OmniVista 3600 Air Manager 8.2.5



Copyright

Alcatel-Lucent and the Alcatel-Lucent Enterprise logo are trademarks of Alcatel-Lucent. To view other trademarks used by affiliated companies of ALE Holding, visit: enterprise.alcatel-lucent.com/trademarks. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Neither ALE Holding nor any of its affiliates assumes any responsibility for inaccuracies contained herein. (May 2017)

Open Source Code

This product includes code licensed under the GNU General Public License, the GNU Lesser General Public License, and/or certain other open source licenses.

OmniVista 3600 Air Manager 8.2.5 introduces new features and fixes to previously outstanding issues. These release notes contain the following chapters:

- "What's New in this Release" on page 4 describes the important changes to OV3600 and new features in this release.
- "Supported Infrastructure Devices" on page 1 describes supported infrastructure devices and Instant software in this release.
- "Resolved Issues" on page 9 describes issues we've fixed.
- "Known Issues" on page 25 describes known issues.
- "Upgrade Instructions" on page 43 describes upgrading your software.

Related Documents

For more information about the features described in these release notes, refer to the OV3600 8.2.5 User Guide.

Contacting Support

Contact Center Online	
Main Site	http://www.enterprise.alcatel-lucent.com
Support Site	https://support.esd.alcatel-lucent.com/
Email	ebg_global_supportcenter@al-enterprise.com
Service & Support Contact Center Telephone	
North America	1-800-995-2696
Latin America	1-877-919-9526
EMEA	+800 00200100 (Toll Free) or +1 (650) 385-2193
Asia Pacific	+65 6240 8484
Worldwide	1-818-878-4507

OV3600 8.2.5 introduces the following changes to functionality and new features.

Important Changes

OV3600 8.2.5 introduces the several changes to functionality that don't require user input.

Library Upgrades

The OV3600 server's performance and ability to load topology maps have been improved with library updates.

Removal of Symbolic Links

Symbolic links in the software have been removed to harden the system.

Admin GUI Password

In order to prevent network devices from using default manufacturer passwords, OV3600 will use the **ampadmin** user password for the admin GUI password. You configure the ampadmin password during a fresh software installation. This change applies only to fresh installations and not software upgrades.

Removal of the TFTPD Utility

We removed the tftpd-server package.

Security

OV3600 8.2.5 introduces the following security enhancements:

- OV3600 strengthens user passwords, replacing SHA1 with SHA512 encryption.
- HPE Alcatel-Lucent provides a digital signature for the upgrade package. The upgrade won't work if there have been modifications made since it was digitally signed.
- OV3600 strengthens pre-set, default passwords, using SHA encryption instead of MD5 for default passwords. You enter the default credentials for each device model on your network by going to **Device Setup > Communications**.
- SQL injection vulnerabilities which could allow an attacker to bypass OV3600's authentication and authorization mechanisms have been fixed.
- OV3600 supports OCSP validation of client certificates. OCSP maintains server security by replacing the need for intermediate certificate validation.

Follow these steps to configure OCSP:

- a. Upload OCSP certificates into OV3600 by going to **Device Setup > Certificates** in the WebUI.
- b. Click **Add**, then click **Save**. Ensure you use the correct OCSP label to distinguish the responder certificate from the signing certificate.
- c. Enable certificate authentication under OV3600 Setup > Authentication, then select Yes for the Enable Certificate Authentication option.
- d. Log in to the OV3600 CLI session, and select **9** to set **Make OCSP Required** from the Security menu.

New Features

OV3600 8.2.5 introduces the following new features.

Support for New Devices

OV3600 8.2.5 supports the following new devices:

- Support for the Alcatel-Lucent 7280 Switch. OV3600 supports the 7280 mobility Switch running Alcatel-Lucent AOS-W 6.5.4 or later.
- Support for the Alcatel-Lucent 8400 Switch Series. OV3600 supports monitoring of Alcatel-Lucent switches running XL.01.01.00X.

For a complete list of supported products and to find out when each version of Instant was initially supported in OV3600, refer to OV3600 8.2.5 Supported Infrastructure Devices.

Topology Enhancements

OV3600 8.2.5 includes many new updates to Topology:

- Now you can:
 - View aggregated links and stack member details
 - Map network devices that are part of a spanning tree, using the spanning tree overlay
 - Find Switch-connected APs, Mobility Master physical and virtual appliances, Mobility Switch physical and virtual appliances, and third party devices
 - Filter by folder groups
 - Set multiple root nodes
 - See search results in the topology map and details about devices and links depending on your user role.
- Other changes include:
 - New icons for switch stacks and down devices
 - New task pane tabs
 - Improved VLAN and planetary layouts
 - Hyperlinks to Topology from switch and switch interface monitoring pages

For information about all the topology enhancements, see "Using Topology" in the OV3600 8.2.5 User Guide.

SNMPv3 Cipher

OV3600 supports only approved ciphers for encryption in order to enable FIPS for storing SNMPv3 passwords more securely.

UCC Dashboard Enhancement

In AOS-W 6.5 and 8.2, the UCC dashboard now displays the name of the UCC service provider for Wi-Fi calls in the Calls Details table. For other types of calls, this field will be blank.

You can find this column by clicking the Call Details hyperlink beneath a UCC call chart, then scrolling to the right side of the table to the "UCC_SERVICE_PROVIDER" column.

For more information, see "Using the UCC Dashboard" in the OV3600 8.2.5 User Guide.

Switch Cluster Dashboard Enhancement

You can monitor a cluster's fault tolerance with the following new fields in the Clusters table: **Free AP Count**, **Maximum Switch Failover**, and **Possibility on Hitless Failover**.

For information about these statistics, see "Monitoring Switch Clusters" in the OV3600 8.2.5 User Guide.

New Triggers for Switch Clusters

You can set critical thresholds to inform you of when maximum throughput or AP and client capacities are being reached.

For information about configuring these triggers and viewing the events, see "Creating Triggers" in the OV3600 8.2.5 User Guide.

AirMatch Dashboard

OV3600 displays graphs in a simple dashboard that show power and channel distribution.

For information about what you can do from the dashboard, see "Using the AirMatch Dashboard" in the OV3600 8.2.5 User Guide.

Information for Alcatel-Lucent Virtual Appliances

OV3600 now displays the host type, processor model, and CPU information on the monitoring pages for the Mobility Master virtual appliances and the Mobility Switch virtual appliances.

IPv6 monitoring support for Alcatel-Lucent switches

If using IPv6 for switches, then you need to configure OV3600 for IPv6 addresses on the switch. OV3600 supports only full config and partial config (and not ZTP) for IPv6 addresses.

To configure IPv6 monitoring:

- 1. Go to **OV3600 Setup > Network**.
- 2. Select Yes for the IPv6 Enabled option.
- 3. Enter the IPv6 addresses.

Partial Config for Alcatel-Lucent Switches

AirWave now provides partial config for Alcatel-Lucent Switches. This feature allows you to input CLI commands that will be run on any device you choose.

This partial configuration setting is available under **Group > Basic** for the corresponding group, depending on the Manage Read/Write mode setting on the device. Select the device type as **Alcatel-LucentSwitch/Alcatel-Lucent Switches/Comware Switches** to filter the corresponding devices present in that group.

To configure this option:

- 1. Go to **Group > Basic** for the corresponding group.
- 2. Select **Factory-default only** for the Alcatel-Lucent/HPE Office Connect Switch Config setting. Depending on the device state and the **Manage Read/Write** mode setting for a device, the expected configuration workflows are shown in Table 1.

Table 1: Configuration Workflows

Full Config Flag/Device State	Factory-Default Devices	Non-Factory Devices
Yes	Push full config and reboot	Push full config and reboot
No	No action	No action
Factory-default only	Push full config and reboot	No action

- 3. Enter a job name.
- 4. Enter a job description.

- 5. Select **Alcatel-Lucent Switch**, **Alcatel-Lucent Switches**, or **Comware Switches** to filter the corresponding devices present in that group.
- 6. Enter a name for the configuration snippet.

Time Zone Option

Now you can change the time zone without changing the UTC system time. From the OV3600 CLI, select **8** to change the time zone using the Advanced menu. By doing so, you can change the time zone without affecting monitoring time stamps.

JRE 1.8.0_144 Upgrade

JRE 1.8.0_144 installs when you upgrade from an older version of OV3600.

Logging of AMP CLI Commands

OV3600 now logs CLI commands in the event log.

Device Event Logging

When an AP changes primary or secondary Switches, OV3600 logs the last and current master Switch IP address associated with the AP.

To view the Recent OV3600 Device Events:

- 1. Go to **APs/Devices**, then select an AP from the device list at the top of the monitoring page.
- 2. Click Alerts & Events.

For information about device event logging, see "Monitoring Cluster Events" in the OV3600 8.2.5 User Guide.

Secure NTP

You can now enable NTP authentication using SHA1 hashing, in addition to MD5 and SHA, from the WebU by navigating to **OV3600 Setup > Network** and selecting **MD5**, **SHA**, or **SHA1** for the **Key Type** option.

Non Persistent Cookies

You can turn off persistent cookies by going to **OV3600 Setup > Authentication** and selecting **No** for the **Use Persistent Cookies** option.

Web Session Limit

OV3600 limits the how many concurrent sessions, defined by an organization, for all accounts and account types. To configure the Web session limit, go to **OV3600 Setup > Authentication**.

The default settings are:

- Max AMP User Idle Timeout. The user session timeout is 240 minutes (4 hours)
- Max AMP User Absolute Timeout. The combined user session timeout is 10,080 minutes (7 days).
- Max AMP User Sessions. The maximum number of sessions allowed per user is 10.
- Max AMP Total Sessions. The total number of sessions allowed is 100.

New Widgets for Client Inventory Report

Now you can view a Client Capability Summary report with the following wireless characteristics:

- 802.11a/b/g
- 802.11ac
- 802.11n

Client Details and Client Diagnostics Enhancements

You can view the following information in the Current Association widget at the lower left corner of the Client Details or Client Diagnostic pages for a wireless client:

- Connection Mode
- Channel Width Capability
- Spatial Streams Capability

Click Through Agreement

You can configure a Click Through Agreement message, which OV3600 displays immediately after logging in to WebUI. In order to gain full access to the WebUI, the user must accept the terms of usage.

To create a click through agreement:

- 1. Navigate to **OV3600 Setup > Authentication**.
- 2. Enter your message in the **Click Through Agreement** field.
- 3. Click Save.

Security Enhancements for Military Deployments

The information given here supercedes information in any existing OV3600 Security Technical Implementation Guide (STIG).

