager**. The **Galleria Skin** and **Galleria Skin 2** provide a customizable and dynamic full-screen user experience for guests. (#25672)
- In Transaction Processor configuration, for matching names against Property Management Systems (PMS) you can now configure how many characters of the name require matching. To use this feature, go to **Configuration > Hotspot Manager > Transaction Processors** and open the configuration form for a new or existing processor. In the **Processing Gateway** drop-down list, select one of the PMS providers. In the **Name Match** field, you can specify either an exact name match or matching just the first 3, 4, 5, 6, or 7 letters of the last name. (#25783)
- The performance of captive portal pages was improved. (#25965)
- When you configure a guest self-registration to use a Facebook Wi-Fi social login, a new option lets you enable a RADIUS Change of Authorization (CoA) when the guest's session expiration time is reached. To use this feature, go to **Configuration > Pages > Guest Self-Registrations > Advanced Editor link**. In the **Customize Guest Registration** page, scroll to the **Social Logins** area and select the check box in the **Social Login** row, and then select the Advanced check box. The new **Disconnect Action** drop-down list specifies the action to take when a disconnect is requested by Facebook. If a CoA Enforcement Profile is selected, it must be compatible with the NAD the guests are connecting to. (#26001)
- When **Single Sign-On _ SAML Identity Provider** is selected in the **Vendor Settings** field at **Configuration > Pages > Web Logins**, a new configuration option, **Client Certificate**, lets you request a client certificate from the user to be used for authentication. (#26046)
- Access control lists in Guest and Onboard now support IPv6 addresses in addition to IPv4. These access control lists include any "allow access", "deny access", or "enable access" fields, found on forms such as **Web Logins**, **Guest Self Registration**, **Provisioning Settings**, or the SCEP server settings in **Certificate Authority Settings**. (#26079)
- Significant performance enhancements were made to guest-facing pages such as Web Logins and Guest Self-Registration pages, improving performance by 32% to 166% more requests per second. (#26119)
- Support was added for specifying security options for Cross-Origin Resource Sharing (CORS). This applies to API requests made from Web applications. The default is to not permit any cross-origin requests. To configure this behavior, you can specify a list of hostnames, optionally including wildcards, at **Administration > Plugin Manager > API Framework > Configuration > Allowed Origins**. (#26179)

Insight

Features Added in 6.5.0

- Support was added for WYSIWYG graphical report design in Insight. This feature includes the following changes: (#20541)
 - On the Insight **Dashboard**, a **Report** button was added. You can click this button to open the **Add Reports** form and generate a report of the currently-displayed Dashboard widgets.
 - On the **Add Reports** form, you can add a Dashboard report by selecting the new **Dashboard** template. The report uses the current Dashboard widgets in the configuration. To change the widgets in the report, first change them in the Dashboard and then return to the report configuration.
 - The **Add Reports** form also includes a new **Design** tab. You can click the **Header**, **Title**, or **Footer** row to edit the HTML, or the **Image** row to add a file.
- Insight reports now support OnGuard Agent **Type** and **Version** fields in WebAuth reports. (#22689)
- A new template, **Endpoint Latest**, was added to Insight report configuration to allow reporting on location attributes. (#23219, #24079)
- A new template, **MAB**, is now supported in Insight report configuration for MACAUTH BYPASS reports. (#23421)
- A new widget, **Insight Disk Usage**, was added to the Insight Dashboard. It displays Insight resource consumption statistics such as disk usage of the Insight DB and the Reports Directory. (#23620)
- A sample report can now be viewed for each of the template types within a template group. In the **Select Template** field on Insight's **Reports > Configuration** tab, the **Sample Report** link downloads an example of the selected report in PDF format. (#25123)
- Support was added for including endpoint connection information such as Switch Port/Controller and Access Point in Insight reports. (#25422)
- Insight report configuration now displays uploaded images in the Design Tab. Support was also added for uppercase image file extensions for JPEG and PNG. GIF images are not supported. (#25514)
- Insight reports now include the following new **Posture** fields for the File Check Health class: (#25575)
 - Files Missing
 - Files Not Allowed
 - Invalid MD5 Sum Files
- Enhancements to Insight's **Search** tab provide additional information. Changes to this form include: (#26125, #26126, #20660)
 - A **Summary View** button was added to the **Search Type** options. You can configure the Summary View for an endpoint, a network device, or a user and specify the widgets to include. When you select columns and click **Save**, the details are correlated across cluster nodes in the displayed information.

Onboard

Features Added in 6.5.0

- The guest self-registration page can now be configured to initiate Onboard device enrollment as an alternative to NAS login, allowing the guest to log in and proceed to Onboard enrollment in one step. To use this feature, go to **Configuration > Pages > Guest Self-Registrations** and click the link to either create or edit a page. In the diagram, you can either: (#9859, #25652)
 - Click **Advanced Editor**, scroll to **Login > Enabled**, and select the **Enable Onboard device enrollment** option.
 - Under **Receipt Page > Submit**, click either **Title**, **Login Message**, **Login Delay**, or **NAS Vendor Settings**. In the **Enabled** field at the top of the form, select the **Enable Onboard device enrollment** option.
- Onboard now provides the ability to require a sponsor to approve a new device that is being provisioned for the network. A field for the sponsor's email address will be added to the guest's login form below the username and password fields. When the user logs in to register their device, an email is sent to the sponsor requesting approval, and a message is displayed on the user's screen advising them that it is in process. To set up the email to the sponsor, first go to **Onboard > Deployment and Provisioning > Provisioning Settings > Web Login tab**, click in the **Custom Fields** text box, and select **Sponsor's Email: (sponsor_email)** from the drop-down list. Next, click the new **Sponsorship Confirmation tab** and then click the **Enabled** check box. Options on this tab let you specify provisioning settings related to sponsorship confirmation and UI overrides. (#11912)
- The list of available settings you can configure for an iOS device at **Onboard > Configuration > iOS Settings** now includes **Device Restrictions Settings**. (#12402)
- Automatic cleanup options were added for Onboard certificates. In the **Actions** area of the **Onboard > Deployment and Provisioning > Provisioning Settings** form, options let you: (#14424)
 - Revoke certificates for inactive devices, specifying the period of inactivity
 - Delete duplicate certificates, specifying the number of days to wait after re-enrollment before deletion
- The default algorithm to use for the certificate authority in Onboard is now changed to SHA-512 from SHA-1 because SHA-1 digest algorithm is no longer considered fully trustworthy by many browsers. Additionally, attempting to create a certificate authority with SHA-1 results in the following warning message in the UI: (#25671)

The SHA-1 digest algorithm is no longer considered fully trustworthy by many browsers and, if used, may result in security warnings being displayed.
- When a device is disabled or deleted through the Onboard BYOD self-service portal, active sessions for the device are now terminated. (#15599)



The {php} Smarty tag is now deprecated. Please be aware that PHP is no longer allowed in editable templates. A warning message will be displayed if you attempt to save a template that contains the {php} tag. Existing templates that include this tag will not work. (#16900)

- An error message is now displayed if a user tries to onboard an Android or iOS device with a browser that is not supported for that operating system (for example, iOS with Chrome, Dolphin, or Opera Mini). The **Onboard > Deployment and Provisioning > Provisioning Settings > Supported Devices tab** includes options to enable the browser check for Android and for iOS. For new installations, these options are enabled by default. For existing installations, these options are disabled by default. (#17164)
- In the 6.5 release, a switchip is no longer necessary in order to reconnect a device after onboarding. The device's MAC address is all that is required. (#18599)

- Onboard now provides the ability to specify different instructions for iOS and OS X provisioning. (#21007)
- Onboard now provides the ability to customize the iOS and OS X enrollment wizard's post-login instructions. (#21008)
- You can now filter devices by MDM enrollment status. A **Managed By** column was added to the **Onboard > Management and Control > View by Device** list, and the **Show Details** link for the device displays all endpoint attributes, MDM and otherwise. (#23877)
- Onboard now provides the ability to create certificates suitable for use as HTTPS server certificates. At **Onboard > Management and Control > View by Certificate**, the **HTTPS** option is available as a certificate type when importing or creating a code-signing certificate and can be used to filter the certificate list. (#25301)
- Onboard can now use the same code-signing certificate for signing Windows applications and iOS and OS X profiles. Profile-signing certificates are no longer needed and have been removed. (#25648)
- Certificates that are currently valid can now be deleted. This has the same effect as revoking them or disabling the device. The **Delete Certificate** option is available in the certificate's row at **Onboard > Management and Control > View by Certificate**. (#25741)
- Onboard certificates can now be provisioned in a browser for manual installation on devices that do not have an Onboard client. To use this feature, go to **Onboard > Deployment and Provisioning > Provisioning Settings**. The **Supported Devices** tab now includes a **Web-Based Provisioning** section, and the **Instructions & Messages** tab includes a **Web-Based Instructions** section. (#25752)
- Onboard now provides the ability to onboard devices via social login. To use this feature, go to **Onboard > Deployment and Provisioning > Provisioning Settings > Web Login** and scroll to the **Social Logins** section. (#25754)
- The trusted servers configuration at **Onboard > Configuration > Network Settings** now defaults to the automatic setting of only trusting the common names of servers in the ClearPass cluster. (#25767)
- Onboard now provides the ability to manually override device detection for scenarios where the device cannot be accurately detected from the browser user agent. To use this feature, go to **Onboard > Deployment and Provisioning > Provisioning Settings**. Both the **Supported Devices** tab and the **Instructions & Messages** tab now include an **Override Device Type Detection** field. (#25815)
- A new page, **Usage**, was added under **Onboard > Management and Control**. This page displays usage statistics for Onboard. Information shown here includes: (#25869)
 - **License Usage:** Count representing a 30-day rolling average of the number of devices with valid certificates
 - **Devices:** For each device type, the number enrolled, not enrolled, and denied
 - **Certificates:** For each CA, the number valid, expired, and revoked
- Support was added for the Chromebook System TPM Token certificate store. To use this feature, go to **Onboard > Deployment and Provisioning > Provisioning Settings > Supported Devices tab** and scroll to **Chromebook Provisioning > Chromebook Token**. (#26570)

OnGuard

- Support was added for the following products: (#26283, #26515, #28184, #28707, #29371, #30375, #30377)
 - Altiris Agent 6.x (Windows)
 - Avast Internet Security 10.x (Windows)
 - Avast Mac Security 11.x (Mac OS X)

- Avast Security 2015 on Mac OS X
- Avira Antivirus Pro 15.x (Windows)
- Bit9 Agent 7.x (Windows)
- Bitdefender Antivirus Plus 19.x (Windows)
- Bitdefender Antivirus Plus 20.x (Windows)
- BitLocker Drive Encryption 10.x (Windows)
- uTorrent 3.x (Windows)
- Casper Suite 9.x (MacOSX)
- DELL Kace Agent 6.x (Windows)
- Dr.Web for Mac 10.x (MacOSX)
- FileVault 10.10 (Mac)
- F-Secure Anti-Virus for Mac 1.x (MacOSX)
- Kaspersky Anti-Virus 15.x (MacOSX)
- Kaspersky Anti-Virus 16.x (Windows)
- Kaspersky Endpoint Security Encryption 10.x (Windows)
- Kaspersky Internet Security 15.x (Windows)
- Kaspersky Internet Security 16.x (Windows)
- Kaspersky Total Security 16.x (Windows)
- Mac OS X Builtin Firewall 10.11.x (Mac OS X)
- Malwarebytes Anti-Malware 2.x (Windows)
- McAfee VirusScan Enterprise 8.8.x (Windows)
- Microsoft Windows Update Agent 10.x (Windows)
- Norton Internet Security 22.x (Windows)
- Oracle VM VirtualBox 4.x (Windows)
- Software Update 10.11.x (Mac OS X)
- Sophos SafeGuard 7.x (Windows)
- Symantec Hosted Endpoint Protection 2.x (Windows)
- System Center Configuration Manager 5.x (Windows)
- VirtualBox 5.x (Mac OS X)
- VMware Player 5.x, 6.x, 7.x (Windows)
- VMware Workstation 11.x (Windows)

Support was enhanced for the following products:

- AVG AntiVirus Free Edition 2015.x (Windows)
- Avira Free Antivirus 15.x (Windows)
- Avira Mac Security 3.x (MacOSX)
- Bitdefender Antivirus Essential 1.x (Windows)
- clamXav 2.x (Mac OS X)

- ESET Endpoint Antivirus 6.x (Windows)
- ESET NOD32 Antivirus 4.x (MacOSX)
- FileVault 10.7.x (Mac)
- Kaspersky Total Security 15.x (Windows)
- McAfee VirusScan 18.x (Windows)
- McAfee VirusScan Enterprise 8.8.x (Windows)
- Norton Antivirus 12.x (Mac OS X)
- Sophos Anti-Virus 9.x (Mac OS X)
- Symantec Endpoint Protection 12.x (Windows)
- Symantec Endpoint Protection 12.1.x (Windows)
- Symantec Hosted Endpoint Protection 2.x (Windows)
- System Center Configuration Manager 5.x (Windows)
- System Center Endpoint Protection 4.x (Windows)
- System Center Endpoint Protection for Mac 4.x (Mac OS X)

Features Added in 6.5.3

- During automatic upgrade, the ClearPass OnGuard Unified Agent now uses HTTPS instead of HTTP to download the new OnGuard version. (#29156)
- The ClearPass OnGuard Unified Agent now supports Windows 10. (#29159)



After the 6.5.3 release, an issue was identified with Windows 10 64-bit. Review the workaround instructions in #30090 to obtain a hotfix patch to address it.

- A new option, **Disconnect Network Connections**, was added to the **Remediation Action For Network Connection Types Not Allowed** drop-down list for Windows on the **Network Connection Types** form. This remediation action applies only to wireless network interfaces. When this option is selected, OnGuard will disconnect the wireless network interface. This provides an alternative to disabling the wireless interface when a wired interface is connected. (#29536)

Features Added in 6.5.2

- The VPN component of the ClearPass OnGuard Unified Agent was updated to match VIA 2.1.1.8. Some important enhancements are: (#29017)
 - Multiple DNS suffix support
 - Split tunnel works in driver mode

For more details, refer the *Aruba VIA 2.1.1.8 Release Notes* on the [Support site](#).