OV3600 8.2.5 introduces the following security enhancements to prevent common vulnerabilities and exposures (CVE):

- A new CLI menu option under Security > Apply STIGs will apply and enforce the STIG modules according to the Defense Information Systems Agency (DISA) for STIG compliance. You can't change this setting after you enable it.
- Your CLI ampadmin password must contain at least 15 characters, including an upper case letter, a lower case letter, a number, and a special character (whitespaces excluded). You can only change the password once within a 24 hour period. The change must be at least 8 different characters, not reusing any of the previous 5 password patterns. Password change is required every 60 days.
- You WebUI amin password must contain at least 15 characters, including an upper case letter, a lower case letter, a number, and a special character (whitespaces excluded).
- You can no longer log in using the **amprecovery** credentials so there are no longer any built in username and password combinations aside from the install user.
- OV3600 enforces a limit of 3 consecutive failed login attempts. The user account will auto unlock after 15 minutes.
- OV3600 now displays a visible logout popup message.
- OV3600 now displays the last login to the CLI and the WebUI. For the WebUI last login entry, go to Home > User Info.
- We updated Apache to Apache 2.2.15-59 for CentOS 6, which is maintained by CentOS.
- We enhanced event log messages to include session IDs (session IDs are randomly generated using FIPS-compliant encryption). And, in order to make clear which part of the line in the audit log is the session ID, OV3600 now uses the label, "session id".
- OV3600 now uses FIPs-compliant cryptography to generate and encode the session ID.
- The audit system now reviews any attempt to change the system time.
- Now you can access /var/log/httpd/access_log on from System > Status, and download the access_log, secure, and amp_events logs under System > Download Log Files.

The following tables describe issues resolved in OV3600 8.2.5 and previous releases.

Table 2: Issues Resolved in OV3600 8.2.5

ID	Description
DE29977	Symptom : RADIUS authentication with PEAP-EAP-MSCHAPv2 failed to return the correct user name and NAS IP address.
	Scenario : OV3600 8.2.5 returns the correct user name and NAS IP address, resolving a known issue in previous releases, where the user name would be returned as <i>anonymous</i> .
DE29882	Symptom : Wired clients connected to an Aruba 2930F switch incorrectly appeared as devices in the folder view for the switch.
	Scenario : In OV3600 8.2.5, wired clients connected to an Aruba 2930F switch correctly show up as authenticated clients in the folder view for the switch.
DE29861	Symptom: OV3600 was unable to receive syslog messages when the OV3600 server was configured as a syslog server for an Aruba 8400 switch.
	Scenario: OV3600 8.2.5 can correctly receive syslog messages from an Aruba 8400 switch.
DE29746	Symptom: VisualRF heatmaps are minimized in the WebUI page when you define a heatmap using metric units and selected "Probability" for the region type.
	Scenario: OV3600 8.2.5 correctly displays VisualRF heatmaps defined with metric units.
DE29735	Symptom: Installing custom certificates using the WebUI caused VisualRF to restart.
	Scenario: OV3600 8.2.5 supports uploading custom certificates via the WebUI.
DE29657	Symptom : In previous releases, the selected background image for a building would not correctly appear in VisualRF.
	Scenario : In OV3600 8.2.5 , you can set a background image for a building in VisualRF by right-clicking the building and selecting Set Background .
DE29591	Symptom :In OV3600 8.2.4, Neighbors and Connected Devices information for HPE Comware and OfficeConnect 1920 switches were not available via SNMP v3 or SNMP v2
	Scenario: OV3600 8.2.5 polls these switches for LLDP data, allowing Neighbors and Connected Devices tables to correctly display data using SNMPv3 or SNMPv2.
DE29533	Symptom : In earlier versions of OV3600, if users viewed the VLANs tab in IGC and then navigated to another tab in IGC, OV3600 would display a warning that pending changes would be lost, even if no changes were made to default VLAN settings.
	Scenario : The Instant GUI Config (IGC) feature now accepts the default client VLAN as a supported setting without saving changes.

Table 2: Issues Resolved in OV3600 8.2.5 (Continued)

ID	Description
DE29493	Symptom: OV3600 generated false alerts for radar detection or device events.
	Scenario : OV3600 8.2.5 resolves a previously known issue, where OV3600 could generate multiple alerts even though the OV3600 server received only a few syslog messages.
DE29359	Symptom : OV3600 did not recognize Aruba APs with OUIs starting with 44:48:C1 and 20:A6:CD as Aruba devices.
	Scenario : OV3600 8.2.5 supports these new Aruba OUIs.
DE29345	Symptom : The clarity_data section of the command output did not correctly decrypt and display IP address information.
	Scenario : The swarm debug command used for troubleshooting Alcatel-Lucent Instant AP connectivity now correctly displays all available clarity data, resolving an issue where encrypted information in the output of the command was not correctly decrypted.
DE29336	Symptom : In OV3600 8.2.3.1, only locally-defined users were able to make and save changes to IGC settings.
	Scenario : In OV3600 8.2.5, a user is able to save and apply changes to managed devices using IGC, regardless of whether that user logged in as a centrally authenticated user or a locally created user.
DE29308	Symptom : In previous releases of OV3600, users could appear to be incorrectly classified into the user role "", and the user name could display as the device IP address instead of the correct username.
	Scenario : Improvements in AppRF allow the OV3600 8.2.5 WebUI to correctly displays the user role and user name for each user.
DE29296	Symptom : Previous releases of OV3600 supported antenna gain values in whole numbers only, which could trigger a configuration mismatch in an AP radio profile if Alcatel-Lucent AOS-W returned a value with a decimal point.
	Scenario : OV3600 8.2.5 supports AOS-W antenna gain values with a decimal point, preventing this configuration mismatch issue.
DE29154	Symptom: Gaps in Radio Errors graphs.
	Scenario: We fixed the way OV3600 interprets the statistics for packets sent and received by the AP and traffic on the channel, so the graphs display correctly now.
DE29135	Symptom : SSID and role filters applied to some AppRF reports were ignored, and the report output included all available data.
	Scenario : In OV3600 8.2.5, the AppRF reports generated for specific SSIDs or roles now correctly filter the output to include only those selected options.
DE28916	Symptom : Devices that were brought down from the network remained "up" in OV3600, preventing OV3600 from being able to delete those devices.
	Scenario : Devices physically disconnected from the network no longer appear as "UP" on OV3600 for an extended period of time, and can be properly deleted from the OV3600 database.

Table 2: Issues Resolved in OV3600 8.2.5 (Continued)

ID	Description
DE28489	Symptom : In previous releases, the Radio Power graph showed data inconsistent with the Tx Power column of the Radios table on the on the APs/Devices > Monitor page.
	Scenario: The Radio Power graph on the APs/Devices > Monitor > Radio Statistics page now displays correct transmit power data.
DE28310	Symptom : In previous releases, uploading a floor plan in .DWG format could cause VisualRF processes to time out, triggering a Service Temporarily Unavailable error during the upload process.
	Scenario: OV3600 8.2.5 allows you to upload VisualRF floor plans in .DWG format.
DE28299	Symptom : A large number of users connected to the network using VIA or a VPN were classified into "unknown" WLANs and roles.
	Scenario : OV3600 8.2.5 supports enhanced classification for VIA/VPN users, and these users no longer appear to be associated with an unknown WLAN or role when connected to an Alcatel-Lucent AOS-W controller.
DE28743	Symptom: Details for members of a switching stack were not available in the Details task pane when you clicked on a stack switch in the topology map.
	Scenario: OV3600 8.2.5 now includes this feature.
DE27717	Symptom : Cisco 3850 and 3650 switches appeared in the OV3600 WebUI with a device type of Cisco Catalyst Switch instead of the correct type and model number.
	Scenario : These Cisco devices how properly appear with the correct device type and model number in OV3600 8.2.5.
DE27412	Symptom : The link to the global template on the Groups > Templates page did not redirect to the templates page.
	Scenario : When you click a link to a global template in the OV3600 8.2.5 WebUl, you are correctly directed to the page for that template.
DE26790	Symptom : Sorting filters applied to the Destination table on the AppRF > Destinations page only apply to the first 1000 table rows.
	Scenario : Sorting enhancements in OV3600 8.2.5 allow sorting filters to apply to all enable entries in tables with more than 1000 rows.
DE26299	Symptom : The Auto Arrange option for VisualRF maps can cause campus icons to overlap, making the icon labels illegible.
	Scenario : In OV3600 8.2.5, improvements to the Auto Arrange option prevent icon overlap, allowing VisualRF to display each icon in a separate location on the map.
DE25816	Symptom : OV3600 did not allow the Prefer AMON vs SNMP setting to be enabled if telnet credentials are not defined. Saving this setting without telnet credentials triggered the error " <i>Failed to enable 'Prefer AMPN vs SNMP Polling' since its Telnet/SSH credentials are empty</i> " appear in event logs.
	Scenario: This issue is resolved in OV3600 8.2.5

Table 3: Security Issues Resolved in OV3600 8.2.5 for Military Deployments

ID	Description
DE30080	Symptom: Creating a 802.1q tagged interface caused OV3600 services to not start.
	Scenario: After upgrading to OV3600 8.2.4.1, all devices appeared as being down.
DE30041	Symptom: You can't exit the Upload File session in the OV3600 CLI.
	Scenario : Now, if you choose Upload File by mistake, or you change your mind, the CLI process exits when you leave the line blank.
DE29928	Symptom: There is no cross-site scripting (XSS) protection.
	Scenario: OV3600 now provides XSS protection in the response headers.
DE29929	Symptom: RPM keys were not installed.
	Scenario : Previously, the gpg-pubkey package was installed, but the keys weren't imported automatically, or manually using rpm import. Now the keys are pre-imported automaticaly.
DE29833	Symptom: ZTP configuration doesn' t work for Alcatel-Lucent switches.
	Scenario : When you configure the secondary NIC card with an IP address, the Alcatel-Lucent switch fails to check into Airwave 8.2.5, it will not get added to Alrwave
DE29802	Symptom: There is no way to view the maximum number of unsuccessful attempts.
DE29797	Scenario : Now you can configure the maximum number of unsuccessful login attempts before OV3600 resets the interface. The default is 3.
DE29755	Symptom: You couldn't reset the ampadmin user password using amprecovery credentials.
	Scenario : We fixed the issue that prevented you from resetting the ampadmin password using the amprecovery credentials.
DE29727	Symptom: RADIUS authentication with PEAP-MSCHAPv2 failed with hostnames.
	Scenario: Giving a hostname and selecting PEAP-MSCHAPv2 no longer results in failed authorizations.
DE29557	Symptom: OV3600 needed to comply with TFTPD STIG requirements.
	Scenario: OV3600 8.2.5 now supports the following STIG requirements:
	 V-38701: The TFTP daemon must operate in secure mode which provides access only to a single directory on the host file system. (CAT I)
	 V-38606: The tftp-server package must not be installed unless required. (CAT II) V-38609: The TFTP service must not be running. (CAT II)
DE29504	Symptom: OV3600 needed to strengthen password requirements for the ampadmin user.
	Scenario: See "Security Enhancements for Military Deployments" on page 8 for more information.
DE29233	Symptom : You couldn't change the OV3600 server hostname from the OV3600 Setup > Network page.
DE29141	Scenario : We've the issue and the hostname no longer reverts back to localhost.localdomain after you change the hostname.