- For “Allow Only One Network Connection” and “Allow One Network Connection with VPN” configurations, if more than one network connection type is selected and the ClearPass OnGuard Unified Agent detects more than one network connection type, then OnGuard gives priority to network connections in the order they were added to the list of allowed network connections. The first network connection that was added has the highest priority and is retained, and all other connections are disabled or disconnected. (#29034, #29488)

Features Added in 6.5.1

- The ClearPass OnGuard Unified Agent can now automatically upgrade without requesting the user's permission. It updates automatically if the **Upgrade Action** is set to **Download and Install** on the **OnGuard Settings** page. (#27675, #27676)
- A new parameter, DESKTOPSHORTCUT, was added to the ClearPass OnGuard Unified Agent installer for Windows. This parameter controls whether to create a desktop shortcut or not. A value of 1 will create a desktop shortcut when OnGuard is installed; a value of 0 will not create the desktop shortcut. The default value is 1 (creates shortcut). To use this parameter to install OnGuard without creating a desktop shortcut for it, use one of the following commands: (#27677)
 - ClearPassOnGuardInstall.eye /DESKTOPSHORTCUT=0
 - msixexec /i ClearPassOnGuardInstall.msi DESKTOPSHORTCUT=0
- The **Override Server IPs** field in OnGuard Settings now allows FQDN as well as IP addresses. This feature is available in Policy Manager at **Administration > Agents and Software Updates > OnGuard Settings > Policy Manager Zones > Override Server IPs**. (#27811, #27818)

Features Added in 6.5.0

- A new health class, File Check, was added for both Mac OS X and Windows OS to check for the presence or absence of files. Auto-Remediation is not supported for the File Check health class. (#14032, #14034)
- The ClearPass OnGuard Unified Agent is now supported on Ubuntu OS. The ClearPass OnGuard Unified Agent Installer for the Ubuntu OS can be downloaded from **Administration > Agents and Software Updates > OnGuard Settings**. As part of support for the Ubuntu OS, the ClearPass OnGuard Unified Agent user interface now has an **OnGuard** tab and a **Common** tab, and the **Diagnostics** tab now includes **Health Logs**. Currently, only two health classes are supported for Ubuntu: Services and AntiVirus. Support for the Persistent Agent for Ubuntu was added in the Beta 1 release. In the Beta 2 release, support was added for the Dissolvable Agent, with Firefox supported on the Native Agent and Chrome supported on the Java-based Agent. (#20656, #25267, #26493)

The system requirements, procedures, and rpm dependencies for OnGuard installation on Ubuntu are shown below:

Supported Operating Systems

All Ubuntu flavors based on version 12.04 or above are supported.

Installing the ClearPass OnGuard Persistent Agent

- (1) Ensure the system is up to date. Run the **sudo apt-get update** and then **sudo apt-get upgrade** command.
- (2) Make sure all rpm dependencies are installed (gksudo, gdebi library dependency) prior to OnGuard installation.
- (3) Download the Ubuntu **ClearPassOnGuardInstall.tar.gz** file and extract it.
- (4) Select the binary installer provided for the target platform. For Ubuntu, use **clearpass-onguard-installer-<versionnumber>-ubuntu-i386** for 32 bit machines. Use **clearpass-onguard-installer-<version number>-ubuntu-x86_64** for 64 bit machines.
- (5) Run the selected binary installer either by mouse click or from the terminal.
- (6) When the installer starts, it asks for permissions for system changes with a password prompt. Accept the End-user license agreement (EULA) and continue. The native installation mechanism (debi) begins the actual installation.
- (7) When the installation is complete, the installer closes and the ClearPass OnGuard Agent starts automatically. If the installation fails, the installer displays installation logs for troubleshooting.

Uninstalling the ClearPass OnGuard Persistent Agent

To uninstall the application, run the `sudo apt-get purge clearpass-onguard` command from the terminal.

Dependencies

The binary Installer and the application require the following packages:

- libc6 (>= 2.15)
 - libdbus-1-3 (>= 1.0.2)
 - libdbus-glib-1-2 (>= 0.78)
 - libgcc1 (>= 1:4.1.1)
 - libglib2.0-0 (>= 2.14.0)
 - libgnome-keyring0 (>= 2.22.2)
 - libnm-glib-vpn1 (>= 0.7.999)
 - libnm-glib4 (>= 0.7.999)
 - libnm-util2 (>= 0.7.0)
 - libproxy1 (>= 0.4.7),
 - libqtcore4 (>= 4:4.7.0~beta1)
 - libqtgui4 (>= 4:4.6.1)
 - libstdc++6 (>= 4.6)
 - libtdb1 (>= 1.2.7+git20101214)
 - libxml2 (>= 2.7.4)
 - zlib1g (>= 1:1.2.0)
 - gdebi
 - gksu
- Two new fields were added in Patch Management configuration for Windows OS. The **Grace Period** field lets you specify a time interval during which the client will be treated as Healthy even if some patches are missing. The **Scan Interval** field lets you specify the time interval after which the OnGuard Agent should check for missing patches. (#24125)
 - Authentication server IP addresses used by OnGuard persistent agents can now be manually configured. At **Administration > Agents and Software Updates > OnGuard Settings > Policy Manager Zones**, the user can configure an ordered list of authentication server IPs per zone. (#25836)

The following issues were fixed in previous 6.5.x releases. For a list of issues resolved in the 6.5.5 release, see the [What's New in This Release](#) chapter.

Fixed in 6.5.4

The following issues were fixed in the 6.5.4 release.

Policy Manager

Table 18: *Policy Manager Issues Fixed in 6.5.4*

Bug ID	Description
#29744	Corrected an issue that resulted in inconsistent behavior with service filters based upon Network Devices or Network Device Groups if the device was removed or added to a Network Device Group.
#30116	The ClearPass OnGuard Unified Agent client summary was not displayed properly in the Dashboard widget.
#30228	Corrected an issue where repeated email alerts were sent.
#30282	Removed non-standard field names from the Common Event Format (CEF) syslog output.
#30359	<p>Adding an external Nessus audit server failed with the error message "Primary Server: Unable to connect to Nessus Server".</p> <p>This issue is corrected in ClearPass; however, some changes are required on the Nessus server side. In the Nessus server configuration, please set "disable_ntp" to "no" and restart the nessus process on the Nessus server.</p> <ol style="list-style-type: none"> Set the value for disable_ntp to no. For example, on a CENTOS/RHEL server running Nessus: centos# /opt/nessus/sbin/nessuscli fix --set disable_ntp=no Restart the nessus service. For example: centos# service nessusd restart If the Nessus server has TLS enabled, then add the Nessus CA Certificate to the ClearPass Certificate Trust List. The Nessus CA certificate can be downloaded from <a href="https://<nessus-server>:8834/getcert">https://<nessus-server>:8834/getcert.
#30402	An excessive number of account lockouts occurred for users authenticating against Active Directory after changing their password. ClearPass now always uses the Name field value from the EAP MSCHAPv2 packet to calculate the challenge. The RADIUS service parameter Re-attempt AD login with different Username formats has also been removed.
#30424	Corrected an issue that resulted in policy server restarts if generic HTTP enforcement was used in an application service.
#30511	When using RADIUS Accounting Proxy, a previous username was being forwarded for % {Endpoint:Username} although a different username had since authenticated for a given MAC address.
#30712 #30598	PostAuth did not send a change of authorization (CoA) if the username included both uppercase and lowercase characters.

Table 18: Policy Manager Issues Fixed in 6.5.4 (Continued)

Bug ID	Description
#30725	Using a RADIUS server as an authentication source did not work with 3rd party RADIUS servers or pre-6.5 ClearPass instances.
#30730	Some EAP-FAST clients could not authenticate after the provisioned PAC (protected access credential) had expired.
#30756	No maximum limit was set for the SSL session cache store for the PEAP, TTLS, or FAST methods. A default value is now set in ClearPass and can be configured in the RADIUS service parameter TLS Session Cache Limit located under Administration > Server Manager > Server Configuration .
#30784	Corrected an issue where, after using the Cluster Upgrade Tool v2 to upgrade the hardware appliance to 6.5, the ClearPass hardware appliance network interface failed to start after applying the 6.5.3 patch update and network connectivity was sometimes lost after the appliance rebooted.

CLI

Table 19: CLI Issues Fixed in 6.5.4

Bug ID	Description
#30952	Corrected an issue where the <code>system reset-server-certificate</code> command option was not available in the ClearPass CLI.

Guest

Table 20: Guest Issues Fixed in 6.5.4

Bug ID	Description
#30500	Corrected an issue where Yahoo! social media logins would not successfully complete.
#30502	If MAC detect was enabled under the MAC Authentication plug-in, there was a chance self-registration receipts would have incorrect or missing data.
#30503	Country codes were not configurable. The default country and currency can now be configured within the transaction processors.
#30505	The <code>\$_endpoint</code> page variable was not available on Hotspot plan-selection pages.
#30507	Corrected an issue where Guests could not log themselves out of the network from the self-service portal.
#30735	The PHP version is now updated to 5.5.30.
#30814	Using the Edit option for a content item on the publisher node did not correctly replicate changes to subscriber nodes.
#30939	Corrected an issue where using the multiselect control on a form could result in a wide-screen, horizontal scrolling view on a small-screen mobile device.
#30940	The guest self-registration workflow diagram was not clickable when certain skins were in use.
#30943	Corrected an issue where editing a print template created by the wizard could cause an application failure.

Onboard

Table 21: *Onboard Issues Fixed in 6.5.4*

Bug ID	Description
#30838	Corrected an issue with the Onboard > Management and Control > View by Username list view where, under certain circumstances, using the Delete User link, or using the Certificates link to revoke all TLS client certificates issued to the user, sometimes incorrectly deleted or revoked additional Onboard certificates.
#30839	In certain circumstances, uploading a new trusted certificate in the Onboard > Configuration > Network Settings > Trust tab would produce an error such as "NwaMdpsConfig with id <N> not found".

OnGuard

Table 22: *OnGuard Issues Fixed in 6.5.4*

Bug ID	Description
#30090	On Windows systems, the ClearPass OnGuard Unified Agent exhibited the following two symptoms: <ul style="list-style-type: none">• Health checks on Windows 10 64-bit systems sometimes took longer than on Windows 10 32-bit or earlier Windows releases.• The "Windows Security Health Validator" plugin did not properly detect automatic and/or security updates on Windows 10 64-bit systems.
#30166	The ClearPass OnGuard Unified Agent was unable to detect certain health classes when running on Mac OS X 10.11 (El Capitan).
#30213	On Mac OS X, the ClearPass OnGuard Unified Agent sent two WebAuth requests when the Retry button was clicked.
#30214	The ClearPass OnGuard Unified Agent sent incorrect status for the Dell KACE Agent 6.x on Windows.
#30334	On Mac OS X, VIA failed to automatically start a VPN connection when an untrusted network was detected.
#30375	The ClearPass OnGuard Unified Agent did not properly detect Avast Security 2015 (version 11.x) on Mac OS X.
#30380	On Mac OS X, the ClearPass OnGuard Unified Agent was not able to read the DAT file version and Engine version of Norton AntiVirus 12.7.56.

Fixed in 6.5.3

The following issues were fixed in the 6.5.3 release.

Policy Manager

Table 23: Policy Manager Issues Fixed in 6.5.3

Bug ID	Description
#26475	The Computed Attributes list in the Access Tracker sometimes did not show MDM polled attributes.
#28813	When profiling was enabled and a subscriber was elected as the profile master, the subscriber made an excessive number of DNS queries to the publisher.
#28979	When installing a 25K appliance, the VM disk space requirements now correctly display an alert based upon 1800 GB instead of 2000 GB.
#29082	Active Policy Manager licenses were marked as expired if approximately 100 or more ClearPass API requests were posted per second.
#29089	When endpoint details and attributes were fetched from Google Admin Console, Chromebook could not be used in the role mapping policy. The Rules Editor displayed the message "The value entered is not valid" if Google Chrome was selected as the value.
#29478	Corrected an issue that sometimes occurred in ClearPass when a proxy server was used to contact the Webservices server to get the latest patches or fingerprint updates. In scenarios where the username and password were not configured to access the proxy server, ClearPass sent an empty authentication header, causing some proxy servers to return a "407 authentication required" error message. Now ClearPass will not send an empty authentication header to the proxy server if it is not required.
#29548	The notifications displayed in Policy Manager for expired RADIUS or HTTPS server certificates were still displayed even after the certificates were renewed.
#29607	On a cluster, the Event Viewer displayed a warning message that "The total number of authentication requests is 31939 and the appliance capacity is 80". The maximum appliance capacity values for both hardware appliances and virtual machines are now updated to HCG mode values (tested for maximum authentication request capacity).
#29641	The "cluster reset-database -E" command did not work and caused the login to fail with the message "Error reading license information. Please retry."
#29656 #29745	Attempting to send a Change of Authorization (CoA) for a user failed if the user was authenticated on one node of a ClearPass cluster and the CoA was sent from a different node in the cluster. This had also occurred if VIP was configured.
#29663	OpenSSL is now upgraded to version 1.0.1p. This includes fixes for CVE-2015-1793.
#29216 #29691	The Internet Explorer 11 browser (IE 11) would hang in ClearPass 6.5.1 Server Configuration pages, and settings could not be changed or updated on any of the Administration > Server Manager > Server Configuration pages.
#29818	ClearPass did not display attributes from the Accounting-Interim Request in the accounting record details.
#29881	Apache httpd is now upgraded to version 2.4.16. This includes fixes for CVE-2015-0228, CVE-2015-0253, CVE-2015-3183, and CVE-2015-3185.

Table 23: Policy Manager Issues Fixed in 6.5.3 (Continued)

Bug ID	Description
#29920	ClearPass sent a logout message to the Palo Alto Networks server even if the user was still connected.
#29952	Changes that were made to the standard syslog format in 6.5.0 (inclusion of null values, order of key-value pairs, timestampformat and source attribute) are now removed, and the behavior will be as it was prior to the 6.5.0 release.
#30176	Corrected an issue where, in ClearPass 6.5.1 and 6.5.2, SNMP traps were not sent.

Dissolvable Agent

Table 24: Dissolvable Agent Issues Fixed in 6.5.3

Bug ID	Description
#29513	The native dissolvable agent did not work properly on Chrome 42.x or higher, and the guest page failed to detect whether the ClearPass OnGuard Unified Agent was installed. The ClearPass OnGuard native dissolvable agent (WebAgent) is now supported on Chrome Browser 42 and higher versions.

Endpoint Context Servers

Table 25: Endpoint Context Server Issues Fixed in 6.5.3

Bug ID	Description
#29062	An incorrect endpoints count was shown for Google Admin Console.
#29079	The backslash character (\) was not accepted in the Username field of the Endpoint Context Servers configuration forms.
#29571	With JAMF MDM, ClearPass could not discover all the endpoints of devices with multiple MAC addresses.
#29946 #29918	ClearPass showed the wrong serial numbers for endpoints pulled from JAMF.

Guest

Table 26: Guest Issues Fixed in 6.5.3

Bug ID	Description
#29679 #29992	The PHP version is now updated to 5.5.28. This includes fixes for CVE-2015-3152.
#29837	Duplicate data sometimes caused a database query error when trying to view the list of devices on the Guest > Manage Devices page or the list of guest accounts on the Guest > Manage Multiple Accounts page.
#29900	If onboarding was configured to use sponsor confirmation, the sponsorship notifications sometimes displayed a malformed username (the @ symbol was shown as %40).

Table 26: Guest Issues Fixed in 6.5.3 (Continued)

Bug ID	Description
#29951	The Guest > Manage Accounts page displayed a database query error.
#30013 #30017	Social logins using Facebook did not return the public profile if the app was created with the Facebook API version 2.4.

Insight

Table 27: Insight Issues Fixed in 6.5.3

Bug ID	Description
#29701	The Insight Dashboard did not load properly in ClearPass 6.5.2.

Onboard

Table 28: Onboard Issues Fixed in 6.5.3

Bug ID	Description
#29437	When onboarding Windows devices, server certificate validation was not disabled even if that was specified in the configuration.
#29551	Corrected an issue where Onboard accepted Certificate Signing Requests (CSRs) with invalid signatures.
#29784	Windows 10 devices were shown as Windows 8 devices in the Onboard device list.

OnGuard

Table 29: OnGuard Issues Fixed in 6.5.3

Bug ID	Description
#29092	The ClearPass OnGuard Unified Agent failed to enable Kaspersky Internet Security 15.x and antivirus live updates. ClearPass OnGuard Unified Agent now supports updating virus definitions and enabling firewall for Kaspersky Internet Security 2015.
#29101 #29655	The ClearPass OnGuard Unified Agent could not contact the server from the current zone.
#29155	OnGuard did not establish a control channel for a user if multiple instances of OnGuard were running. The ClearPass OnGuard Unified Agent now supports the "switch user" use case on Windows and on Mac OS X.
#29157	The ClearPass OnGuard Unified Agent caused high bandwidth usage when multiple users were logged in to the same client using the "switch user" use case.
#29158 #29659	The ClearPass OnGuard Unified Agent would sometimes hang while performing health checks and had to be manually restarted.
#29201	When a profile mapped to the IKEv2 policy used the SHA1-96 HASH algorithm in the controller's connection profile settings, VIA continually tried to connect and failed with the error message "ERR-8949 FAILED TO ESTABLISH TUNNEL". This issue was specific to controllers running ArubaOS 6.3.x or earlier versions.

Table 29: OnGuard Issues Fixed in 6.5.3 (Continued)

Bug ID	Description
#29253	The ClearPass OnGuard Unified Agent for Mac OS X was not able to detect Microsoft System Center 2012 Endpoint protection for MAC.
#29487	The latest versions of some antivirus software products were not detected. Support is now added for Dr. Web 10.0, F-Secure 1.0, and Kaspersky Anti-Virus 15.0 on Mac OS X.
#29501	The ClearPass OnGuard Unified Agent for Mac OS X did not detect ESET NOD32 Antivirus 4.x.
#29543	The VPN component of the ClearPass OnGuard Unified Agent is now updated to match the Aruba VIA 2.3 version. This includes Windows 10 support.
#29690	On Mac OS X, the Login and Retry buttons in OnGuard were sometimes disabled after the machine woke up from sleep mode.
#29721	The ClearPass OnGuard Unified Agent now supports Aruba VIA functionality on Windows 10.
#30039	The ClearPass OnGuard Unified Agent for Windows could not read the DAT file time for AVG AntiVirus Free Edition 2015.

Fixed in 6.5.2

The following issues were fixed in the 6.5.2 release.

Policy Manager

Table 30: Policy Manager Issues Fixed in 6.5.2

Bug ID	Description
#20004	A String data type for the GuestUser Role ID produced the database query error "Invalid input syntax for integer". The data type for the GuestUser Role ID is now Integer instead of String. After upgrade, the admin should manually update the value for this tag in enforcement profiles with the appropriate integer values.
#27850 #27967 #27969 #27971 #28026 #29183 #29209	This release includes fixes for CVE-2015-3653, CVE-2015-3654, CVE-2015-3655, CVE-2015-3656, CVE-2015-3657, and CVE-2015-4649. For more information, refer to the Aruba Security Advisory ARUBA-PSA-2015-009.
#27889	The user interface could not be launched if the certificate chain was built incorrectly (for example, if the incorrect SUBCA was included in the chain). A new CLI command provides the option to reset the HTTPS Server certificate and the RADIUS Server certificate. The user must provide confirmation in order to reset the server certificate, since a restart of services is required after the certificate reset. Usage:#system reset-server-certificate
#27977	Adding a role as a string caused the user's role to be incorrect. In the TACACS Enforcement Profile, the Auth-Status can now be set to either PASS_ADD or PASS_REPL in the TACACS+ Authorization response.
#28247	Corrected an issue where 0.0.0.0/1 was not allowed as a netmask length for device IP configuration.

Table 30: Policy Manager Issues Fixed in 6.5.2 (Continued)

Bug ID	Description
#28360	The Apache httpd version is now upgraded to 2.4.12.
#28433	A start/stop operation or an IP address change could be executed in Server Configuration by a user with insufficient privileges.
#28591	Policy Manager's online help could be accessed even if the user did not have permissions to access the user interface.
#28599	The RADIUS server crashed if the value of the NetBIOS Domain Name attribute was not set in the Active Directory authentication source.
#28625	Change of authorization (CoA) did not work for a Juniper VPN client. ClearPass now uses the Access-Request without Calling-Station-Id and with User-Name in order to send the CoA for the session.
#28634	Corrected issues with RADIUS server and policy server memory leaks. For more information, see #29125 and #29212.
#28663	New-line characters () were displayed in the login banner.
#28665	The Syslog LEEF (Log Event Extended Format) message format fields were updated to send additional IDs and categories in LEEF messages.
#28686	More than 21 Palo Alto Firewall serial numbers could not be added in the Endpoint Context Server configuration for the Palo Alto Networks Panorama server type.
#28714	The PostgreSQL version is now updated to 9.1.15. This includes fixes for CVE-2014-0067, CVE-2014-8161, CVE-2015-0241, CVE-2015-0242, CVE-2015-0243, and CVE-2015-0244.
#28751	In server configuration, trying to drop a subscriber node failed if the file backup servers configuration included the server that was to be dropped. A fix is also included for an issue that occurred when restoring a backup taken with file backup servers that included ClearPass nodes that were not in the cluster.
#28846	This release includes fixes for the Leap Second vulnerability. Insertion of the leap second is scheduled for June 30th, 2015 at 23:59:60 UTC. For more information, refer to the <i>Aruba Leap Second Field Bulletin</i> at https://support.arubanetworks.com/Documentation/tabid/77/DMXModule/512/Default.aspx?EntryId=5192 .
#28881	Static-IP-based profiling using NADClient configuration failed if the number of IP addresses to be scanned was more than 100.
#28955	ClearPass 6.5.1 required the HTTP CONNECT method for certificate revocation list updates via proxy. The Administration > Certificates > Revocation Lists form now includes an option to bypass the proxy server.
#29080	The CP-HW-500 appliance could not be reached on the network. To avoid interface lockups, PCIE_ASPM=off is now included in the grub configuration if it is missing.
#29125	A RADIUS server memory leak occurred while processing the Accounting-Request without the Calling-Station-ID attribute in the accounting packets.
#29212	In a Switch User use case, WebAuthAHealth Requests from the OnGuard Agent caused memory leaks in the Policy Server.
#29234	Corrected an issue that sometimes caused TLS tunnel failures between the client and ClearPass, leading

Table 30: Policy Manager Issues Fixed in 6.5.2 (Continued)

Bug ID	Description
	to authentication failures.
#29239	The default value for the cluster-wide service parameter “Free memory threshold value” has been changed from 30% to 20% in this release. This was done to avoid false out-of-memory alarms that could be generated, especially on CP-VA-500 and CP-HW-500 where 4GB RAM is available and some of the processes pre-allocate around 2.5+ GB.
#29375	OpenSSL is now upgraded to version 1.0.1o-111. This includes fixes for CVE-2014-8176, CVE-2015-1788, CVE-2015-1789, CVE-2015-1790, CVE-2015-1791, and CVE-2015-1792.

CLI

Table 31: CLI Issues Fixed in 6.5.2

Bug ID	Description
#27841 #28578 #28612	Corrected an issue where, if a static route was deleted, the same route could not be added again.

Endpoint Context Servers

Table 32: Endpoint Context Server Issues Fixed in 6.5.2

Bug ID	Description
#28609	The Event Viewer did not display the count of endpoint details for some servers. As part of the fix, new Event Viewer messages were added.
#28610	If MobileIron MDM endpoints were deleted from the endpoint repository, ClearPass did not fetch their device details at subsequent polling intervals.
#28729	An SSH handshake sometimes failed for a certificate with a DHE cipher.
#28748	ClearPass did not fetch attributes from Aruba Activate if the device details included any Unicode or non-ASCII characters.

Guest

Table 33: Guest Issues Fixed in 6.5.2

Bug ID	Description
#28656 #28988 #29379	The PHP version is now updated to 5.5.26. This includes fixes for CVE-2015-1351, CVE-2015-1352, CVE-2015-2325, CVE-2015-2326, CVE-2015-3414, CVE-2015-3415, and CVE-2015-3416.
#28679	Corrected some issues with performance when there is a large number of accounts. Tag lookup performance is now greatly improved in guest management queries.
#28690	Data migration failed during upgrade from 6.3.6 to 6.5.0 if there were outstanding certificate signing requests in Onboard.

Table 33: Guest Issues Fixed in 6.5.2 (Continued)

Bug ID	Description
#28872	Twilio SMS did not work for international numbers. Please re-save any Twilio gateway you might have configured.
#28899	ClearPass Guest did not honor the expiry_timezone field, and if timezone selection was enabled on a form with the Expire After field, the timezone adjustment was made twice.
#28900	Corrected an issue where a timing problem could cause a social login on a subscriber node to fail.
#28905	The SMS gateway for EZ Texting did not work and returned a 404 error message. The API URL for the EZ Texting SMS gateway has been updated.
#28947	Anonymous logins failed on a subscriber node if the publisher was not accessible.
#28973	The "Password matching complexity requirements" password generator did not check the list for disallowed symbols.
#29030	Corrected an issue that caused a spurious warning to be logged in the Application Log when browsing to a Web login page.

Insight

Table 34: Insight Issues Fixed in 6.5.2

Bug ID	Description
#28317	Insight search drop-down lists were not populated if the search query took a long time.
#29226	This release includes fixes for CVE-2015-4650. For more information, refer to the Aruba Security Advisory ARUBA-PSA-2015-009.

Onboard

Table 35: Onboard Issues Fixed in 6.5.2

Bug ID	Description
#28845	HTTP proxy settings were not provisioned correctly for iOS 8.3 devices.
#29105	Corrected an issue that prevented iOS reconnect when using a Cisco controller.

OnGuard

Table 36: OnGuard Issues Fixed in 6.5.2#

Bug ID	Description
#28550	The ClearPass OnGuard Unified Agent for Windows caused high CPU usage when WmiPrvSE.exe was launched.
#28552	The ClearPass OnGuard Unified Agent's Controller Service crashed on the Windows OS.
#28705	The ClearPass OnGuard Unified Agent could not identify the latest disk encryption software version. As part of the fix, the ClearPass OnGuard Unified Agent for Windows now supports Sophos SafeGuard 7.x.

Table 36: OnGuard Issues Fixed in 6.5.2# (Continued)

Bug ID	Description
#28817	In rare situations, the ClearPass OnGuard Unified Agent wrote an empty server IP in agent.conf, causing OnGuard to crash.
#28981	The ClearPass OnGuard Unified Agent incorrectly reported the status of the System Center Configuration Manager 5.x agent.

QuickConnect

Table 37: QuickConnect Issues Fixed in 6.5.2

Bug ID	Description
#28600	Onboarding failed on non-English Windows 8 systems.
#29437	When onboarding Windows devices, server certificate validation was not disabled even if the Validate Certificate option was disabled at Onboard > Configuration > Network Settings > Trust .

Fixed in 6.5.1

The following issues were fixed in the 6.5.1 release.