Table 4: Issues Resolved in OV3600 8.2.4.1

ID	Description
DE29409	Symptom: RF channel quality information was inaccurate for a managed AMP that has IAPs.
	Scenario: OV3600 now supports this feature for Instant APs running Instant 6.5.3.0.
DE29293	Symptom: After upgrading to OV3600 8.2.4 from 8.2.3.1, controllers were mismatched and configuration imports failed.
DE29243	Scenario: When you enabled 2-factor authentication, VisualRF failed to authenticate internally and displayed an error message that the role wasn't found.
DE29235	Symptom: The VisualRF backup is not available for download.
	Scenario: With OV3600 8.2.4.1, you can download the VisualRF backup from the /var/ampcli/user directory.
DE29196	Symptom: The Save button wasn't working on the Instant Config page after making a second configuration change on Instant APs running Instant 6.5.0.0-4.3.0 and 6.4.4.0-4.2.4.
	Scenario: The Save button now works when you make configuration changes on the Instant Config page.
DE28904	Scenario: The <i>OV3600 8.2.4 User Guide</i> now contains documentation for configuring the Alcatel-Lucent Instant Options under "Secure Access to OV3600".
DE28987	Scenario: Table 132: UCC Report Fields in the <i>OV3600 8.2.4 User Guide</i> has been revised to include descriptions for the following connectivity types:
	WiFi to externalWiFi to PSTN
DE28985	Scenario: Table 136: Reports > Generated Page Fields and Descriptions in the <i>OV3600 8.2.4 User Guide</i> has been revised to include additional information for the Report Start and Report End fields.
DE27014	References to OV3600 8.1 have been removed from Table 1: Instant support in OV3600 in the OV3600 8.2.4 User Guide.

Table 5: Issues Resolved in OV3600 8.2.4

ID	Description
DE28904	Symptom: The release notes didn't document the new Alcatel-Lucent Instant options that were introduced in OV3600 8.2.3.
	Scenario: We've added information about Instant certificate authentication to the <i>OV3600 8.2.4 User Guide</i> .
DE28863	Symptom: IGC became mismatched when the DHCP profile contained 3 or more IP addresses. Scenario: The WebUI has been updated to allow clients to enter up to 2 IP addresses in DHCP profile.
DE28704	Symptom: The shellinaboxd daemon was using 99% CPU cycles, preventing ALC from starting. Scenario: The issue that caused shellinaboxd to use 99% CPU has been fixed.
DE28446	Symptom: OV3600 sent false alerts indicating working devices as down devices. Scenario: The false trigger causing the down device alerts has been fixed.

ID	Description
DE28386	Symptom: The IGC produced extra overrides that did not exist before migration. Scenario: We've fixed this issue to prevent the IGC from producing excessive overrides during migration.
DE28374	Symptom: Heat maps are out of place when the floor plan dimensions are metric. Scenario: Importing floor plans now works as expected when using metric dimensions.
DE28245	Symptom: Spikes in OAW-IAP VPN usage graphs were shown to be displaying higher values than actual VPN usage. Scenario: This issue was fixed in OV3600 8.2.4.
DE28174	 Symptom: Virtual Switches fluctuated between up and down status, while OAW-IAPs associated with the Virtual Switches remain UP. Scenario: Caused by clients with user names containing illegal utf-8 characters. This issue has been fixed.
DE28140	 Symptom: Documentation of the minimum version of VMware ESXi that OV3600 supports needed to be updated. Scenario: We've updated the VMware ESXi requirement to 5.5 or higher in the OV3600 8.2.4 Installation Guide.
DE27829	 Symptom: In the Client Sessions Summary Report, the session data by SSID's bytes in and out data were switched. Scenario: This issue was resolved by switching these values to their correct locations.
DE26556	Symptom: OV3600 displays an incorrect client count. Scenario: This issue was resolved by an update released in Alcatel-Lucent AOS-W 8.1.

Table 6: Issues Resolved in OV3600 8.2.3.1

ID	Description
DE28019	Symptom: There was an extra space in the Select a Profile drop-down menu.
	Scenario: This problem no longer occurs when you run an on-demand synthetic test and don't have any other test profiles.
DE27748	Symptom: A Jedis exception error didn't allow synthetic tests to run.
	Scenario: OV3600 sends an error instead of stopping VisualRF and Clarity Synthetic when it encounters a Jedis exception error.
DE27747	Symptom: In OV3600 8.2.2, the PCI compliance report for PCI 4.1.1 showed pass instead of fail.
	Scenario: This compliance report would be inaccurate because of an underlying AOS-W issue, where the client encryption method data was missing. We've changed the way OV3600 handles this data to assume the exchange of information is unencrypted if the authentication method is captive portal.
DE27711	Symptom: The release notes didn't document the supported upgrade paths for OV3600 8.2.x.
	Scenario: This document adds "Upgrade Instructions" on page 43.

Table 6: Issues Resolved in OV3600 8.2.3.1 (Continued)

ID	Description
DE27672	Symptom: Synthetic tests failed if the AP name contained spaces.
	Scenario: When passing a command, the controller handled the space in the AP name as a break between commands. Clarity Synthetic now allows AP names to contain spaces to make setting an AP in synthetic mode possible.
DE27630	Symptom: In OV3600 8.2.2.1, the OV3600 server crashed if the storage disk was full.
	Scenario: Now OV3600 displays a warning when the storage disk is running out of space, giving you time to free up space.
DE27586	Symptom: In OV3600 8.2.3, the log collection failed if the OV3600 server host name was invalid.
	Scenario: We've fixed this Clarity Synthetic issue, and log collection no longer fails with an invalid host name error.
DE27566	Symptom: In OV3600 8.2.2.1, the client count and usage graphs didn't display properly.
	Scenario: We've fixed a rare condition where illegal UTF-8 encoding caused problems with client monitoring after upgrading from older OV3600 7.7 releases.
DE27366	Symptom: The Results page for a synthetic test displayed "Success" for response time and loss.
	Scenario: Clarity Synthetic has been corrected to display all time results using milliseconds (ms).
DE27467	Symptom: In OV3600 8.2.2, the Interface Monitoring page for the Aruba 2530-24G switch didn't display VLAN (tagged) information.
	Scenario: OV3600 8.2.3.1 resolves an issue that prevented the display of DOT1D, DOT1Q, and VLAN information in the Physical Interfaces table.
DE27338	Symptom Clarity Synthetic showed browser exception errors in the WebUI.
	Scenario: Under some circumstances, running a bulk test would throw exceptions like "TypeError: Cannot set property" or "TypeError: Cannot read property". These situations now fail gracefully.
DE27269	Symptom Clarity Synthetic showed hyperlinks in the timestamp for tests that in progress, implying that results were available.
	Scenario: This hyperlink becomes available in the timestamp after the synthetic test is complete.
DE27163	Symptom: AppRF data didn't load data for 1-day or 2-day intervals.
	Scenario: We've fixed an issue which caused a page-lock issue that prevented AppRF from displaying all data properly.
DE27121	Symptom: In OV3600 8.2.2.1, updates to the client and usage graphs on the Controller Monitoring page were delayed by 45 minutes to an hour.
	Scenario: We fixed this issue in OV3600 8.2.3, and the client and usage graphs display properly
DE27088	Symptom: Your synthetic test failed if you used the same AP as a client and a target.
	Scenario: In OV3600 8.2.3.1, Clarity Synthetic will not allow you to run a test if using an existing profile if the AP you selected as a client is already a target.

Table 6: Issues Resolved in OV3600 8.2.3.1 (Continued)

ID	Description
DE27068	Symptom: XML external entity (XXE) and cross-site scripting (XSS) security vulnerabilities were discovered in VisualRF.
	Scenario: OV3600 8.2.3.1 addresses the security advisory ARUBA-PSA-2017-001, resolving security vulnerabilities CVE-2016-8526 and CVE-2016-8527.
DE27029	Symptom: If you ran many synthetic tests, then you had to scroll through a long Results page to view your test results.
	Scenario: We've added a column to the Results page to optimize the test results displayed on your monitor.
DE26866	Symptom: When running the page load test, Clarity Synthetic was set up use to the HTTPS version of a website.
	Scenario: The page load test has been changed to use the HTTP version.
DE26634	Symptom: VisualRF doesn't crash when loading .dwg drawings.
	Scenario: Improvements in VisualRF prevents the OV3600 WebUI from timing out when uploading floorplans in the .dwg format.
DE26499	Symptom: The interface information was missing for the stack member client diagnostic page for Alcatel-Lucent MAS switches.
	Scenario: The stack member client diagnostic page interface has been added to the topology view.
DE26322	Symptom: OV3600 deleted configuration jobs scheduled on a device if you deleted the device.
	Scenario: This issue no longer occurs when you delete devices from multiple folders in OV3600 8.0.11.1
DE21040	Symptom: AppRF data exceeded allocation limits.
	Scenario: Failed nightly maintenance jobs caused AppRF tables to bloat. OV3600 8.2.3.1 fixes this issue.

Table 7: Issues Resolved in OV3600 8.2.3

ID	Description
US14762	Symptom: After upgrading the Instant software version on a virtual Switch, OV3600 lost the IGC-based configuration overrides, resulting in configuration mismatches.
	Scenario : OV3600 8.2.3 resolves an issue in OV3600 8.0.x that caused the virtual controller to lose configuration overrides after an Instant upgrade.
US15871	Symptom: Upgrading OV3600 to 8.0.10, 8.0.11 and 8.2.0.1 failed during database migration if there were missing tables, indexes, or foreign keys, causing the server to crash.
	Scenario: OV3600 checks the database schema before it starts an upgrade, then it logs an error if the database schema is incomplete.
DE26260	Symptom: A security scan might highlight several vulnerabilities in OV3600 8.2x.
DE25721	Scenario: OV3600 8.2.3 addresses CESA-2016:0494, Oracle Java SE, security vulnerabilities. These fixes include a CentOS 6 update, Oracle Java for Business, and NTP 4.2.8p8 updates.