Policy Manager

Table 38: Policy Manager Issues Fixed in 6.5.1

Bug ID	Description
#20185	Routing could not be provided to VLANs that were created and attached to an MGMT or DATA interface. The "network ip add" command now supports adding custom routes via a VLAN interface.
#22963	Corrected an issue where a cluster split-brain occurred during recovery of a failed publisher.
#26614	The Policy Manager user interface showed an incorrect license usage count. This occurred in a specific deployment where CPPM was behind the load balancer and authentication requests did not include the MAC address.
#26939	The error message "Guest application has exceeded recommended capacity..." was displayed in the Event Viewer.
#27428 #28033	In the Service Rule area on the Configuration > Services > Edit page, the mouse cursor changed to a pointer and none of the options were clickable.
#27445 #28032	On the Monitoring > Live Monitoring > Access Tracker page, the text in the Service column was truncated if the service name was longer than 20 characters.
#27454	In some situations (for example, VIA authentication), the controller set the value of the Calling-Station-Id attribute to 000000000000 and ClearPass treated it as a valid MAC address, which caused VIA + Healthcheck to not work. Now if the client's MAC address is all zeros, it is considered an invalid address, and the RADIUS server does not add any computed attributes for the MAC address. The authentication should succeed. Instead of the MAC address, the username must be treated as a session entry in the battery.
#27551	Validation for IP addresses is enhanced, correcting an issue where RADIUS services stopped if the

Table 38: Policy Manager Issues Fixed in 6.5.1 (Continued)

Bug ID	Description
	wrong IP address was added in Network Devices
#27586	When a network administrator changed the value of the cluster-wide parameter "Store Password Hash for MSCHAP" to "false," ClearPass did not display a warning that the NTLM hashes for local and admin users would be permanently removed.
#27615 #28037	Importing and exporting Google MDM type endpoint context servers did not work and, for the Google MDM type, the Add Endpoint Context Server form had to be used to add the configuration manually instead of using Import or Export. Importing and exporting endpoint context servers of the Google MDM type is now fully supported.
#27658	The Event Viewer gave false alerts if the authentication count exceeded the license capacity of the CPPM node. The Event Viewer now displays the correct authentication count.
#27692	In a test scenario, the number of application licenses was doubled after a failover of the standby publisher.
#27783	The user could not complete onboarding when the pre-auth type was configured as Application Authentication . AppAuth now escapes the backslash character during deserialization of the Policy Server response object so that the Access Tracker is populated with the request details.
#27787	Corrected an issue where Show Sysinfo showed incorrect values for the percentage of disk and memory utilization.
#27870 #26964	If the Default (x servers) value of the set of subscribers in a cluster was selected in the Select Server/Domain field at Monitoring > Live Monitoring > Access Tracker > Edit , the selection would revert to the publisher if the date range was changed or if the user navigated to another page.
#27933 #27880	ClearPass sent an Access-Reject packet when the NAD retransmitted the RADIUS packet, even though the Drop enforcement profile was configured.
#28009 #27937	Corrected an issue where, if the publisher and the standby publisher were in different subnets, the standby publisher was not promoted to publisher during a failover.
#28030 #27630	The value in the FQDN field on the Administration > Server Manager > Server Configuration page was not retained after restoring a backup.
#28079	If the Dashboard's default layout was changed to a new layout, a widget that was used in the default layout could not also be used in the new layout until it was removed from the default layout.
#28113	Users should be aware that ClearPass no longer supports uploading custom Nessus plugins at Administration > Server Manager > Server Configuration , because the option was not used and common practice is to use an external Nessus server instead.
#28135 #28130	Corrected an issue where the standby publisher would not take over from the primary publisher if static routes were added.
#28155	ClearPass periodically rejected users if the LDAP connection was passively closed in "User Bind" mode. ClearPass will now try again to establish a new connection to LDAP/AD after a bind fails due to a TCP idle connection being passively closed by remote-end (AD/LDAP/Firewall).
#28205 #26652	Logs were inconsistent in the Access Tracker. The selected column list is now used to query the table data.
#28288	Corrected an issue with performance regression in guest account lookups, where a steady decrease was observed in the number of requests being processed.

Table 38: Policy Manager Issues Fixed in 6.5.1 (Continued)

Bug ID	Description
#28319	If a ClearPass Evaluation license was expired, the login screen advised that it was expired but did not provide an option to update it. An option to update the license is now provided at login.
#28406	OpenSSL is now upgraded to version 1.0.1m. This includes fixes for CVE-2015-0204, CVE-2015-0207, CVE-2015-0208, CVE-2015-0209, CVE-2015-0285, CVE-2015-0286, CVE-2015-0287, CVE-2015-0288, CVE-2015-0289, CVE-2015-0290, CVE-2015-0291, CVE-2015-0292, CVE-2015-0293, CVE-2015-1787.
#28573	Export for an authentication source of the RADIUS Server type failed with a Javascript alert at Configuration > Authentication > Sources .

Dissolvable Agent

Table 39: Dissolvable Agent Issues Fixed in 6.5.1

Bug ID	Description
#27663 #27661	Users had to install a point patch to restore JRE after each update. The JRE installers are included in ClearPass 6.5.1, and can be downloaded from the Java Dissolvable Agent help page after 6.5.1 is installed.

Endpoint Context Servers

Table 40: Endpoint Context Server Issues Fixed in 6.5.1

Bug ID	Description
#27666	Users could not create more than one Google Admin Console type context server. Users can now add multiple context servers of the Google Admin Console type at Administration > External Servers > Endpoint Context Servers .
#27815	Endpoint attribute information was not deleted when a device was reset in Aruba Activate. Endpoint attribute are now deleted from CPPM when the corresponding attributes are deleted in the MDM Context Server.
#28169 #28441	Endpoints could not be retrieved from the Google Admin Console. The "osVersion" attribute is now changed to the "optional response" attribute in the MDM Connector.

Guest

Table 41: Guest Issues Fixed in 6.5.1

Bug ID	Description
#27981	Operator profile permissions were not applied correctly to the Guest > Manage Accounts page (report_users).
#27999	The PHP version is now upgraded to 5.5.22. This includes fixes for CVE-2015-0231, CVE-2015-0235, CVE-2015-0273, CVE-2015-2305, and CVE-2015-2331.
#28200	Viewing an operator profile on a subscriber node would display an error instead of the expected list of roles.
#28356	Corrected an issue with performance regression in guest account lookup.

Insight

Table 42: *Insight Issues Fixed in 6.5.1*

Bug ID	Description
#27245 #28045	When a CPPM session was active, idle session timeout for Insight did not take effect.
#27597 #28028	The Insight search utility did not correctly display an error message if a user searched for a device by username, but no username data existed.
#27741	Insight did not send email notifications for reports if the SMTP auth-method was CRAM-MD5.

Onboard

Table 43: *Onboard Issues Fixed in 6.5.1*

Bug ID	Description
#27985	Corrected an issue with double-escaping in certain Onboard list views.
#28171	Corrected an issue that produced a SQL error in the Onboard > Management and Control > View by Device page when a device without a MAC address was present in the database.
#28194	Corrected a creation error for the QuickConnect package that sometimes occurred while a background cluster operation was running.

OnGuard

Table 44: *OnGuard Issues Fixed in 6.5.1*

Bug ID	Description
#27668	OnGuard did not select the correct patch management application on a system where two patch management applications were installed.
#28075	The ClearPass OnGuard Unified Agent for Windows could not perform health checks if the hostname included Chinese characters.
#28210	Certificate store access failed after updating the certificate. VIA now displays a certificate selection window if a previously-selected certificate is either expired or deleted.

Fixed in 6.5.0

The following issues were fixed in the 6.5.0 release.

Policy Manager

Table 45: *Policy Manager Issues Fixed in 6.5.0*

Bug ID	Description
#20280	CPPM license usage counters in Graphite were not available on ClearPass 6.3.x.
#20639	The “ Guest Access - Web Login PreAuth ” and “ Onboard Authorization - RADIUS ” service templates were removed. These two templates were replaced by the Onboard template.
#20788	Corrected a RADIUS server issue where <code>rlm_device_sensor</code> crashed if a burst of accounting requests was sent that included device sensor information.
#21874	The Event Viewer page displayed an incorrect authentication count when the node authentication capacity exceeded the licensing limit. The error was in the authentication count which was same as the license capacity instead of the actual authentication count.
#22057	A device could not be disconnected after an AirGroup authorization request was received from the client.
#22910	The Access Tracker on the publisher would hang if one of the subscribers was down. An error message is now shown to let the user know if the nodes selected in the Access Tracker are unreachable, so the user can remove the node and execute it again.
#23851	The Active Sessions data filter query that is used to get authentication details is now optimized to retrieve information more quickly.
#24141	CentOS is now updated to version 6.6. This provides fixes for the kernel vulnerability CVE-2014-2523.
#24397	Using certificate namespace attributes in authentication source filters caused AD lookups to fail.
#24423	Mobile devices could not be polled from JAMF. The JAMF connector configuration is now reset after each poll.
#24484	ClearPass could not be accessed through the CLI because logs used too much disk space. To fix this issue: <ul style="list-style-type: none">• The new 'system cleanup' command performs on-demand cleanup.• The 'system sysinfo' command provides information on the disk and memory utilization.• The system checks the disk utilization every hour and purges data if the configured disk threshold is met.
#24674	Incorrect error messages were shown after OCSPP responses without nonce were rejected. The appropriate messages are logged now when OCSPP checks fail.
#24783	The CURL library is now updated to 7.19.7-37.3. This includes fixes for CVE-2013-4545.
#25112	ClearPass 6.5.0 now supports extended network traffic counters for database traffic (port 5432) and HTTP and HTTPS web traffic (ports 80 and 443) between the nodes in the cluster. These counters also increment during cluster operations that add or drop a subscriber, or promote a subscriber to a publisher.
#25191	The event viewer failed to show an accurate SMTP delivery status for an email sent using the Send Test Email action on the Administration > External Servers > Messaging Setup page.
#25197	This release includes fixes for a vulnerability issue where the CPPM version was displayed during the

Table 45: Policy Manager Issues Fixed in 6.5.0 (Continued)

Bug ID	Description
	launch of an SSH session in CPPM before authentication completed.
#25202	A space after a comma in a comma-separated whitelist host header configuration sometimes caused the HTTPD service to stop.
#25305	Users were not able to filter the endpoint repository using an attribute name with '_' .
#25714	Users were not assigned the correct user role after a subscriber in a multi-node cluster was promoted to a publisher.
#25732	Endpoint cache entries did not update correctly when endpoints were manually deleted in bulk.
#25733	Some of the guest accounts did not authenticate after CPPM was upgraded to the latest version.
#25737	The event viewer now logs start and end events for subnet scans for static IP device discovery, providing enhanced visibility into the subnet scan process.
#25744	Corrected an issue where the error message “Can’t contact LDAP server” was shown intermittently. CPPM will now reconnect once to the LDAP/AD server if the bind fails with the error code LDAP_SERVER_DOWN during authentication.
#25860	The Policy Server service parameter "Authentication Cache Timeout" is removed in this release, because Policy Manager does not use this parameter anymore.
#25878	Corrected an intermittent issue where users could not update the management/data port gateway IP address.
#25916	In the CPU Load screen, the Y-axis was labeled incorrectly. The CPU Load Y-axis now displays "Load Average" instead of "Percentage."
#25983	The “Use Full Username” option is now supported for Palo Alto Networks UID updates.
#26048 #25196	OpenSSL is now upgraded to the latest version available. This includes fixes for CVE-2014-3511, CVE-2014-3566, CVE-2014-3567, and CVE-2014-3568.
#26057	A warning message was not displayed when the RADIUS certificate expiration would occur within 30 days. The warning is now correctly displayed when the RADIUS certificate is about to expire.
#26112	The Dashboard’s Quick Links widget pointed to an incorrect link if Configuration > Network > Devices or Administration > Server Manager > Server Configuration was selected.
#26178	The administrator was unable to insert a service in the OnGuard Posture Plugin configuration if the service name included special characters.
#26182	The Analysis & Trending page showed an incorrect correlation of authentication count and time. This occurred only if the user changed the time duration scale.
#26279	Authentications sometimes failed against an AD/LDAP server if the length of the user DN exceeded 255 characters.
#26370	Mobile devices were not updated from JAMF. The JAMF MDM connector configuration is now reset after each poll.
#26377	Reject requests were not shown in red in the Access Tracker.

Table 45: Policy Manager Issues Fixed in 6.5.0 (Continued)

Bug ID	Description
#26412	CLI-based enforcement failed on extreme switches.
#26499	Any changes made to the cluster password caused the syslog queries to the database to fail.
#26519	If a disabled node was part of a VIP configuration and it is in Enabled status during a “join back to cluster” operation, then VIP service will be started automatically after the node joins back to the cluster. The VIP service will be started after the node is made a subscriber and before it is promoted to publisher (if that is selected).
#26660	Corrected a spacing issue between the application name and text in the Clearpass UI.
#26717	<p>When configuring an SMTP mail server for email notifications with SSL enabled, server certificates were not validated. Server certificate validation is now added for SMTP configuration with Connection Security set to SSL.</p> <p>To fetch Server Certificates, use the following configuration:</p> <ol style="list-style-type: none"> Go to Administration > External Servers > Endpoint Context Servers > Add. On the Server tab, use the following values: <ul style="list-style-type: none"> Select Server Type = Generic HTTP Server Name = smtp.gmail.com Server Base URL = https://smtp.gmail.com:465 Validate Server = Mark the Enable check box to validate the server certificate. <p>This fetches the server certificate, and a Certificates tab is added to the form, where you can see the certificate listed.</p> Click Save.
#26723	Downloading skins from the Administration > Agents and Software Updates > Software Updates page failed with a Download Stuck error.
#26745	The error message that was displayed at Monitoring > Event Viewer did not provide enough information when a RADIUS server failed to start due to an expired server certificate.
#26850	This release includes fixes for CVE-2015-1389, a cross-site scripting vulnerability that could permit an unauthenticated user to inject script code that could be executed by a ClearPass administrator while inside an administrative session.
#26891	Corrected an issue with server certificate validation by retrieving the Certificate Extension Values like Subject Key Identifier and Authority Key Identifier while the Certificate Chain for Radius Server Certificate and Https Server Certificate were being built.
#26933	Users should be aware that, during upgrade to 6.5, the AntiVirus check in the Linux Posture Policy will not be restored by default. The administrator must manually reconfigure AntiVirus checks for Linux systems if they are required. A message is now displayed in the UI advising the user of this.
#26946	<p>Performance is now improved for Active Directory error handling. Now the Domain Service is not restarted when authentication fails with the following error codes:</p> <ul style="list-style-type: none"> ● 0xC000006D - STATUS_LOGON_FAILURE ● 0xC000006E - STATUS_ACCOUNT_RESTRICTION ● 0xC000006F - STATUS_INVALID_LOGON_HOURS ● 0xC0000071 - STATUS_PASSWORD_EXPIRED ● 0xC0000072 - STATUS_ACCOUNT_DISABLED ● 0xC0000064 STATUS_NO_SUCH_USER ● 0xC000006E STATUS_ACCOUNT_RESTRICTION ● 0xC000006C STATUS_PASSWORD_RESTRICTION ● 0xC000006A STATUS_WRONG_PASSWORD ● 0xC0000193 STATUS_ACCOUNT_EXPIRED ● 0xC000006F STATUS_INVALID_LOGON_HOURS

Table 45: Policy Manager Issues Fixed in 6.5.0 (Continued)

Bug ID	Description
	<ul style="list-style-type: none"> 0xC0000234 STATUS_ACCOUNT_LOCKED_OUT 0xC0000224 STATUS_PASSWORD_MUST_CHANGE
#27103	Attempting to integrate a Vasco Identikey Authentication server with Clearpass 6.5.0 using Vasco as a Radius Authentication source failed. The RADIUS server is now modified to integrate with the Vasco IdentiKey Authentication Server.
#27171 #27112	CPPM updates to PANW did not update the NETBIOS name for users.
#27298	This release includes fixes for multiple cross-site scripting vulnerabilities that existed within ClearPass and that could be used by one authenticated administrative user to inject script code into the session of another administrative user.
#27336	The IPSec tunnel was not reestablished when configuration parameters such as the IKE version or hash algorithm were modified.
#27342	Usage of port 4231 in the External Netevent Target URL is removed in 6.5. To specify an external Insight server, use http://<CPPM-IP-Address>/netwatch/netevents in the Target URL.
#27497	If the default "admin" or "apiadmin" account's name or user ID was changed, it reverted to the default after upgrade. ClearPass now gives a validation error in such cases. Users should be aware that ClearPass 6.5.0 does not support any changes to the name or ID of the default admin user (admin, apiadmin). If these values were changed in previous versions of ClearPass, they will be reset to their original default values upon upgrading to ClearPass 6.5.0. (The password will be carried forward as in the previous version.)
#27532	The glibc package was updated. This includes fixes for CVE-2015-0235.
#27857	Users should be aware that, to enable upgrade from 6.2 or 6.3 now that the 6.5 upgrade image is DER-signed, the CPPM-x86_64-20140919-cli-der-support patch update is now required before upgrading from ClearPass 6.2.6 or 6.3.6 to 6.5.0. The patch is available in the Software Updates portal and the support site.

AirGroup

Table 46: AirGroup Issues Fixed in 6.5.0

Bug ID	Description
#26361	Corrected an issue where a dot (".") character was not permitted in an AP-Name used for AirGroup sharing rules.

CLI

Table 47: CLI Issues Fixed in 6.5.0

Bug ID	Description
#25669	Users should be aware that the 'network app' command is now deprecated in the CLI as it is no longer needed.

Dissolvable Agent

Table 48: *Dissolvable Agent Issues Fixed in 6.5.0*

Bug ID	Description
#25871	Users should be aware that the Java-based OnGuard Dissolvable Agent does not display remediation results unless the latest version of Java is installed on the client. This is the expected behavior, and reflects ever-changing Java security policies. The latest Java version is always required in order to perform client health checks.
#27239	The Native Dissolvable Agent for Mac OS X displayed the warning “ Identity of the developer cannot be confirmed ” during launch.

Endpoint Context Servers

Table 49: *Endpoint Context Server Issues Fixed in 6.5.0*

Bug ID	Description
#24170	CPPM was unable to fetch Endpoints from Maas360. This issue was observed only for endpoints that had wired interfaces.
#25470	Improvements to the requests library resolved an issue where the Clearpass server was unable to retrieve information from an MDM simulated server when proxy was configured on the CPPM Server.
#25498	All endpoint types were downloaded from Aruba Activate, even though a filter for Aruba Active MDM was configured in Administration > External Servers > Endpoint Context Servers that limited the download to remote and instant APs.
#26996	Corrected an issue that occurred while configuring Administration > External Servers > Endpoint Context Servers .The ClearPass Cloudy Proxy option listed in the Server Type drop-down list is now disabled.
#27005	An issue with multiple occurrences of TCP connections while polling MDM Servers from MDM Connector was resolved by upgrading the library.
27640	Additional ContextServers could not be added if the same ServerName was used for both and the base URL was different. The ServerName can now be configured as the proper HostName or IP address for MDM ContextServers.

Guest

Table 50: *Guest Issues Fixed in 6.5.0*

Bug ID	Description
#14368	Page action links were not displayed correctly if a custom skin was used as the non-default skin.
#19568	Database errors occurred when RADIUS accounting data was sent to a server that did not process the RADIUS authorization (access-request). This issue was triggered when a session had RADIUS accounting data but did not match any authentication records.
#22011	Firefox could not save or auto-complete passwords. This prevented the username and password of the operator be auto-filled in various configuration forms, such as the Edit Account form.
#25135	Guest sponsorship approval could be incorrectly configured to allow role override when operator authentication was disabled.

Table 50: Guest Issues Fixed in 6.5.0 (Continued)

Bug ID	Description
#25327	Unwanted JavaScript appeared in emails when certain skins were used.
#25339	Messages sent using the SMS Global SMS gateway were not encoded according to the gateway's requirements.
#25343	This release includes fixes for CVE-2014-6628, a vulnerability issue that permitted an authenticated administrative user to execute arbitrary uploaded code on the underlying operating system with the privilege level of the Web server. As part of this fix, the ability to run PHP within Guest's custom pages has been removed. If you previously ran PHP from Content Manager or within a login or registration page, you should contact Aruba Support for assistance.
	The ability to run PHP within the custom pages for ClearPass Guest has been removed.
#25639	The contents of folders under CPGuest > Config > Content Manager > Public could not be deleted.
#26103	The initial state of the account was incorrect if a role override for sponsored registrations was set to [Prompt].
#26258	The value for the IdP-Cookie-Timeout-Mins attribute was applied as seconds instead of minutes.
#26327	To improve performance of Web login pages, Advertising Services can now be selectively enabled or disabled from either Configuration > Pages > Web Logins or Configuration > Pages > Guest Self-Registrations > Master Enable .
#26371	Operating as a SAML Identity Provider (IdP) failed due to browser redirection issues.
#26400	Changing a guest account role on the Guest > Manage Accounts > Edit Account form did not trigger an appropriate CoA request for active sessions. To configure CoA requests to handle changes in guest roles, the admin must create CoA profiles in the correct format: <ol style="list-style-type: none"> At Policy Manager > Configuration > Enforcement > Profiles > Add, on the Profile tab, select RADIUS Change of Authorization (CoA) in the Template drop-down list. In the Name field, the name entered for the profile must include the exact role name in square brackets. For example, for the role "[Guest]", the profile name might be "My Company [Guest] CoA". On the Attributes tab, select Aruba - Change-User-Role in the Select RADIUS CoA Template drop-down list. Click a row and add an attribute with the Type as Radius:IETF, and for the Value enter the role name, but without the square brackets this time.
#26401	On Guest > Manage Devices , disabling or deleting an account did not disconnect an active session for the device. Disabling or deleting a device account now triggers a session disconnect for all active sessions associated with the account.
#26444	Enabling a Web login security hash did not work for Apple devices. Devices are now verified and authenticated successfully when the same hash is present in the Web login and the controller.
#26489	A RADIUS CoA from Active Sessions did not work due to proxy settings being used incorrectly by internal communications.
#26889	On the Active Sessions list, if the Role column was added, it was not populated with the authenticated devices. The Role column now shows the device's role for authenticated devices. If there is a CoA, however, this column is not updated.
#26941	This release includes fixes for CVE-2015-1551, a vulnerability that permitted an authenticated administrative user to read information which he or she may not be authorized to read by uploading content which exploits a bug that fails to enforce proper file path restrictions.

Table 50: Guest Issues Fixed in 6.5.0 (Continued)

Bug ID	Description
#27273	Device accounts that are paired with guest accounts that require sponsorship are now updated when sponsorship confirmation is received.
#25368 #26073 #26393 #27050 #27478	The PHP version is now updated to 5.5.21. This includes fixes for CVE-2014-2497, CVE-2014-3538, CVE-2014-3587, CVE-2014-3597, CVE-2014-3668, CVE-2014-3669, CVE-2014-3670, CVE-2014-3710, CVE-2014-4698, CVE-2014-4670, CVE-2014-5120, CVE-2014-8142, CVE-2014-9427, CVE-2015-0231, and CVE-2015-0232.
#27506	The active session was not disconnected for the user if the expiration time was set to "now". For an active session, a role-change CoA attempt will be made if there is an applicable profile, and no CoA will be sent if the user expiration time is extended.
#27595	The bypass CNA configuration sometimes failed on the subscriber.
#27606 #27607	If a proxy was configured, ClearPass Guest used it incorrectly when contacting the publisher. ClearPass requires direct access to all other servers in the cluster.
#27628	The random password generator allowed some inappropriate words.

Insight

Table 51: Insight Issues Fixed in 6.5.0

Bug ID	Description
#20096	Authentication records could not be updated in the auth table of the Insight DB. To fix this issue, the 20-character limit for the field has been removed and the data type of the "ip" column is changed to Text.
#25306	Headers on a PDF report were not displayed correctly. Column headers are now displayed only at the beginning of the table.
#25476	Uploaded Images were not correctly displayed in Insight reports in PDF and HTML formats.
#26157	Corrected an issue where including special characters (such as the '=') in a cluster password caused upgrades to fail.
#26988	This release includes fixes for CVE-2015-1550, a vulnerability that permitted an authenticated administrative user to execute arbitrary uploaded code on the underlying operating system with the privilege level of the Web server. As part of this fix, report names now cannot contain characters such as a slash (/) or two sequential periods (..).
#27300	This release includes fixes for CVE-2015-1392, multiple SQL injection vulnerabilities that existed within ClearPass. An administrative user with a lower privilege level could have leveraged these vulnerabilities to read information that should only be available at a higher privilege level.

Onboard

Table 52: *Onboard Issues Fixed in 6.5.0*

Bug ID	Description
#21010	Auto-reconnect is not supported for Mac OS X, and the Provisioning Settings forms are updated to reflect this.
#24553	When you connect to ADCS to issue an Onboard certificate, the server certificate is verified against the CPPM Trust list.
#24879	The ClearPass Endpoint profile now correctly displays the device family for Ubuntu and Chromebook devices.
#25132	The iOS Settings > Settings Type > Create and Cancel buttons both initiated the Create function. The Cancel button now works correctly.
#25291	To address an issue where Mac OS X systems with no airport card failed onboarding with a "Profile installation failed" error, the console application now displays the error message "mdmclient: No wireless interface was found." Users should be aware that configuring wired networks with Mac OS X is only supported when the Mac has a Wi-Fi adapter (AirPort card or similar), otherwise the profile installation will fail with the message "Profile installation failed. The 'Wi-Fi Network' payload could not be installed. The Wi-Fi network either could not be found, or could not be connected. You may need to try to reconnect at a later time." This is due to system limitations of Apple's device provisioning process.
#25364	Corrected an issue that prevented the generation of EC keys in Onboard.
#25484	The requirement to have a network configured to enroll Chromebook devices in Onboard has been removed, since there is no network configuration done on Chromebook.
#25667	An incorrect signature algorithm was used with certificates using the SHA-2 family of signature algorithms.
#25671	The default configuration for a newly installed or created Onboard Certificate Authority (CA) is updated to use the SHA-512 digest algorithm. The SHA-1 cryptographic hash algorithm is not recommended for SSL or code-signing certificates. Its use is being deprecated by major providers, and it will soon be untrusted for code-signing certificates. More information is available at sites such as http://googleonlinesecurity.blogspot.com/2014/09/gradually-sunset-sha-1.html and http://blogs.technet.com/b/pki/archive/2013/11/12/sha1-deprecation-policy.aspx .
#25812	The Onboard device incorrectly displayed the marketing model names of iOS devices instead of the internal product numbers of the device.
#25909	A Windows client failed to sign the Aruba QuickConnect application in FIPS mode.
#26350	Options to control reconnect behavior are no longer included in the Provisioning Settings form. For iOS, reconnect behavior is now automatic when Insight is enabled and the same SSID provisioning is used, and is disabled otherwise.
#26558	The UI navigation to Onboard > Deployment and Provisioning > Provisioning Settings did not work correctly when the Aruba ClearPass skin was used.
#26601	Onboard incorrectly displayed a warning message about RADIUS server certificates missing the id-kp-eapOverLAN key usage even when the server certificate specified "Any Extended Key Usage".
#27349	Onboard enrollment failed against the latest version of ADCS on Windows 2008.
#27365	For non-Apple devices, the device type was displayed as "None" if ADCS was used for issuing client certificates. When signing a client certificate with ADCS, Onboard now records the device information

Table 52: Onboard Issues Fixed in 6.5.0 (Continued)

Bug ID	Description
	against the certificate, even when the certificate itself does not embed this information.
#27369	Duplicate device entries sometimes caused re-enrollment to fail.
#27455	When SSO was configured for Onboard, the “Unsupported Device” informational text was not displayed correctly. Error messages are now correctly displayed when SSO is configured.
#27746	QuickConnect.exe could not be downloaded successfully on legacy versions of Internet Explorer.