Table 7: Issues Resolved in OV3600 8.2.3 (Continued)

ID	Description
DE27379	Symptom: In previous versions of OV3600, there were only libX11 and libX11-common RPMs in the software package, which caused security scans to report vulnerabilities.
	Scenario: OV3600 8.2.3 has been updated with the libX11-1.6.3-2 replacement to avoid this issue.
DE27281	Symptom: Zero touch provisioning (ZTP) device registration failed after a fresh installation or an upgrade to OV3600 8.2.3.
	Scenario: In OV3600 8.2.3, there is a new setting under AMP Setup > Additional AMP Services, called Disable TLS 1.0 and 1.1. This option is set to Yes by default. In order for Aruba switches to automatically check-in to OV3600 by ZTP, you must change this option to No.
DE27123	Symptom: Upgrading OV3600 8.0.9 to 8.2.2 or 8.2.2.1 on Red Hat Enterprise Linux (RHEL) 6.3 failed.
	Scenario: We addressed an issue with processing internal messages that prevented successful upgrades on systems running RHEL 6.3.
DE27121	Symptom: In OV3600 8.2.2.1, updates to the client and usage graphs on the Controller Monitoring page were delayed by 45 minutes to an hour.
	Scenario: We fixed this issue in OV3600 8.2.3, and the client and usage graphs display properly now.
DE26934	Symptom: VisualRF didn't update the 5 GHz radio information for Cisco 3600i APs.
	Scenario: We fixed an issue that occurs when you use an 802.11a/b/g/n device that supports 802.11ac but don't upgrade it to 802.11ac.
DE26905	Symptom: OV3600 displays the last authenticated username for a client if it's connected without a username.
	Scenario: This issue no longer occurs for authenticated clients, connecting with LMAC and captive portal, or for unauthenticated clients.
DE26651	Symptom: OV3600 failed to push new certificate and captive portal settings to Alcatel-Lucent MAS switches.
	Scenario: If you enabled overrides for new certificate and captive portal settings, OV3600 no longer marks the switches as being mismatched
DE26058	Symptom: OV3600 didn't provide a Media Classify option for access list profiles.
	Scenario: You can configure this option from the Groups > Controller Config page or the AP/Devices > Manage > Overrrides page.
DE25721	Symptom: Earlier versions of OV3600 used SHA-1certificates, which were set to expire in 2017.
	Scenario: OV3600 8.2.3.1 addresses an NTP security vulnerability.
DE25533	Symptom: Earlier versions of OV3600 used SHA-1certificates, which were set to expire in 2017.
	Scenario: OV3600 8.2.1 and later use the replacement SHA-2 certificates.
DE25122	Symptom: The Interface Monitoring page displayed incorrect interface and port statistics for x86 Switches.
	Scenario: AOS-W 8.0.1 fixes issues related to x86 controller interface statistics that caused the Usage and Interface Frame Counter graphs and the in and out values in the Interface table to appear as "zero".

Table 8: Issues Resolved in OV3600 8.2.2

ID	Description
DE26397	Symptom: In earlier OV3600 releases, users with regular, non-administrator accounts couldn't see AppRF and UCC data in the dashboards.
	Scenario: Starting with OV3600 8.2.2, you can create an AppRF or UCC role that gives non-administrator users read-only privilege. For information about configuring user roles, see the <i>OV3600 8.2.3 User Guide</i> .
DE26139 DE26138	Symptom: The Clarity Live data on the Home > Clarity page of the OV3600 WebUI shows accurate data for MAC authentication failures.
	Scenario: This resolves an issue where the MAC authentication failure counters on the top of the Clarity dashboard page were not incrementing correctly.
DE26038	Symptom: Walls appeared incorrectly in the VisualRF floor plan after an upgrade to OV3600 8.2.x.
	Scenario: An issue is resolved that affects how files are backed up and restored in OV3600 8.2.2.
DE25921	Symptom: Device communication credentials for new devices are no longer visible via the View Device Credentials link in the Device Communications section of APs/Devices > Manage page, or the Default Credentials section of the Device Setup > Communication page of the OV3600 WebUI.
	Scenario: In previous releases, credentials for newly discovered devices were visible by default.
DE25884	Symptom: The Group > Monitor page displayed the wrong bandwidth usage for a Switch. For example, OV3600 reports the device usage as 163 Gbps on the Group page and 260 Mbps on the Monitoring page for the same device.
	Scenario: OV3600 properly displays information about your device bandwidth usage.
DE25821	Symptom: OV3600 reported inconsistent numbers of clients on the APs/Devices > Monitor page.
	Scenario: The wired client count under the Monitor Info section was double the count found in Radio and Wired Interfaces combined. This issue, which occurred when the OAW-IAP acted as a gateway for wired networks, has been addressed.
DE25645	Symptom: If you restored one Instant cluster with an backup of another Instant cluster, OV3600 rebooted the OAW-IAPs because they used the same virtual controller key.
	Scenario: When the OAW-IAPs are in monitor-mode, OV3600 now warns you if the OAW-IAPs are using the same virtual controller key.
DE25211	Symptom: OV3600 reported inconsistent numbers of clients on the APs/Devices> Monitor page.
	Scenario : The wired client count under the Monitor Info section of the APs/Devices > Monitor page was double the count found in Radio and Wired Interfaces combined. This issue, which occurred when the OAW-IAP acted as a gateway for wired networks, has been addressed.
DE24958	Symptom: Connecting to the OV3600 server with SSH was possible using the Diffie-Hellman Group 1 key exchange.
	Scenario: OmniVista 3600 Air Manager no longer supports SSH client to server connections using the Diffie-Hellman Group 1 option and instead uses Group 14, for greater security.

Table 8: Issues Resolved in OV3600 8.2.2 (Continued)

ID	Description
DE24406	Symptom: Backup configurations downloaded from the OV3600 WebUI couldn't be restored from because the files weren't compressed properly.
	Scenario: This issue occurred when using the Chrome browser to download the backups.
DE22421	Symptom: The usage field and usage graph that showed bandwidth used for incoming and outgoing traffic on a radio did not display on the APs/Device Monitor page.
	Scenario: This issue affected HP ProCurve MSM Switches running OV3600 8.0.6.3 and Firmware 6.2.1.0 or 6.4.2.0.

Table 9: Issues Resolved in OV3600 8.2.1.1

ID	Description
DE26015 DE25582	Symptom: OV3600 8.2.1 did not support ZTP on the HPE Aruba Switch Models 2530 YB and 2620. Scenario: We addressed this issue by supporting CBC ciphers in order to accept TLS 1.0 calls.
DE25988	Symptom: Client graphs were inconsistent with corresponding AMON data after upgrading to OV3600 8.2.1 from 8.2.0.3.
	Scenario: This issue occurred when the new AMON receiver crashed while trying to calculate AMON message loss. Message loss monitoring has been fixed.
DE25869	Symptom: If you upgraded the firmware on a Switch and then rebooted it, the device might appear to be down although its status is up when polled.Scenario: This issue has been fixed. You no longer see a Device Down error in the event log.
DE25577	Symptom: After an upgrade to OmniVista 3600 Air Manager 8.2.0.2, OmniVista 3600 Air Manager tried to restart every few seconds when running out of memory.
	Scenario: We fixed an issue that prevented OmniVista 3600 Air Manager from loading AppRF data.

Table 10: Issues Resolved in OV3600 8.2.1

ID	Description
DE25427	Symptom: A Switch does not automatically reboot if a firmware download operation fails.
	Scenario: If the OV3600 system boot process detects file copy failures during a firmware upgrade, the reboot process will not initialize, and the switch will not reboot.
DE25735	Symptom: OV3600 is now able to restore a backup file after anOV3600 server upgrades from OV3600 8.0.x to OV3600 8.2.1.
	Scenario: Improvements to how the internal server_watcher_limits file is handled resolve this issue in OV3600 8.2.1.
DE25599	Symptom: Planned APs correctly appear on an OV3600 8.2.1 VisualRF floorplan.
	Scenario: An issue was identified in OV3600 8.2 that prevented planned APs from appearing on a floorplan. This issue is resolved in OV3600 8.2.1 by improvements to the parsing of the internal catalog repository that maintains all of the values used by VisualRF.

Table 10: Issues Resolved in OV3600 8.2.1 (Continued)

ID	Description
DE25580 DE25544	Symptom: An issue is resolved where Instant APs configured via the Instant GUI Config (IGC) feature could lose a configured PPPOE-password parameter and incorrectly add an additional ACL entry.
	Scenario: This issue occurred when IGC incorrectly identified a mismatch on the device, and attempted to modify the device configuration to resolve that mismatch. Internal changes in OV3600 8.2.1 prevent a mismatch from being incorrectly identified, resolving this issue.
DE25691	Symptom: APs placed in a VisualRF floorplan no longer shift location slightly when the page is refreshed.
	Scenario: When APs were placed on a small VisualRF floor plan configured with metric units and a small grid size, rounding errors in internal calculations made the AP change positions slightly when the position was saved to the flooplan. This issue is resolved in OV3600 8.2.1.
DE25623	Symptom: An Instant AP image can not be uploaded via an external file server if an image with the same name is already uploaded to the OV3600 server.
	Scenario: The Device Setup >Upload Firmware & Files page of the OV3600 WebUI now supports uploading files via an external file server, even if a file with the same name already exists in the firmware list on the Groups > Firmware page.
DE25540	Symptom: OV3600 failed to import Cisco IOS templates from standalone APs.
	Scenario: This issue has been fixed in OV3600 8.2.1.
DE25539	Symptom: OV3600 8.2.1 contains OpenSSL security updates for RHSA-2016:0996-2.
	Scenario: Security flaws in OpenSSL could allow an application that is compiled against it to crash, or execute arbitrary code, using the permissions of the user running the application. OV3600 8.2.1 includes enhancement for RHSA-2016:0996-2, which resolves vulnerabilities CVE-2016-2842, CVE-2016-2100, CVE-2016-2108, CVE-2016-2107, CVE-2016-2106, CVE-2016-2105, and CVE-2016-0799.
DE25509	Symptom: An issue is resolved where an Instant AP cluster appeared in an error state after upgrading from Instant 4.1.1.13 to Instant 4.1.3.
	Scenario: Changes to how the OV3600 Instant GUI Config (IGC) feature handles Instant releases with double digits resolves this issue in OV3600 8.2.1.
DE25472	Symptom: OV3600 8.2.1 contains OpenSSL security updates for RHSA-2016:0301-1.
DE24975	Scenario: Security flaws in OpenSSL allowed side-channel attacks, application crashes, decryption of RSA-encrypted cipher text, or allowed malicious SSLv2 clients to negotiate SSLv2 ciphers that were disabled on the server. OV3600 8.2.1 includes enhancement for RHSA-2016:0301-1, which resolves vulnerabilities CVE-2015-3197, CVE-2016-0702, CVE-2016-0705, CVE-2016-0797 and CVE-2016-0800.
DE25434	Symptom: An issue is resolved where a large number of alerts for high CPU or memory usage were incorrectly triggered.
	Scenario: An OV3600 trigger configured as " <i>Device Type is Access Point, Percent CPU Utilization</i> >= 80% or Percent Memory Utilization >= 30% for 1 minutes" triggered many alerts where the alert type appeared as "deleted" in the System > Alerts page. Improvements to CPU utilization processes resolve this issue in OV3600 8.2.1.