OnGuard

Table 53: OnGuard Issues Fixed in 6.5.0

Bug ID	Description
#6012	The ClearPass OnGuard Unified Agent for Windows now categorizes virtual Interfaces such as VMware Network Adapter VMnet8 as Other instead of Wired .
#20279	On Mac OS X, the ClearPass OnGuard Unified Agent’s Quit and Force Quit options sometimes did not work and the machine would not restart.
#25081	The Access Tracker showed a status of Service even after the Service was removed from the Posture Policy configuration.
#25843	A disk encryption check failed due to a trailing backslash character (\) in the location path.
#25848	Network administrators were unable to uninstall OnGuard silently (without startup confirmation or uninstall status messages) using an MSI package.
#25906	The ClearPass OnGuard Unified Agent failed Disk Encryption Checks for PGP on Mac OS X.
#26275	On Mac OS X 10.10, after changing the mode on the CPPM server the ClearPass OnGuard Unified Agent would not relaunch.
#26300	The ClearPass OnGuard Agent now performs health checks every time system wakes up from hibernation/sleep mode.
#26369	The ClearPass OnGuard Unified Agent caused delays in loading the desktop after rebooting the Windows OS.
#26513	The Native Dissolvable Agent for Windows did not send health for Windows Security Health Validator.
#26613	The following method has been added for mass deployment environments that need MSI based solution to uninstall. (msiexec /i ClearPassOnGuardInstall.msi CLEANUP=1 /q)
#26669	The ClearPass OnGuard Unified Agent was unable to detect Casper Suite Patch Agent.
#26808	The ClearPass OnGuard Unified Agent was unable to detect Korean applications for the Installed Applications Health Class in the Korean Windows OS.
#26844	The ClearPass OnGuard Unified Agent in the OnGuard Activity > Bounce Agent option displayed an incorrect message in the Korean language.
#27011	The ClearPass OnGuard Unified Agent displayed an incorrect disk encryption state while using FileVault.

Table 53: *OnGuard Issues Fixed in 6.5.0 (Continued)*

Bug ID	Description
#27183	The ClearPass OnGuard Unified Agent for Mac OS X was not able to launch processes while performing auto-remediation of the Processes health class on Mac OS X 10.10.
#27207	A user could not log in to ClearPass using a client certificate with a chain length of more than one. The depth of the client certificate chain validation has now been increased.
#27374	During installation of the ClearPass OnGuard Unified Agent, the message “Windows cannot verify the publisher of this software” was displayed.

QuickConnect

Table 54: *QuickConnect Issues Fixed in 6.5.0*

Bug ID	Description
#21736	The ClearPass QuickConnect application on an Android device no longer displays errors when a user manually launches the application and selects a configured network.
#25216	Corrected an issue where Onboarding failed for Mac OS X 10.6.8.
#25323	Onboarding failed on a Korean Windows system when virtual interfaces were present.

The following known issues for this release were identified in previous releases. Workarounds are included when possible. For a list of known issues identified in the ClearPass 6.5.5 release, see the [What's New in This Release](#) chapter.

Policy Manager

Table 55: *Known Issues in Policy Manager*

Bug ID	Description
#10881	Entity updates with PostAuth enforcement fail if the publisher is down.
#11744	Symptom: Upgrading from 5.2 to 6.x fails if CPPM is joined to the domain. Scenario: The issue will not be seen if the latest cumulative patch is installed before performing the upgrade.
#11906	Symptom: The Aruba dictionary becomes disabled by default after upgrading from Policy Manager 4.x to 6.0.1. Workaround: Customers who run into this issue must enable the Aruba dictionary manually from the Administration > Dictionaries page.
#12316	Syslog Filters and Data Filters configuration will be removed after an upgrade. Policy Manager does not carry forward Syslog Filters and Data Filters configuration. Only default data is migrated.
#13645	Authorization attributes are not cached for the Okta authentication source.
#13781	Symptom/Scenario: In the 6.1 release, the default unit for the CRL update interval was changed to "hours" from an earlier default unit of "days". Restoring a 5.x backup on CPPM 6.x causes the update interval to be "hours". For example, "2 days" in 5.2.0 becomes "2 hours" in 6.1.0. Workaround: Manually change the value in days to the value in hours. In the above example, that would be 48 hours.
#13999 #13975	In order to add or update a PostAuth profile configuration, the admin must first delete old profiles from CPPM, and then add the new/updated profiles.
#14186	Symptom: Post auth doesn't work properly for UNKNOWN endpoints in a MAC Authentication Bypass (MAB) flow. Scenario: This has been observed if the user tries to connect using an endpoint that is unknown to CPPM.
#14190	Symptom: Blacklisted MAC Authentication Bypass (MAB) users cannot be blocked using the Blacklist User Repository. Workaround: In order for post auth to work in a MAB flow, a new blacklist repository must be added with a custom filter.
#17232	Symptom/Scenario: The error and warning messages returned by the Web service are displayed in English instead of the localized language.
#18064	Symptom: AirWatch custom HTTP actions needs content even though it's not required. Scenario: For AirWatch MDM, custom-defined HTTP actions such as Lock Device or Clear Passcode fail with error messages. This is due to a bug in AirWatch. Workaround: Do either of the following: <ul style="list-style-type: none"> • Add a header Content-Length:0 in the Context Server Action.

Table 55: Known Issues in Policy Manager (Continued)

Bug ID	Description
	<ul style="list-style-type: none"> Add a dummy JSON data {"a":"b"}.
#18701	Symptom/Scenario: Performing an AddNote operation using AirWatch as the MDM connector fails in CPPM. This is due to a bug in AirWatch.
#19176	CPPM does not currently support posting of Palo Alto Networks (PANW) user ID information when the PAN OS uses Vsys.
#19826	Palo Alto Networks (PANW) devices will only accept the backslash character (\) as a separator between the domain name and the username.
#20292	Symptom/Scenario: On the Monitoring > Live Monitoring > System Monitor page, the Last updated at field displays time based on the time zone of the ClearPass node where the user is viewing the page.
#20383	The system posture status may still be maintained after Post Auth agent disconnect action. This is likely to happen when Posture result cache timeout service parameter is higher than the Lazy handler polling frequency.
#20416	Symptom: The Palo Alto Networks (PANW) operating system firewall rejects user ID updates from CPPM when the user ID limit is reached on the firewall. When this happens, user ID updates are rejected with errors. Scenario: This occurs when the PANW firewall exceeds its supported limit advertised for user ID registration. Workaround: There is no workaround at this time.
#20453	In order for CPPM to have complete data to post to Palo Alto Networks devices in HIP reports, profiling must be turned on. This is the expected behavior.
#20455	Symptom/Scenario: When doing an SSO & ASO flow in Safari browsers, the certificate needs to be added in the trust list of the browser. Workaround: Please follow these steps: <ol style="list-style-type: none"> 1. Open the Safari browser and enter the SP URL. 2. After you enter the SSO application in the browser, the Show Certificate option is provided in a popup window. 3. Click Show Certificate and select the "Always trust 'FQDN of SP machine' when connecting to IPaddress" check box, and then click the Continue button.
#20456	Symptom: SNMP bounce fails. Scenario: When only the SNMP bounce in the SNMP Enforcement profile of a Web auth service is configured, SNMP bounce functionality does not work. Workaround: Also configure a VLAN ID along with the SNMP bounce in the SNMP enforcement profile.
#20484	Symptom: Dropping the Subscriber and then adding it back to the cluster may fail at times. Scenario: CPPM system time might not have been synchronized with an NTP source. Workaround: Configure an NTP server. CPPM will synchronize its time with the NTP source. Attempt the cluster operation.
#20489	Symptom/Scenario: CPPM 6.3 does not allow a server certificate with a Key Length of 512 bits as seen in the Self-Signed Certificate and Certificate Signing Request UIs. Earlier CPPM versions did not have this restriction, hence their server certificate may use one with a 512 bit Public Key. After upgrade, these servers will not work properly. Workaround: The admin must manually fix the server certificate to allow a minimum of 1024 bits long Public Key prior to upgrade.
#20943	Symptom/Scenario: After upgrading from 6.2.0 to 6.3.0, the Workspace Attributes under Service

Table 55: Known Issues in Policy Manager (Continued)

Bug ID	Description
	Rules, Role Mapping, and Enforcement Policy Rules are not updated. In 6.2, under Enforcement Policy > Rules , the WorkSpace Dictionary Items are used with Application:WorkSpace:<Attribute>. In 6.3 this is changed to Application:ClearPass:<Attributes>.
#21334	<p>Symptom: CPPM does not launch.</p> <p>Scenario: The ClearPass user interface will not launch from Firefox or from older versions of Internet Explorer (IE) browsers if an EC-based HTTPS server certificate is used. On Firefox, the error message "Secure Connection Failed. An error occurred during a connection to <server>. Certificate type not approved for application" is displayed. On older versions of IE, the error message "Internet Explorer cannot display the Web page" is displayed.</p> <p>Workaround: Use the latest version of IE, or the Chrome browser instead.</p>
#22023	<p>Symptom/Scenario: Launching the customer's ClearPass user interface through a proxy does not work on the Internet Explorer or Safari browsers.</p> <p>Workaround: Use the Chrome or Firefox browser instead.</p>
#23581	<p>Symptom: A database connection error occurs in the Access Tracker UI when it is updated to 6.3.2 with MD2 server certificates.</p> <p>Scenario: This is a database connection problem because of the MD2 certificate available for PostgreSQL. MD2 is not supported.</p> <p>Workaround: After updating to 6.3.2 (patch installation from 6.3.0), if Access Tracker or Analysis & Trending show errors relating to database query errors, it can be due to an invalid Server Certificate.</p> <ol style="list-style-type: none"> 1. Go to Server Certificate and select the certificate for the server and RADIUS service. 2. Click View Details for each certificate in the chain. 3. Look for the Signature Algorithm and check to see if it uses MD2. 4. Download the certificate that is MD5 or SHA1-based algorithm to replace the MD2 algorithm from the corresponding Certificate Authority site. 5. From the Support shell, restart the cpass-postgresql service.
#23625	<p>Symptom: Restoring the log DB in 6.3.2 overwrites existing event viewer entries.</p> <p>Scenario: In 6.3.2, restoring the log database alone (without configuration database restoration) from a backup results in the Event Viewer entries being overwritten with the ones from the backup. This has occurred in cases where the log database is restored manually after the upgrade.</p> <p>Workaround: There is no workaround at this time.</p>
#23848	<p>Symptom: The ClearPass server's time setting might sometimes be off by as much as eight hours.</p> <p>Scenario: This is due to a known issue with VMware tools, which periodically checks and synchronizes time between the host and the guest operating systems. This issue is documented by VMware at http://pubs.vmware.com/vSphere-50/index.jsp?topic=%2Fcom.vmware.vmttools.install.doc%2FGUID-C0D8326A-B6E7-4E61-8470-6C173FDDF656.html.</p> <p>Workaround: There is no workaround at this time.</p>
#24646 #24919 #26698 #27379 #27568	<p>Symptom/Scenario: There are some issues on Internet Explorer 9 (IE 9), including:</p> <ul style="list-style-type: none"> • The login banner is not centered and the footer is not placed at the bottom of the page. • The IE browser fails to display an error message if connectivity is lost with the ClearPass Policy Manager server. • The scroll function does not work in the pop-up that opens from the Monitoring > Audit Viewer page. • ClearPass Policy Manager and Insight do not work properly on IE 9. • The Save operation gets stuck when you try to save the server configuration changes using the IE browser. <p>Workaround: Use IE 10 or IE 11 or the Firefox or Chrome browsers instead. Users should be aware that ClearPass supports IE 10 and later on Windows 7 and Windows 8.x.</p>
#24781	Palo Alto Networks (PANW) devices accept only the backslash (\) character as a separator between the domain name and the username. If the update uses an "at" sign (@) between the domain name

Table 55: Known Issues in Policy Manager (Continued)

Bug ID	Description
	and the username, the HIP report will not be shown in PANW.
#25211	Symptom/Scenario: When messages are sent using the Send Message option, messages are not received on the end points enrolled with SAP Afaria MDM Server.
#25720	Symptom/Scenario: The Dashboard shows the server as being down if an HTTPS server certificate is signed by OnBoard CA using SHA-256. Workaround: Be aware that SHA1 RSA is not recommended for security reasons. You must update your certificates to use stronger keys, such as RSA with > 1024 bits length.
#27306	Whenever IPsec configuration is changed on either end of the tunnel (Wireless Controller or ClearPass), after the changes, the ClearPass IPsec service should be restarted in ClearPass from Services Control to establish the IPsec tunnels reliably. After restart, verify the status of the IPsec tunnel from the Network tab at Administration > Server Manager > Server Configuration .
#27592	Symptom: SAML-SSO using TLS certificate does not work in Firefox or Safari browser. Workaround: Use alternate browsers such as Google Chrome or IE.
#27621	Symptom: The number of authentications per second for non-MSCHAPv2 methods is reduced when the Local User or Admin User authentication sources are used. Scenario: Local and admin user passwords are now stored as non-reversible PBKDF2 based hashes. A side-effect of this change is reduced performance in password-based authentications (for example, PAP, GTC, WebAuth, or TACACS+) against the Local User and Admin User authentication sources. Refer to product documentation for the latest performance numbers. Authentications against external authentication sources such as AD or external SQL are not affected by this change.
#27737	Symptom/Scenario: Session Restriction Enforcement is not converted to Session Notification if Session check User name is configured. Workaround: Configure a new Session Notification Enforcement as shown below and associate it with the service: <ul style="list-style-type: none"> ● Session-Notify Server Type = Palo Alto Networks Firewall ● Session-Notify Server IP = <IP ADDRESS> ● Session-Check Username = %{Endpoint:Username}
#27745	Symptom: Some CPPM Dashboard widgets do not work properly. Scenario: On the CPPM Dashboard, some widgets (for example, All Requests) do not display information correctly when dragged onto the Dashboard windows. This happens with the Internet Explorer 9 browser. Workaround: Use the Firefox or Chrome browser instead.
#27895	Users should be aware that, because of schema changes now that ClearPass supports storing irreversible passwords, any import of old authentication sources using XML files will break the required SQL filters. Avoid any import of old authentication source configuration as this causes authentication failures for guest users and admin users.
#27903	Symptom/Scenario: Trying to upgrade from 6.2.6 to 6.5.0 using the Import Updates option on the Software Updates portal does not work, and the error message “Uploaded file is invalid...” is displayed. Workaround: Use either the CLI or Web server option instead to perform the upgrade.
#27908	If you will be upgrading through the CLI and are upgrading from 6.4.0 or 6.4.1, you must update to 6.4.2 or later before upgrading to 6.5. This is due to the changes in the signing mechanism of the updates and upgrade images. Prior to updating to 6.4.2, you must first download and install the 6.4.0 CLI updates patch. At support.arubanetworks.com, go to Download Software > ClearPass > Policy Manager > Current Release and select CPPM-x86_64-20140919-cli-der-support-patch . If you are upgrading through the Software Updates portal in the Policy Manager user interface, or

Table 55: Known Issues in Policy Manager (Continued)

Bug ID	Description
	through the Web service, upgrade is supported for any 6.4.x version.
#27922	<p>Symptom: TACACS/WebAuth authentication fails and shows an internal error.</p> <p>Scenario: In some upgrade cases the services might not come up properly on subscriber nodes, resulting in Webauth/TACACS Authentication Failures. The Access Tracker > Session Details form shows the internal error message "Failed to authenticate user",</p> <p>Workaround: Manually restart the corresponding services that cause the failures.</p>
#28417	<p>Symptom: Updating the DNS settings through the UI causes the application to hang and the error message "Error processing request. Please retry" is displayed.</p> <p>Scenario: If the DNS settings are updated at Administration > Server Manager > Server Configuration, all services are restarted and the UI session is lost.</p> <p>Workaround: Wait a moment to let the Admin server restart, and then refresh the UI and log in again.</p>
#28575	<p>Symptom: The Edit and Delete actions in service templates might not work.</p> <p>Scenario: This happens only for services created in 6.4.x and after upgrade to 6.5.0.</p> <p>Workaround: Service and related entities should be edited or deleted manually.</p>
#28991	<p>Symptom: Endpoint context server updates fail after Palo Alto Networks firewall is upgraded to PAN-OS 7.0.</p> <p>Scenario: This affected PAN-OS 7.0 as well as in Panorama 5.1 and later releases.</p> <p>Solution: This issue was tracked by Palo Alto Networks under bug 80993 and resolved in PAN-OS 7.0.2. For additional details see https://www.paloaltonetworks.com/documentation/70/pan-os/pan-os-release-notes/pan-os-7-0-2-addressed-issues.html.</p>
#29995	<p>Symptom: Installing the 6.5.3 update might fail if the boot partition does not meet the free space requirements that are required by this update.</p> <p>Workaround: If this occurs, please contact Support to resolve the issue and retry the update.</p>
#30902	<p>Symptom: Taking a snapshot of a ClearPass virtual machine from the VMware vSphere client fails in EXSi 5.5 environments.</p> <p>Scenario: When a ClearPass 6.5.4 virtual machine is deployed in a VMware EXSi 5.5 environment, attempting to create a snapshot of the running virtual machine with the Quiesce guest file system option selected fails and leaves the virtual machine in an unstable state. This issue occurs because the VMware tools version 9.10.0 that ships with ClearPass 6.5.4 is incompatible with ESXi 5.5.</p> <p>Workaround: Restart the ClearPass virtual machine to recover from this state. To enable snapshot functionality, install a compatible version of VMware tools from the vSphere client. In the vSphere client, right-click on ClearPass VM, select Guest > Install/Upgrade VMware Tools, and then choose the Automatic Tools Upgrade option. This will install VMware tools version 9.4.10, which enables snapshot functionality.</p>

Dissolvable Agent

Table 56: Known Issues in the Dissolvable Agent

Bug ID	Description
#7165	To have health data collection work correctly in 64-bit Windows 7, please use the JRE version provided by CPPM. It can be downloaded from the following URL: <a href="https://<CPPM-IP-Address>/agent/html/help.html">https://<CPPM-IP-Address>/agent/html/help.html
#18031	Symptom: The OnGuard Web Agent does not work with Chrome on Mac OS X with Java 7 or 8 installed. Workaround: The Java plugin is now deprecated in Chrome 42.x and above. This is an issue with Chrome, not with ClearPass. Use the Firefox, Internet Explorer, or Safari browser.
#18035	Symptom: The OnGuard Web Agent applet fails to launch on Mac OS X 10.9. Scenario: New security restrictions in Mac OS X 10.9 and Safari 7 prevent the launch of the OnGuard Web Agent. Workaround: Go to Safari menu > Preferences > Security > Allow. Allow plugins should already be selected. Click Manage Website Settings , look for your portal Web site IP/name, and select Run in Unsafe Mode .
#18230	Symptom/Scenario: The ClearPass OnGuard Dissolvable Agent might not work properly if the client machine runs two different Java versions—for example, Java 6 and Java 7. Workaround: Uninstall the old Java component if it exists and keep the latest Java version.
#20191	The OnGuard applet needs to run in Safari's "Unsafe mode" to perform health checks. To enable this, go to Safari > Preferences > Security > Manage Website Settings > Java > [Select IP/hostname of ClearPass server] , and select "Run in Unsafe Mode" in the drop-down list.
#20514	Client health checks might not work if the client is not running the latest Java version.
#23253	Symptom/Scenario: Launching the Web Agent applet using some Java versions (7u55 and above) displays the security warning "This web site is requesting access and control of the Java application shown above. Allow access only if you trust the web site..." Workaround: Click Allow to let the health checks proceed.
#23340	Symptom: The OnGuard Agent does not display remediation messages. Scenario: This happens on Mac OS X using Firefox 27 and JRE 1.7 update 55. It is not an issue on later versions of Firefox. Workaround: Reload the page and log in again.
#24518	Symptom: The first time a run or scan operation is initiated in the Native Dissolvable Agent flow, an "External protocol request" message is displayed, and if the user clicks the "Do Nothing" option, the message stays on the screen. Scenario: This occurs on the Chrome browser on both Windows and Mac OS X. Workaround: This message is produced by the Chrome browser and can be ignored. Click Launch Application in the External protocol request message.
#24762	Symptom: When launching the OnGuard Dissolvable Agent, Mac OS X displays the message "You are opening the application 'ClearPass OnGuard WebAgent' for the first time. Are you sure you want to open this application?" Scenario: This is the normal, default behavior of Mac OS X, and is not an issue in OnGuard.
#24766	Symptom/Scenario: The Native Dissolvable Agent fails to download from IE on Windows 2008/XP if the "Do not save encrypted pages to disk" check box is enabled. Workaround: Go to Internet Options > Advanced . Uncheck (disable) the check box for the <i>"Do not save encrypted pages to disk"</i> option.
#24768	Symptom: The Native Dissolvable Agent does not work well in Internet Explorer on Windows XP. Scenario: The agent works after downloading it and allowing pop-ups, but no remediation results are

Table 56: Known Issues in the Dissolvable Agent (Continued)

Bug ID	Description
	displayed and, after clicking Launch ClearPass Application , a series of messages is displayed in a loop. Workaround: Windows XP is an unsupported operating system. Use a later Windows version or the Chrome or Firefox browser instead.
#24792	Symptom/Scenario: The Native Dissolvable Agent flow will not work properly on IE if ActiveX Filtering is enabled on IE settings. Workaround: For Native Dissolvable Agent to work properly on Internet Explorer, ActiveX Filter should be disabled.
#24862	Symptom/Scenario: The Native Dissolvable Agent uses ActiveX on IE on Windows OS. Based on IE Security Settings, the browser may ask the user to run or allow "ClearPass OnGuard Web Agent Control". Workaround: For the Native Dissolvable Agent to work properly on Internet Explorer, the user should allow "ClearPass OnGuard Web Agent Control" ActiveX Control to run.
#27117	Symptom: On Mac OS X, the Native Dissolvable Agent might not work properly on Google Chrome or Firefox if Avast Mac Security 2015 Antivirus is installed.
#27756	Symptom/Scenario: The Native Dissolvable Agent can not be installed on Mac OS X 10.6. Workaround: On Mac OS X 10.6, admin/root permission is required to install the Native Dissolvable Agent. After installation, the admin user should execute the following command: <code>sudo chmod -R 777 ~/Library/Application\ Support/ClearPassOnGuardWebAgent/</code>
#28398	Symptom: The native dissolvable agent does not automatically relaunch the applet. Scenario: This has been seen on Mac OS X or on Ubuntu after upgrading from 6.5.0 to 6.5.1, and might occur until a proper network connection is established in cases of rebooting the machine after shutdown. Workaround: Launch manually if auto-launch does not help.
#28737	Symptom: The Java dissolvable agent does not work properly on Chrome 42.x or higher. The guest page fails to detect whether the ClearPass OnGuard Unified Agent is installed or not. Scenario: On Chrome 42 and higher versions, the guest page keeps asking the user to download the ClearPass OnGuard Unified Agent even if the agent is already installed. This happens on both Windows and Mac OS X for the Java-based agent. Workaround: The Java dissolvable agent is not supported on Chrome 42.x or later. Use the Internet Explorer, FireFox, or Safari browser instead.
#29127	Symptom: The OnGuard Java-based Dissolvable Agent is not supported on the Chrome 42.x or higher browser. Scenario: The Java plugin is now deprecated in Chrome. This is an issue with Chrome, not with ClearPass. Workaround: Use the Firefox, Internet Explorer, or Safari browser.
#29186	Symptom/Scenario: The Native Dissolvable Agent sometimes does not run on Windows Vista, Windows 2008r2, or Windows 8. Workaround: Right-click the OnGuard application to open Properties , and then unblock the .exe file.
#30245	Symptom: The Java dissolvable agent is not supported in the Microsoft Edge browser. Scenario: The Java dissolvable agent is not supported on the Edge browser on Windows 10, because the Edge browser does not support plugins. Workaround: Use Firefox or Internet Explorer 11 instead.

Guest

Table 57: *Known Issues in Guest*

Bug ID	Description
#9967	Symptom/Scenario: Unicode SMS messages (UTF-16 encoded) are limited to 70 Unicode characters. The ClearPass Guest user interface still displays 160 characters as the limit. Sending a Unicode SMS message over 70 characters may fail if the SMS service provider does not support multi-part SMS messages. Workaround: If you plan to use Unicode SMS messages, check your SMS receipt carefully to ensure it is not over 70 characters in length.
#25137	Please review your operator privileges for new features that may need to be enabled.
#27363	Symptom/Scenario: If the default role-mapping policy [Guest Roles] is renamed, the guest roles in ClearPass Guest are not populated.

Insight

Table 58: *Known Issues in Insight*

Bug ID	Description
#11827	Symptom/Scenario: Insight is not supported in Internet Explorer 8 (IE8).
#12096	Symptom/Scenario: Editing a report to select some columns for analytics overwrites/replaces the chosen columns for the corresponding report.
#12159	Symptom/Scenario: Insight reports do not show license changes immediately. The changes might take up to 24 hours, depending on when the changes are made.
#19507	Symptom/Scenario: PDF and HTML Data Tables are not created if the CSV file size is larger than 1MB, although the generated PDF and HTML reports include analytics if configured in the report.
#20601	Insight custom templates used in report configurations of 6.3.x versions are not supported in 6.4.x. Customers must contact Aruba TAC by providing logs from Insight > Administration > Collect logs and a new set of custom templates for the 6.4.x version will be provided. Custom templates in 6.4.x work fine with 6.5.x and are carried forward.
#26899	Symptom: Use of System Events and Audit Events via the Insight template is not recommended. Workaround: Use the default System Events and Audit Events template from syslog filters instead.
#27529	Insight report generation for the Endpoint Latest template might take a long time or might not complete if the number of endpoints is greater than 1,00,000.

Onboard

Table 59: *Known Issues in Onboard*

Bug ID	Description
#9897	<p>Symptom: ClearPass Onboard does not update the Policy Manager endpoints table with an endpoint record when provisioning an iOS 5 device.</p> <p>Scenario: This is because the iOS 5 device does not report its MAC address to ClearPass Onboard during device provisioning.</p>
#10667	<p>Symptom/Scenario: When using Onboard to provision a OS X system with a system profile, an administrator user must select the appropriate certificate when connecting to the provisioned network for the first time. The administrator should also ensure that the system's network settings are configured to automatically prefer connecting to the provisioned network, if the intent is for non-administrator users to always use that network.</p> <p>Workaround: The process to provision an OS X system with a system profile is:</p> <ol style="list-style-type: none"> 1. The administrator should log in to the OS X system and connect to the provisioning SSID. Do not select the "Remember this network" option. 2. Use Onboard to provision the device with an EAP-TLS profile, ignoring the username/password prompt. 3. Connect to the provisioned network, selecting EAP-TLS as the mode and selecting the provisioned certificate, but ignoring the username field. 4. When the system connects and authorizes to the network, use Network Preferences to place the EAP-TLS network first in the priority list. 5. After the administrator logs out, users logging in are connected by EAP-TLS and cannot modify those settings.
#20983	<p>Symptom: HTC Android asks the user to enter a certificate name to be installed when onboarding.</p> <p>Scenario: HTC Androids running Android version less than Android 4.3 and greater than Android 2.3 ask the user to enter a name for the certificate to be installed while onboarding. Authentication will fail if the user does not enter the exact certificate name as QuickConnect application instructs in a message prior to the certificate installation dialog.</p> <p>Workaround: None. This issue is due to a limitation in the Android phone's firmware.</p>
#23287	<p>Symptom: Embedding Admin credentials for onboarding does not work in Windows 8 and above. The system hangs and there is no error message.</p> <p>Scenario: When onboarding Windows systems with Windows 8 and above, if operations requiring admin privileges are configured, then the end user doing the onboarding needs to have admin privileges on the system. These operations include installing applications, configuring wired networks, installing certificates in the machine certificate store, and so on. Embedding admin credentials along with the QuickConnect wizard for this purpose does not work for Windows 8 and above.</p> <p>Workaround: There is no workaround. This is a Windows system limitation.</p>
#23699	<p>Symptom: Mac OS X disconnects before it completes a certificate renewal.</p> <p>Scenario: On Mac OS X, automatic certificate renewal through the "Update" option on Apple's interface does not work. This occurs on provisioned (wireless) networks.</p> <p>Workaround: This is an issue with OS X limitations, and is not an Onboard issue. Users should be aware that when their certificate is about to expire, they should renew the certificate through Onboard instead of using Apple's automatic certificate renewal.</p>
#25711	<p>iOS always displays SHA-1 for the signing algorithm regardless of the actual algorithm used. This is an issue with iOS, not Onboard.</p>

OnGuard



Memory utilization for ClearPass OnGuard depends on the Health Classes configured and the type of Windows OS; however, the minimum requirement for ClearPass OnGuard running on a Windows platform is 90 MB.