Table 10: Issues Resolved in OV3600 8.2.1 (Continued)

ID	Description
DE25421	Symptom: Some .dwg files were not correctly uploaded into VisualRF as floorplan images.
	Scenario: Improvements to an internal image converter process resolves an issue where some .dwg images were not getting correctly converted to .svg images in VisualRF.
DE25385	Symptom : In previous releases of OV3600, filters applied to limit the display of rogue devices could not be removed all filters at once, but had to be removed individually.
	Scenario: OV3600 8.2.1 resolves this issue with the addition of a new Reset filters link on the RAPIDS > List page.
DE25382	Symptom: The default duration for a support connection is fourteen days in OV3600 8.2.1. In previous versions of OV3600 8.2.x, the default connection period was one day.
	Scenario: A support connection is a point-to-point IP tunnel that is initiated from a customer OV3600 server to Aruba's support server. A support connection on a server running OV3600 8.2.1 remains open for seven days, unless it is manually closed using the command # service support_connection stop .
DE25373	Symptom: When running a custom report with the Uptime by Device option selected, OV3600 reported incorrect uptimes or reported devices as being down although they were running.
	Scenario: This issue has been fixed by improvements to the order in which device uptime records are set.
DE25317	Symptom: The Clients > Diagnostics page inaccurately reported the channel width when it displayed 120 MHz for very high throughput (VHT) mode.
	Scenario: The channels displayed are now correct for high throughput (HT) and VHT networks. Channels a device can use are: 20, 40, 80, or 160.
DE25282	Symptom: An OV3600 server running OV3600 8.2.0.x sent random authentication requests to the RADIUS server.
	Scenario: This issue occurred only for RADIUS authentication, where unexpected RADIUS requests were repeatedly sent to the RADIUS server, and continually failed.
DE24713	Symptom: Cisco 2700e LWAPP APs did not correctly display heat maps for 802.11ac radios, although heatmaps did correctly display for radios in 'ng' or 'na' modes.
	Scenario: Updates to the internal catalog allows VisualRF to recognize Cisco 2700e LWAPP AP radios in 802.11ac mode.
DE24567	Symptom: Previous releases of OV3600 8.x generated two NMS events for the same rogue ID classification if If a trigger is configured to forward an alert to another network management system.
	Scenario: Improvements in OV3600 8.2.1 sends a single detailed alert for an NMS trap, rather than sending one NMS trap with details, and another NMS trap without details.
DE22575	Symptom: The Supported Platforms column in the interfaces table on the Groups > Switch Config > Local Config > Network > Port/Interfaces > Gigabit Ethernet page now correctly lists the Alcatel-Lucent Switch.
	Scenario: In previous releases of OV3600, the Switch was incorrectly omitted as a supported platform for Ethernet interfaces that were supported by that device.

Table 11: Issues Resolved in OV3600 8.2.0.3

ID	Description
DE25624	Symptom: OV3600 did not generate matching event reports for an AP on the Reports > Detail page although it had connected clients.
	Scenario: This issue occurred when OV3600 skipped AMON messages that didn't contain AP identification information. The method in which OV3600 obtains the identification information for an AP has been changed to resolve this issue.
DE25570	Symptom: When VisualRF ran calculations to build the campus grid, it generated large amounts of data which resulted in extremely large backups.
	Scenario: As a result of this issue, VisualRF ran out of memory and crashed. Visual RF now runs calculations in smaller intervals.
DE25448	Symptom: Sometimes the Domain Name System (DNS) Resolution graph in the Clarity dashboard wouldn't display.
	Scenario: This graph wouldn't load because of an underlying AOS-W issue, where the DNS samples field populated when it shouldn't. The mechanism for querying the DNS samples measured has been corrected.
DE25419	Symptom: Old JRE files remained after an upgrade.
	Scenario: When upgrading from an earlier version of OV3600, a new JRE installs over itself, leaving JREs from previous installations. You can run a script and select which JRE files to delete. The script is in the /src/x86_64/rpms/Makefile directory.
DE25416	Symptom: After upgrading from OV3600 8.0.11.1 to 8.2.x, the Network view in VisualRF displayed incorrect results on the campus map.
	Scenario: OV3600 8.2.0.3 fixes an issue where the data migration of pixel width and height didn't work during an upgrade from 8.0.11.x. Campuses no longer overlay each other on the map, and you can drag and drop, or auto arrange items again.
DE25408	Symptom: You could not modify the primary, secondary, or tertiary Switches from the Cisco Thin AP Settings or the Manage Configuration page.
	Scenario: After upgrading from an earlier version of OV3600 to 8.2.0.1, you couldn't make a selection from the drop down menu, or access the drop down menu. These issues are resolved for all web browsers.
DE25352	Symptom: In the Usage graph for connected clients, accessed from the Client > Connection page, the labels and color codings were incorrect.
	Scenario: The information in these graphs, such as color coding, axis direction, and client traffic direction, were changed to match other Usage graphs in the WebUI.
DE25346	Symptom: During an upgrade to OV3600 8.2.x, the system attempted to upgrade the firmware after exceeding the maximum retries limit.
	Scenario: The system now stops the upgrade when it reaches the maximum retries limit.
DE25320	Symptom: The row of statistics hyperlinks at the top of the OV3600 WebUI (Top Header Stats), displayed incorrectly.
	Scenario: OV3600 8.2.0.3 corrects this screen output issue.

Table 11: Issues Resolved in OV3600 8.2.0.3 (Continued)

ID	Description
DE25312	Symptom: Security flaws in the OV3600 8.0.x release could have caused an application that is compiled against the NSS library to crash, or execute arbitrary code, using the permissions of the user running the application (CVE-2016-1978 and CVE-2016-1979).
	 Scenario: OV3600 8.2.0.3 contains the following Linux security updates, which correct these issues: nss-util security update RHSA-2016:0370-1 glibc security and bug fix update RHSA-2016:0175-1 kernel security and bug fix update RHSA-2015:2636-1 nss, nss-util, and NSPR security update RHSA-2016:0591-1
DE25310	Symptom: AMON messages sent from Alcatel-Lucent AOS-WSwitches contain timestamps in various formats.
	Scenario: OV3600 8.2.0.3 resolves this issue by reporting all messages in the Clarity dashboard in milliseconds. In order to view complete Clarity data, upgrade OV3600 to 8.2.0.3 and ensure that the controller is running AOS-W 6.4.3.9, 6.4.4.8, or later.
DE25067	Symptom: When you deploy an AP in a floor plan, VisualRF doesn't display a heatmap for the AP unless you restart VisualRF.
	Scenario: VisualRF automatically refreshes and displays a heatmap for APs added to a floor plan.
DE24962	Symptom: The telnet_cmds log file tracks commands sent between OV3600 and a device using Telnet or SSH and might include passwords and secret data.
	Scenario: Security enhancements in OV3600 8.2.0.3 prevent these files from being viewed using the WebUI and prevent them from being included in an OV3600 backup file.

Table 12: Issues Resolved in OV3600 8.2.0.2

ID	Description
DE25409 DE25378	Symptom: Clients associated to an Instant AP correctly appear in VisualRF.
	Scenario: In previous releases of OV3600 8.2.x, OAW-IAP clients did not appear correctly in VisualRF floor plans.
DE25333	Symptom: OV3600 8.2.x processed incoming rogue data and didn't update the AP database. correctly.
	Scenario: OV3600 stores this rogue AP data and shows rogue devices accurately in the RAPIDs overview pages.
DE25314	Symptom: In the Home > Clarity Monitoring pages of the WebUI, the AP Name column in the AP Summary table and APs column of the AP Association table display the AP name defined by the Switch to which that AP is associated.
	Scenario: OV3600 displays the correct AP name sent by the Switchin the Clarity monitoring tables and graphs.
DE25260	Symptom: An issue prevented OV3600 7.7.14 from upgrading to earlier releases of OV3600 8.2.x.
	Scenario: This issue is resolved by changes to the internal installation process that modified the order in which some modules were installed.

Table 12: Issues Resolved in OV3600 8.2.0.2 (Continued)

ID	Description
DE25429	Symptom: The DNS failure graph on the Home > Clarity pages of the WebUI displayed inaccurate DNS data.
	Scenario: Alcatel-Lucent Switches running Alcatel-Lucent AOS-W 6.4.4.6 sent continuous server timeout errors. As a result, the DNS failure graphs displayed inaccurate data. This issue has been resolved.
US14749	Symptom: The accuracy of Clarity data is improved with a change that allows OV3600 to use VLAN IP addresses to validate the source of the AMON messages sent to the OV3600 server.
	Scenario: This change resolves an issue that allowed the Home > Clarity Monitoring pages to display inaccurate information for the following deployments:
	 In a Master+Master-Standby Switch deployment with VRRP and LMS IP set on the Switch, AMON AP messages were being sent with the LMS IP, preventing OV3600 from processing them. If messages were sent from the AP use a different VLAN IP than the Switch, OV3600 would not process them correctly. If the IP address used by a single Switch VLAN is defined as the IP address by which OV3600
	communicates with the Switch, AP station AMON messages sent from any other VLAN IP defined on the Switch would not be processed correctly by OV3600.

Table 13: Issues Resolved in OV3600 8.2.0.1

ID	Description
DE25275	Symptom: An issue is resolved where an OV3600 server upgrading to OV3600 8.2.0 might have
DE25251	insufficient disk space issue to allow the upgrade to completing successfully.
	Scenario: This issue is resolved by changes to the internal upgrade procedures in OV3600 8.2.0.1 that reduced the required disk space for the upgrade.
DE23592	Symptom: VisualRF correctly saves grid size modifications to floor plans.
	Scenario: OV3600 8.2.0.1 resolves an issue that prevented VisualRF section of the OV3600 UI from saving modifications to the floor plan grid size property.