Table 60: Known Issues in OnGuard

Bug ID	Description
#12342	The OnGuard agent fails to collect health on Windows 8 if VMware Server 2.0.2.X is installed.
#13164	Symptom: The hardware installation pop-up dialog appears to stop installing the ClearPass OnGuard Unified Agent for VIA+OnGuard mode. A warning message similar to “The software you are installing... has not passed Windows Logo testing” might be displayed during installation. Scenario: This might occur during the installation of the ClearPass OnGuard Unified Agent on WinXP and Windows 2003 SP2. Workaround: Users should click Continue Anyway to proceed.
#13363	Symptom: On Mac OS X, the current version of the ClearPass OnGuard Unified Agent VPN component does not show some VPN-related information—for example, tunnel IP assigned by the controller, packet count, or diagnostic details. Scenario: This occurs on Mac OS X. It does not occur on Windows OS.
#13929	At times, OnGuard may fail to detect peer-to-peer applications, such as uTorrent, on Windows 2008 R2.
#13935	OnGuard does not support enabling/disabling the Windows Update Agent Patch Management Application.
#13970	After anti-virus software is installed, the system must be rebooted before using ClearPass OnGuard.
#14196	ClearPass OnGuard will not be able get the correct status of 'Software Update' PM application on Mac OS X, if “Check for updates” and “Download updates automatically” are not toggled at least once.
#14673	The OnGuard Agent for Mac OS X does not support bouncing of a VPN Interface other than the Aruba VPN Interface (version 6.1).
#14760	In some cases, OnGuard fails to connect to the CPPM server from a wired interface if the VPN is connected from a trusted network.
#14842	Installing the ClearPass OnGuard Unified Agent removes an existing VIA installation. To continue to use VPN functionality, go to Administration > Agents and Software Updates > OnGuard Settings and select Install and enable Aruba VPN component from the drop-down list.
#14996	If McAfee VE is running on Windows XP, the ClearPass OnGuard Unified Agent VPN will not work.
#15072	VIA connection profile details are not carried forward after upgrading from VIA 2.0 to ClearPass OnGuard Unified Agent 6.1.1.
#15097	The ClearPass OnGuard Unified Agent does not support installation of a VPN component on Mac OS X 10.6.
#15156	VPN configuration is not retained after upgrading to the ClearPass OnGuard Unified Agent using MSI Installer on a 64-bit Windows system.
#15233	On Win 7 (64 Bit), upgrading an existing VIA 2.1.1.X to the ClearPass OnGuard Unified Agent can lead to an inconsistent state. Users should first uninstall VIA and then proceed with the ClearPass OnGuard Unified Agent installation.

Table 60: Known Issues in OnGuard (Continued)

Bug ID	Description
#15351	<p>Symptom: The state of the Real Time Scanning button in the Trend Micro Titanium Internet Security for Mac OS X is not updated.</p> <p>Scenario: This is observed when the ClearPass Unified OnGuard Agent has Real Time Protection (RTP).</p> <p>Workaround: Close the UI using Command +Q and restart.</p>
#15586	<p>Symptom: The ClearPass OnGuard 6.2 dissolvable agent does not support the following new health classes on Mac OS X: Processes, Patch Management, Peer-To-Peer, Services, USB Devices, and Disk Encryption. The dissolvable agent (DA) does not display these health classes as remediation messages in the user interface because java binary sdk support is not included.</p> <p>Scenario: The client will be unhealthy if any of the health classes listed above are configured and performing a health scan via the DA.</p>
#15986	<p>ClearPass OnGuard returns the product name of "Microsoft Forefront Endpoint protection" AntiVirus as "Microsoft Security Essential".</p>
#16181	<p>Symptom: The command level process can be detected using the path "none" but the application level process can't be detected by setting the path to "none".</p> <p>Scenario: This applies to Mac OS X.</p> <p>Workaround: The application-level process health should be configured with the path set to Applications > Firefox.app.</p>
#16550	<p>Symptom/Scenario: The ClearPass OnGuard Unified Agent does not support checking of disk encryption state using the MacKeeper (ZeoBIT LLC) Disk Encryption Product on Mac OS X. This causes the client to be treated as healthy even if none of the disk is encrypted.</p> <p>Workaround: There is no workaround at this time.</p>
#18259	<p>Symptom/Scenario: The ClearPass OnGuard Unified Agent does not support Stop or Pause remediation actions for Oracle VM Box Guest virtual machines on Mac OS X.</p>
#18281	<p>The ClearPass OnGuard configured health quiet period is supported in Health only mode. It doesn't work in Auth+Health mode.</p>
#18341	<p>Symptom/Scenario: OnGuard cannot start a process on Mac OS X for non-administrative users.</p> <p>Workaround: The user must have root privileges to start process-level health checks by OnGuard on Mac OS X.</p>
#19019	<p>The network interface will be bounced twice (once immediately, and once after the configured interval) when the log-out/bounce delay parameter is configured. This is expected behavior; the first bounce is required to end the existing session.</p>
#19685	<p>Symptom: After upgrading OnGuard to 6.3, the backend service fails to start and is unable to collect logs.</p> <p>Scenario: This rarely occurs. It has been observed on the Mac OS X 10.6, 10.8, or 10.9 OS after upgrading OnGuard from 6.2.4 or 6.3 to 6.3.</p> <p>Workaround: If the backend service fails to communicate with the plugin, reboot the system after the OnGuard upgrade is complete.</p>
#20316	<p>OnGuard's Health Check Quiet Period is applicable per network interface. If a machine has more than one network interface, then each interface will have its own Health Check Quiet Period duration.</p>
#21152	<p>Symptom: The ClearPass OnGuard Unified Agent fails to establish a control channel on Windows or Mac OS X if more than one instance of the OnGuard Agent is running.</p>

Table 60: Known Issues in OnGuard (Continued)

Bug ID	Description
	<p>Scenario: This occurs if multiple instances of OnGuard are running due to multiple users having logged in using Switch User.</p>
#23470	<p>Symptom/Scenario: On a Japanese OS, when upgrading from VIA 2.1.1.3 to the ClearPass OnGuard Unified Agent, a known issue with uninstalling VIA displays a message asking the user to select the VIA driver. This does not occur on an English OS.</p>
#23636	<p>Symptom: The value of the Posture:Applied Policy attribute is not correctly displayed in the Access Tracker for posture policies carried over from releases earlier than 6.3.0. Scenario: This has been observed when upgrading from 6.2.6 to 6.3.2. Workaround: This can be corrected by manually saving the affected posture policy once after upgrade.</p>
#23861	<p>Symptom/Scenario: On Mac OS X, the ClearPass OnGuard Unified Agent sometimes fails to download a VIA connection profile after the application mode is changed. Workaround: None.</p>
#24986	<p>Symptom: The Native Dissolvable Agent is not automatically launched after downloading and running the agent the first time on the Chrome browser. Scenario: This occurs on Windows and on Mac OS X. Workaround: The first time you launch the Dissolvable Agent, click Launch ClearPass OnGuard Agent.</p>
#25827	<p>Symptom/Scenario: On Internet Explorer 8, when the security warning message asks whether you want to view only the content delivered through a secure HTTPS connection, the behavior is not as expected. Workaround: For the Native Agent flow to work correctly, click No in the pop-up dialog.</p>
#26224	<p>Symptom/Scenario: Some combined products that include both antivirus and antispyware (for example, McAfee VirusScan Enterprise + AntiSpyware Enterprise) are not shown in the AntiSpyware Posture configuration. Workaround: Add products like this only in Antivirus. Both the AntiVirus and AntiSpyware values are the same.</p>
#26232	<p>Symptom: When installing or running the Native Dissolvable Agent on Mac OS X 10.10, the message "ClearPass OnGuard WebAgent' can't be opened because the identity of the developer cannot be confirmed" is displayed. Workaround: When opening the OnGuard WebAgent application for the first time after installing, the user must open it manually. Right-click and select the Open option. The Web browser will then be able to launch the OnGuard WebAgent.</p>
#26276	<p>Symptom/Scenario: On Mac OS X 10.10, the ClearPass OnGuard Unified Agent 's VIA component fails to download the connection profile when the tunnel is established, and the log window shows the error "Configuration download... failed".</p>
#27134	<p>Symptom: OnGuard does not support dynamic switching between logged-in users on an Ubuntu client.</p>
#27572	<p>Symptom: If the ClearPass OnGuard Unified Agent uses a VIA connection and is installed on a Mac OS X client, and if the user is idle for five minutes, OnGuard automatically disconnects the VIA tunnel. Workaround: If VIA is disconnected, connect again manually.</p>
#27599	<p>Symptom: The OnGuard logo is not shown on the desktop on Ubuntu. Scenario: On the Ubuntu OS, the OnGuard logo is not visible on the desktop at first. The logo will be updated automatically after the desktop is refreshed.</p>

Table 60: *Known Issues in OnGuard (Continued)*

Bug ID	Description
#27602	<p>Symptom: The OnGuard Unified Agent fails to return health-check data over a VPN tunnel when the agent is installed on a client running MAC OSX 10.10 and using the Kaspersky AntiVirus software.</p> <p>Workaround: OnGuard services should be whitelisted on Kaspersky AntiVirus in order to work over VPN.</p>
#27871	<p>Symptom The Java dissolvable agent does not detect AVG 2014.</p> <p>Scenario: This occurs on Mac OS 10.10 with the Java dissolvable agent. The native dissolvable agent is able to detect it.</p>
#27876	Users should be aware that RADIUS CoA over VPN is not supported on Ubuntu.
#29243	<p>Symptom: The Unified Agent fails to disable other types of network connections when “Allow Only One Network Connection” is selected.</p> <p>Scenario: Users should be aware that the ClearPass OnGuard Unified Agent for Windows does not support disabling USB data card/modem type network interfaces.</p>
#29598	<p>Symptom: OnGuard does not stop or pause VM Player 7.x virtual machines.</p> <p>Scenario: Users should be aware that the ClearPass OnGuard Unified Agent does not support auto-remediation for Guest VMs running on VMware Player.</p>
#30106	<p>Symptom: On Mac OS X, the native and Java dissolvable agents do not get the RTP status of ESET Cyber Security Antivirus 6.x.</p> <p>Scenario: Users should be aware that the ClearPass OnGuard Native Dissolvable Agent for Mac OS X does not support the RTP Status check for ESET CyberSecurity and ESET NOD32 Antivirus.</p>
#30243 #30212	<p>Symptom: The ClearPass OnGuard Unified Agent fails to load on Windows Server 2003, and does not support VPN, Auto Upgrade, or SSO on Windows XP or Windows Server 2003.</p> <p>Scenario: Users should be aware that Microsoft stopped supporting Windows Server 2003 on July 14, 2015, and stopped supporting Windows XP on April 8, 2014. Aruba will not provide further ClearPass support for these operating systems.</p> <p>Workaround: Windows 2003 server and XP machines are required to update the Microsoft root CA certificate or missing trust certificates in order to load the OnGuard user interface properly.</p> <p>The following Microsoft knowledgebase article provides information, as well as a link to the hotfix download that needs to be installed in order to enable certificate support with SHA256 algorithm: https://support.microsoft.com/en-us/kb/968730.</p>
#30381	<p>Symptom: The ClearPass OnGuard Unified Agent might not be able to detect the installation of certain Windows updates that are not visible in Control Panel > Programs and Features > View installed updates.</p> <p>Scenario: These are updates that might not use an installer or cannot be removed. Some examples include the Windows Malicious Software Removal Tool, certain Windows Defender updates (but these are validated through AntiVirus health class), and foreign language input method editor (IME) files.</p> <p>Workaround: There is no workaround at this time.</p>
#30572	<p>Symptom: Encrypted Location checks for FileVault 10.11 on Mac OS X 10.11 are not available.</p> <p>Workaround: There is no workaround at this time.</p>
#30618	<p>Symptom: The ClearPass user interface may become unavailable after installing ClearPass OnGuard hotfix patches due to a service restart.</p> <p>Workaround: Log in to the ClearPass CLI using the appadmin account, and restart cpass-admin-server using the ‘service restart cpass-admin-server’ command. This will only affect the GUI and not the availability of ClearPass services (for example, RADIUS).</p>

QuickConnect

Table 61: *Known Issues in QuickConnect*

Bug ID	Description
#20867	<p>Symptom/Scenario: Android 4.3 and above fails to install a self-signed certificate for the CA certificate.</p> <p>Workaround: For onboarding Android version 4.3 and above, CPPM must have a RADIUS server certificate issued by a proper Certificate Authority and not a self-signed certificate. This is a requirement of Android's API for Wi-Fi management. In Onboard > Configuration > Network Settings, the CA certificate that issued the server's certificate has to be selected as the trusted root certificate to be installed on Android.</p>
#25521	<p>Symptom/Scenario: Embedding admin credentials is not supported on Windows 8+.</p> <p>Workaround: Provide the admin credentials manually during Onboard provisioning.</p>