Table 14: Issues Resolved in OV3600 8.2

ID	Description
DE23305	Symptom: VisualRF floor plans could display floor plan dimensions in feet, even if VisualRF was configured to display metric units. OV3600 8.2 resolves this issue, and floor plan dimensions are correctly converted from imperial to metric measurements.
	Scenario: This issue was observed when VisualRF settings were changed to display dimensions in metric units.
DE22577	Symptom: In OV3600 8.0, VisualRF did not update the grid size after you resized a floorplan which in turn prevented heatmaps from displaying correctly.
	Scenario: We fixed this issue in OV3600 8.2, and now VisualRF updates the grid size with new dimensions and displays the heat map.

The following tables describe known issues identified in OV3600 8.2.5 and previous releases. There are no known issues in OV3600 8.2.0.1, 8.2.1.1, and 8.2.4.1.

Table 15: Known Issues in OV3600 8.2.5

ID	Description
DE30129	Symptom: Restricted users can see all spanning tree nodes in the topology map. However, they can't select or get more information of spanning tree for restricted devices.
	Scenario: Spanning tree information is not restricted in API calls for limited access users.
	Workaround: There is no workaround.
DE30119	Symptom: OV3600 doesn't display sysContact and sysLocation for the Aruba 8400 switch.
	Scenario: This issue occurs when the sysContact and sysLocation of the Alcatel-Lucent 8400 switch changes after the device is added to OV3600.
	Workaround: Follow these steps to show the changes in the WebUI:
	 Go to the Manage page for the device by hovering the pointer over the device in the device list and clicking Manage from the shortcut menu. Scroll to the bottom of the page, then click Import Settings.
DE30093	Symptom: The topology map might not be updated when OV3600 discovers new devices.
	Scenario: This issue occurs if OV3600 discovers the devices' MAC addresses only after discovering the interfaces.
	Workaround: Following these steps to force OV3600 to poll the network for updates:
	 Click Poll Now on the device monitoring page. Go to System > Status, then click Restart OV3600 to restart the OV3600 services. After the OV3600 services, poll the device again.
DE30089	Symptom: Aggregated links might not display in the topology map.
	Scenario: This issue occurs intermittently.
	Workaround: Go to System > Status, then click Restart OV3600 to restart the Topology service.
DE30073	Symptom: When you upload more than one floor plan, VisualRF becomes unavailable and restarts on the second upload.
	Scenario: This issue occurs with DWG files.
	Workaround: There is no workaround.
DE30018	Symptom: HP Comware connect switches might not show in the topology map.
	Scenario: This issue might occur when OV3600 doesn't collect interface information for these switches.
	Workaround: There is no workaround.

ID	Description
DE30002	Symptom: Topology doesn't show spanning tree data for third party switches.
	Scenario: This issue occurs with Arista switches. Spanning tree data is available for only HP switches in Topology.
	Workaround: There is no workaround.
DE29921	Symptom: You can't manage the Mobility Master Virtual Appliance (MM-VA) and Mobility Controller Virtual Appliance (MC-VA) in OV3600.
	Scenario: This issue occurs when you discover or monitor MM-VA or MC-VA in OV3600.
	Workaround: There is no workaround.
DE29918	Symptom: HP Office Connect switches might not show in the topology map.
	Scenario: This issue might occur when OV3600 doesn't collect interface information for these switches.
	Workaround: There is no workaround.
DE29738	Symptom: OV3600 displays the incorrect speed mode for 40 Gbps ports.
	Scenario: For Alcatel-Lucent 7280 Switches, in the Interface Summary table, the 0/0/4 ports show 10 Gbps instead of 40 Gbps.
	Workaround: There is no workaround.
DE29347	Symptom: You can't configure OV3600 to enable the serial port from the AMP CLI.
	Scenario: This issue occurs for the appliance server running OV3600 8.2.4 and later that have a serial port not enabled by default.
	Workaround: There is no workaround.
DE29257	Symptom: OV3600 automatically logs out after you log in using Windows Explorer 11.
	Scenario: This issue might occur with OV3600 8.2.2.x, 8.2.3.x, and 8.2.4.
	Workaround: There is no workaround.
DE29225	Symptom: When creating a new floor plan, the Plan By Distance option might be missing in VisualRF.
	Scenario: This issue might occur after you create a floor plan and want to create second one. The drop down arrow for Plan By Distance missing.
	Workaround: There is no workaround.
DE29223	Symptom: After creating a new floor plan and placing APs in the floor plan, the planning circle still appears in VisualRF.
	Scenario: The planning circle should disappear after you click Finish.
	Workaround: There is no workaround.

ID	Description
DE29078	Symptom: After you change the hostname or IP address for the OV3600 server using the AMP CLI, the self-signed certificate still refers to the old information.
	Scenario: Currently, there is no way to regenerate the self-signed certificate that OV3600 generates during initial software installation.
	Workaround: There is no workaround.
DE29032	Symptom: OV3600 stops responding during a restore operation using the AMP CLI.
	Scenario: After you restore successfully from a backup, the CLI prompt doesn't get to the "Hit enter to continue" prompt.
	Workaround: There is no workaround.
DE29002	Symptom: Usage data in the Monitoring page for a Switch is incorrect.
DE28870	Scenario: "Total Out" on the Usage graph is correct, but "Total In" incorrectly shows zero. When you enable AMON statistics for the controller, you can see that CL_RX_BYTES counter is always zero while CL_TX_BYTES shows a number in the bssid_tunnel_stats message. Both values should be identical.
	Workaround: There is no workaround.
DE28866	Symptom: There is a discrepancy between the number of client IP addresses that OV3600 shows when monitoring with AMON and what the Switch shows in the show user mac output.
	Scenario: With AMON, OV3600 deletes a client IPv6 address if it receives an AUTH_USER_DELETED event for the client IP address.
	Workaround: There is no workaround.
DE28808	Symptom: The AMP CLI can become unresponsive.
	Scenario: When this issue occurs, the command input no longer shows in the screen.
	Workaround: If this happens, exit out of the session and start a new session.
DE28729	Symptom: If you reconfigure a stack member as a standalone switch, Topology can't create the link between 2 Alcatel-Lucent Mobility Switches.
	Scenario: Moving a member out of stack requires, re-adding the stack switch in OV3600.
	Workaround: If this issue happens, re add the switches in OV3600.
DE28721	Symptom: You see the message "A web page is slowing your browser" when adding an AP to a floor plan using the Plan By Distance option.
	Scenario: This issue occurs after you've uploaded the DWG file, measured the length, and added an AP to the floor plan.
	Workaround: There is no workaround.

ID	Description
DE27568	Symptom: Cisco switches with SNMPv3 don't show LLDP neighbors and don't appear in the topology.
	Scenario: This issue occurs because LLDP MIBs are not polled for CISCO switches with SNMPV3 configuration.
	Workaround: Follow these steps to discover the switch:
	 Open the Group Basic page by selecting Groups from the navigation bar. From the list of groups, find the group the device belongs to and click the hyperlink to open the Group page. Click the Group Basic page light at the tag of the page and click the paging form the group the device belongs to and click the hyperlink to open the Group page.
	 Click the Group Basic page link at the top of the page, or select Basic from the navigation menu. Scroll down to Universal Devices, Routers and Switches and choose 3 to set the SNMP version. Click Save and Apply. Click Poll Now on the switch monitoring page.
DE20919	Symptom: In VisualRF, heat maps don't refresh after you change wall attenuation settings.
	Scenario: This issue still exists after you refresh VisualRF.
	Workaround: Delete the wall and then re-add the wall, or restart VisualRF.
CR237113	Symptom: Device registration fails for Alcatel-Lucent switches with an SSL connect error 35.
	Scenario: This issue affects Aruba switches with firmware version 16.04.0009K.swi or later.
	Workaround: There is no workaround.

Table 16: Known Issues in OV3600 8.2.4

ID	Description
DE29223	Symptom: After planning and placing your APs, the planning circles still show up on the VisualRF floor plan.
	Scenario: If the Plan By Distance option is chosen when creating a new floor plan the planning circle shown around the individual APs will continue to display after the APs have been installed.
	Workaround: Set the host name using the AMP CLI.
DE29172	Symptom: The GPS 1 and GPS 2 fields can not be saved when creating a Visual RF floor plan.
	Scenario: When creating a new floor plan in Visual RF, if the user chooses to edit the building orientation by adding coordinates in the GPS1 and GPS2 fields and click Save, then reopen the building orientation menu, the values will change to 0.
	Workaround: There is no workaround.
DE29118	Symptom: You can't navigate to the device monitoring from the topology map when IPSEC is enabled.
	Scenario: In such cases, the DHCP server IP address is the source of the device IP address in Topology whereas OV3600 uses the inner IP address.
	Workaround: There is no workaround.

ID	Description
DE29085	Symptom: Customer must configure only one DTLS mgmt-server in Alcatel-Lucent AOS-W 8.1 Switch.
	Scenario: This issue is cause by a limitation when interacting with a Switch configured with Alcatel-Lucent AOS-W 8.1.
	Workaround: To fix this, the user must configure one Alcatel-Lucent AOS-W SwitchDTLS mgmt-server in Alcatel-Lucent AOS-W 8.1 using the following command:
	mgmt-server primary-server <dlst amp="" ip=""> profile default amp transport udp secure</dlst>
DE29065	Symptom: The bandwidth usage graph displays the message "No data available" on the Switch monitoring page.
	Scenario: Prior to Alcatel-Lucent AOS-W 8.1, OV3600 collects data from the APs and sends the data to the Switch for aggregation. A parameter introduced in Alcatel-Lucent AOS-W8.1 allows the controller to collect this data, rather than OV3600.
	Workaround: Set Prefer AMON vs SNMP Polling to Yes, then enter the following CLI command:
	[mynode] (config) #controller-amon bssid-tunnel-stats.
	If Prefer AMON vs SNMP Polling is set to No , the data will not display.
DE29036	Symptom: OV3600 fails to deploy the AMP CLI properly.
	Scenario: This issue occurs when OV3600 with an outdated system timefails to deploy AMP CLI properly.
	Workaround: Update system time prior to upgrading to OV3600 8.2.4.
	If the system can not connect to the Internet, use the command below:
	<pre>#ntpdate pool.ntp.org</pre>
	If the system still can not connect to the Internet, replace pool.ntp.org with an internal ntp server.
DE28980	Symptom: OV3600Topology contains the wrong time zone for the Last Contacted field.
	Scenario: The way OV3600 creates date and time in Topology is not the same as it does for the monitoring page. As a result, the device monitoring pate shows the server time, and last Topology shows the browser time.
	Workaround: Go to the device monitoring page to view the correct time stamp.
DE28962	Symptom: There is a long wait time when restoring the customer database after upgrading to OV3600 8.2.4.
	Scenario: After upgrading to OV3600 8.2.4, it took a customer 50 minutes for the database to restore.
	Workaround: There is no workaround.
DE28960	Symptom: The topology map shows the Switch health is good although there are rouges connected to it.
	Scenario: After the rogue device displays on the device monitoring page and you manually poll the device, it takes more than 5 minutes for the topology page to update the status.
	Workaround: There is no workaround.

ID	Description
DE28870	Symptom: Total IN value displays as 0 on the Switch monitor page.
	Scenario: The Total In value always shows as 0, while the Total Out value shows correctly. This is a limitation caused by Alcatel-Lucent AOS-W software.
	Workaround: There is no workaround.
DE28764	Symptom: Battery tags for charged devices display as empty.
	Scenario: When viewing the Visual RF floor plan, the battery tags for charged devices appear as empty.
	Workaround: There is no workaround.
DE28729	Symptom: The topology map doesn't show a wired connection.
	Scenario: If you reconfigure a stack member as a standalone switch, the Topology map can't create the link connections for the Switch.
	Workaround: Add the Switches to OV3600 again.
DE28718	Symptom: After updating the kernel for DL360 HP blades, the system can't reboot. Scenario: When the system tries to reboot, you see the error message: Error 15: File not found. Airwave doesn't support EFI.
	Workaround: Set the BIOS of a system to use the legacy BIOS mode.
DE28698	Symptom: The link between nodes is missing in the topology map. Scenario: This issue occurs on an Alcatel-Lucent MAS Switch for the last interface (port 24 or 48) if SFP+ up-link models are active.
	Workaround: There is no workaround.
DE28608	Symptom: IPv6 addresses don't display for Switches in the Interfaces page.
	Scenario: The Interfaces page displays only IPv4 adresses for Switches in the Virtual Interfaces table. This is a limitation caused by Alcatel-Lucent AOS-W software.
	Workaround: There is no workaround.
DE28430	Symptom: In 6.5.2, IAP default ip-mode has changed to v4-prefer . There will be a mismatch if the template contains ip-mode v4-prefer .
	Scenario: This issue occurs when the template contains ip-mode v4-prefer configuration when managing 6.5.2 IAPs.
	Workaround: Client must manually remove the ip-mode v4-prefer from the template when a mismatch occurs.
DE28140	Symptom: Customer is deploying OV3600 8.2.3 OVA and getting the following error message: "Unsupported Hardware family vmx-10"
	Scenario: This issue occurs when user deploys using ESX 5.1.
	Workaround: There is no workaround.

ID	Description
DE28408	Symptom: The ClearPass CPU utilization graph may display inaccurate information, but continues to relay accurate CPU-based alerts
	Scenario This issue occurs when the client viewing CPU utilization from the Clearpass WebUI.
	Workaround: There is no workaround.
DE27948	Symptom: OV3600 displays the device status for a virtual controller as being up although it is down.
	Scenario: This issue might occur when OV3600 audits the device configuration and the status is verifying or down.
	Workaround: There is no workaround.
DE26333	Symptom: OV3600 displays the device status for a virtual controller as being up although it is down.
	Scenario: This issue might occur when OV3600 audits the device configuration and the status is verifying or down.
	Workaround: There is no workaround.

Table 17: Known Issues in OV3600 8.2.3.1

ID	Description
DE28176 DE27653	Symptom: Clarity Synthetic doesn't display DHCP failures in the Results page. Scenario: When a WPA test passes and a DHCP test fails, Clarity Synthetic doesn't report the failure or reason code.
	Workaround: There is no workaround.
DE28154	Symptom: Clarity Synthetic displays page load test status as green when the Results popup might show a differently colored status.
	Scenario: All page load tests show green status in the Test Details page.
	Workaround: There is no workaround.
DE28153	Symptom: In Clarity Synthetic, the displayed screen is too small in the lower section of the Results page.
	Scenario: You might notice this issue in the Test Results page.
	Workaround: The screen resolution needs to be adjusted to make the text easier to read.
DE28152	Symptom: Clarity Synthetic displays the selected target as unknown in the Results page although the target is the one used in the synthetic test.
	Scenario: The Results page incorrectly reports the target as unknown.
	Workaround: There is no workaround.

ID	Description
DE28151	Symptom: In Clarity Synthetic, the Test Details page, when filtered, doesn't display properly in small windows.
	Scenario: This issue occurs when you apply a filter to the Test Details and then resize the window. You might be able to move the colored status indicators with a mouse-click.
	Workaround: There is no workaround.
DE25761	Symptom: When you try to upload a DWF file, VisualRF crashes.
	Scenario: When this issue occurs, VRF restarts but doesn't import the file.
	Workaround: Instead of DWF files, upload your floor plans as JPEG files.

Table 18: Known Issues in OV3600 8.2.3

ID	Description
DE27651	Symptom: OV3600 generates errors when an internal query fails on controllers running AOS-W 8.0.1.
	Scenario: Underlying issues with AOS-W cause client connections to fail. You will see a message similar to: 'Error: "ExecUIQuery failed' in the OV3600 event log.
	Workaround: There is no workaround.
DE27474	Symptom: Upgrading from OV3600 7.7 to 8.2.3 fails.
	Scenario: When you try to upgrade from OV3600 7.7 to 8.2.3, the process stops and prompts you to contact Alcatel-Lucent Technical Support.
	Workaround: Upgrading directly from OV3600 7.7 to 8.2.3 is not supported. Complete the interim upgrade to OV3600 8.0 before upgrading to 8.2.3.
DE27378	Symptom: The bandwidth usage is not reported at the group-level for wired clients.
	Scenario: The Groups > List page should report bandwidth usage for wired clients.
	Workaround: There is no workaround.
DE27278	Symptom: Alcatel-Lucent-managed nodes display as generic Alcatel-Lucent devices instead of Alcatel-Lucent Virtual Mobility Switches because of a software change introduced in AOS-W 8.0.1.
	Scenario: OV3600 can't poll these devices and reports them incorrectly as generic Alcatel-Lucent devices. This issue will be fixed in AOS-W 8.1.0.0.
	Workaround: There is no workaround.
DE27214	Symptom: Firmware upgrade for Dell MD series is not available from the APs/Devices > Manage page.
	Scenario: This issue occurs only on the Alcatel-Lucent Virtual Mobility Switches that are not deployed in physical Switches and has been fixed in AOS-W 8.1.0.
	Workaround: There is no workaround.

ID	Description
DE27058	Symptom: In VisualRF, changing the language to Italian, German, Spanish, and Turkish for building properties results in an error.
	Scenario: In OV3600 8.2.2.1, when you modify building properties, such as building names, floor plans, longitude and latitude, and ceiling height and attenuation, or change the language settings, VisualRF generates the following error: Enter a decimal number between 1 and 100.
	Workaround: In order to save these changes, select English as the language.
DE26975	Symptom: After an upgrade from OV3600 8.0.1 to 8.2.2, not all services restart completely.
	Scenario: This issue occurs when services reach their memory limits.
	Workaround: Contact technical support to increase the ALC memory.
DE26799	Symptom: You can't use an external lperf server.
	Scenario: When you configure the Clarity server, there is no option to specify the lperf port, and therefore you must use the default port.
	Workaround: There is no workaround.
DE26680	Symptom: Updates to the client and usage graphs on the Home > Overview page might take from 45 to 60 minutes.
	Scenario: This issue occurs in AirWave 8.2.0.2 and later.
	Workaround: There is no workaround.
DE26784	Symptom: The stack member interface list has duplicate entries.
	Scenario: This issue occurs when the stacked switch is dismantled and converted into separate switches.
	Workaround: Delete the switches and add the switches again.
DE26772	Symptom: When you try to import a certificate from the Device Setup > Certificates menu, OV3600 fails to parse the certificate and cannot import it.
	Scenario: This issue occurs for the following types of certificates: PEM, CER, Trusted CA, and Intermediate CA.
	Workaround: There is no workaround.
DE26513	Symptom: It takes time to populate IP changes in the switch ARP table.
	Scenario: If a gateway switch is not added in OV3600, then the IP change will not be updated.
	Workaround: There is no workaround.
DE26477	Symptom: The Monitoring page for a Cisco Integrated Services Router (ISR) displays the wireless interface incorrectly as a neighbor in the CDP Neighbor table.
	Scenario: This wireless interface would more reliably display as a wireless module or a switch property for the ISR.
	Workaround: There is no workaround.

ID	Description
DE26383	Symptom: In VisualRF, importing maps fails with an internal server error.
	Scenario: This issue occurs when the backup.zip file exceeds 300 Mb.
	Workaround: Use the command line to import maps.
DE26282	Symptom: The device configuration table grows up to 30 GB, resulting in slow processing and monitoring.
	Scenario: This issue occurs in networks with more than 100 Switches and 10 or more archived configurations.
	Workaround: Reduce the amount of archives to 1.
DE26389	Symptom: When upgrading a 2-core processor to OV3600 8.2.2, you might see a discrepancy in the number of monitoring processes reported on the AMP Setup page.
	Scenario : This issue occurs on a 2-core processor because the maximum processes allowed by the database is 3 but the UI allows only 2.
	Workaround: Navigate to AMP Setup > Performance , change the number of monitoring processes to 2, and click Save.
DE26383	Symptom: In VisualRF, importing a map fails with an internal server error when the backup.zip file is larger than 300 MB.
	Scenario: There are no errors in the VisualRF log, but you might see an error similar to the following in the httpd error log:
	Handler/Mocha/InlineStats/Base.pm line 189.
	Use of uninitialized value \$avg_time in numeric gt (>) at /usr/local/airwave/lib/perl/Mercury/Handler/Mocha/InlineStats/Base.pm line 189.
	/bin/df: `/var/lib/pgsql/pg_stats_temp': Permission denied
	/bin/df: `/var/lib/pgsql/pg_stats_temp': Permission denied
	/bin/df: `/var/lib/pgsql/pg_stats_temp': Permission denied
	Out of memory! Callback called exit at /opt/airwave/local/lib/perl5/site_ perl/5.10.0/HTTP/Headers.pm line 84.
	Workaround: Use the command line to import maps.
DE26367	Symptom: In VisualRF, the floor plan size does not display in list view.
	Scenario: This can happen even though you restart VisualRF.
	Workaround: Navigate to VisualRF > Floor Plans and click Map to view floor plan sizes.
DE26182	Symptom: There's a discrepancy between the statistics in the Clarity Dashboard widgets and the statistics that display in related reports.
	Scenario: When you double-click the Summary widget, the same statistics might display incorrectly in the window that opens. For example, the Association column in the Summary widget displays a 53% failure rate and a 15/28 session count, but the window that opens when you double-click the Summary widget shows a failure rate of 78% and a session count of 15/19.
	Workaround: There is no workaround.

ID	Description
DE26109	Symptom: OV3600 does not display licensing report data for Switches that are not active on the network.
	Scenario: If a Switch is not active on the network, OV3600 is not able to return licensing data from that device. As a result, the Reports > Detail page does not correctly display the licensing portion of that report, which appears to be stuck in a loading state.
DE25530	Symptom: OV3600 can create a nightly backup that is unusable.
	Scenario: During a scheduled backup, OV3600 may a backup file that is incomplete and unusuable if the process to clean the database fails due to insufficient disk space.
	Workaround: Restore the OV3600 server from an earlier backup. If you can't restore from a backup created before the issue occurred, contact technical support for help.
DE25520	Symptom: OV3600 8.2.2 does not discover rogue devices for Switches running AOS-W 8.0.
DE25148	Scenario: OV3600 should support RAPIDS for Switches running AOS-W 8.0.
	Workaround: Follow these steps to work around this issue:
	 Using OV3600, add all SCs and LCs manually, or discover them through a network scan (see the OV3600 8.2.3 User Guide for help with manually adding devices or adding networks for SNMP/HTTP scanning).
	2. Update the local Switch to services Switch relation by using the SQL update command. The syntax is: update ap
	set master_controller_id=ap2.id from ap as ap2 where ap2.apparent ip=ap.aruba master ip and ap.aruba switch role=2 and ap2.aruba
	switch_role=1;
	3. Ensure that the monitoring page for the local Switch shows the services Switch name and a link to its monitoring page.
DE25439	Symptom: OV3600 could not complete nightly maintenance tasks.
	Scenario: OV3600 maintenance tasks could fail due to corrupt client history round-robin database (RRD) files, triggering the following alert: Nightly Maintenance failed due to unsuccessful jobs:
	corrupted _rrds, chron_ssid_cleanup, rf_capacity_scatter.
	Workaround: Copy the identify_broken_rrds script from another OV3600 server to the /usr/local/airwave/bin/ and /root/svn/mercury/scripts/ directories, then run the script.
DE25063	Symptom: OV3600 failed to push IP address settings to a Cisco wireless LAN controller.
	Scenario: If you update the IP addresses of the primary, secondary, or tertiary Switches, OV3600 fails to configure the IP addresses and marks the Switches' configuration as mismatched. This issue occurs on Cisco devices running 8.0.121.0 managed by OV3600 8.x.
DE23425	Symptom: OV3600 may report incorrect client counts on local Switches.
	Scenario: This issue might occur during peak usage when OV3600 falls behind in processing AMON data.

Table 19: Known Issues in OV3600 8.2.1

ID	Description
DE25926	Symptom: HPE Aruba 2530YA, 2530YB and 2620 switches fail to register with OV3600 through zero-touch provisioning (ZTP) or configuration pushes from OV3600 to the switch command-line interface.
	Scenario: OpenSSL updates in OV3600 cause compatibility issues with these devices.
DE25875	Symptom: OV3600 displays incorrect transmission power for APs running Alcatel-Lucent AOS-W 6.4.4.0 to 6.4.4.6.
	Scenario: For APs running the impacted versions of AOS-W, transmission power levels on the APs/Devices > Monitor page are displayed as twice the actual level on the AP, and VisualRF heatmaps may display incorrect information. This issue is caused by changes in the information sent to OV3600 by the devices running these versions of Alcatel-Lucent AOS-W.
DE25845	Symptom: The configuration snippet push to a ZTP device gets stuck in the "In Progress" state.
	Scenario: After you start a partial configuration job for a group of factory-default devices added to OV3600 via ZTP, you might see "In Progress" for the ZTP device in the Job Details table on the Groups > Templates > Partial Config page. This partial configuration option was designed for only Alcatel-Lucent switches, and factory-default devices should not be available for selection from the partial configuration option.
DE25501	Symptom: EAP failures in 802.1X AMON messages are not monitored by OV3600.
	Scenario: If clients with invalid certificates attempt to associate to OV3600, OV3600 drops EAP_FAILURE Dot1x messages, preventing the tracking of clients which are facing EAP-FAILURE.
DE25400	Symptom: The OV3600 RAPIDs feature might calculate incorrect signal strengths from the RSSI value for rogue devices.
	Scenario: The cause of this issue is under investigation.
DE25399	Symptom: RAPIDS drops the event that corresponds to the strongest RSSI signal heard from a rogue AP.
	Scenario: RAPIDS records the strongest signal heard for a rogue as the rogue entry's signal value and doesn't overwrite that value until a stronger signal is heard, but RAPIDS may fail to retain the discovery event for that entry.
DE25350	Symptom: There is no support for pushing a full configuration for an Aruba switch running the ArubaOS-switch Operating System using the secure file transfer protocols, SCP and SFTP.
	Scenario: If you use the (unsupported) no tftp client CLI command, the switch is unable to accept TFTP requests. As a result, OV3600 cannot push full configurations to the switch.
DE25268	Symptom: Database schema failures do not cause the upgrade process to halt.
	Scenario: When a database schema change fails during a software upgrade, the upgrade process continues running.
DE24019	Symptom: When monitoring a stack of Aruba switches, or a standalone switch that has stacking-enabled, OV3600 shows a junk record for a switch with a status of Unknown.
	Scenario: This issue occurs when you remove the switch designated as commander from a stack and move it to another part of the network. When SNMP discovery finds the switch in a new stack, the junk record disappears.

Table 20: Known Issues in OV3600 8.2.0.3

ID	Description
DE25598 DE25522	Symptom: After updating the IP address of the Switch, you see syslog error messages listed under device events in the Clients > Detail page and not in the Clarity dashboard.
DE25500	Scenario: Underlying issues with Alcatel-Lucent AOS-W caused OV3600 to report only DNS information in the Clarity dashboard.
	Workaround: Upgrade OV3600 to 8.2.0.3 or later, and ensure that the Switch is running Alcatel-Lucent AOS-W 6.4.3.9, 6.4.4.8, or later.
DE25434	Symptom: OV3600 sends hundreds of alerts for high CPU or memory usage.
	Scenario: You might encounter this issue if you configured OV3600 to send alert notification until it is acknowledged.
	Workaround: When adding a trigger on the System > Triggers page, set the Suppress until acknowledge option to Yes.
DE25324	Symptom: Upgrading from OV3600 8.0.x caused VisualRF beamwidth, orientation and gain values to reset to their default values.
	Scenario: The beamwidth, orientation and gain values are not retained after flushing the bootstrap file or upgrading the OV3600 server.
	Workaround: None.
DE25226	Symptom: OV3600 takes longer to process station statistics AMON messages than it did in OV3600 8.0.x.
	Scenario: This issue has been associated with the Internet Explorer web browser.
	Workaround: None.

Table 21: Known Issues in OV3600 8.2.0.2

ID	Description
DE25398	Symptom: When you hover your mouse over the configuration (\checkmark) icon on the Groups > List page, the popup window of available actions might not appear in the correct spot, be hidden out of view, or display at the very bottom of the page.
	Scenario: This issue has been associated with the Internet Explorer web browser.
	Workaround: Use another web browser to access the WebUI, or select a group from the Groups > List page and use the navigation bar.

Table 22: Known Issues in OV3600 8.2

ID	Description
DE25324	Symptom: VisualRF Beamwidth, Orientation and Gain values on deployed APs automatically reset when you upgrade OV3600 to any version, or when you remove the bootstrap file.
	Scenario: The beamwidth, orientation and gain values are not retained after flushing the bootstrap file or upgrading the OV3600 server.

ID	Description
DE25220	Symptom: VisualRF indicated an incorrect number of APs associated with the OV3600 server.
	Scenario: In a deployment where over 4,000 APs were associated to an OV3600 server, and the active APs status icon at the top of the WebUI page showed the correct number of APs, VisualRF incorrectly indicated that OV3600 had over 10,000 associated APs.
DE25154	Symptom: If an AP upgrades to Instant 4.2.3 and uses Lync applications in its access control rules, Instant GUI Config (IGC) may show a configuration mismatch for that device.
	Scenario: This issue occurs because the list of Lync applications that can be included in an access control rule in the OV3600 8.2 IGC feature differs from the list of available rules in Instant 4.2.3. The following applications are unsupported by IGC in OV3600 8.2.
	 SOS ALG SVP SOS ALG Vocera SOS ALG Skype4B Voice SOS ALG Jabber-MC SOS ALG FTP SOS ALG Skype4B Video SOS ALG RTSP SOS ALG Skype4B File-Transfer SOS ALG SIP SOS ALG Skype4B SOS ALG SIP SOS ALG SIP-Audio Iearninganalytics web SOS ALG SIPS SOS ALG Skype4B Desktop-Sharing
DE25110	 Symptom: If a switch IP address is changed from a static IP address to an IP address dynamically assigned via DHCP, the device may appear as down in OV3600. Scenario: This issue is triggered because OV3600 has no way to determine the IP address that will be assigned to the switch after the change to a DHCP-assigned IP address. Workaround: Manually change the IP address when the IP provisioning option is changed from static to DHCP.
DE24785 DE24834 DE24836 DE24872	 Symptom: When the Groups > Instant Config pages of the OV3600 WebUI are accessed using the Internet Explorer web browser, these pages may not properly display Instant Config (IGC) configuration settings or browser elements, and may not correctly save or update configuration changes. Scenario: This issue occurs when you attempt to use Internet Explorer to create or modify a configuration for Instant devices via Groups > Instant Config. This issue does not occur with other supported web browsers.
	 Possible IGC behaviors in Internet Explorer include the following: Drop-down lists may not display properly Configured settings may not save or update properly Scrolling down a page in the IGC WebUI may cause the browser to unexpectedly return to the top of the page. Clicking the Save or Apply button may not save any configuration changes, may cause the browser to unexpectedly return to the top of the page. Workaround: Use an alternate web browser, such as Mozilla, to configure Instant devices.

ID	Description
DE24424	Symptom: A non-default Failure Timeout value configured via OV3600 Setup > General > Firmware upgrade/Reboot Options is not correctly applied.
	Scenario: By default, if a firmware upgrade on a switch fails, the switch state becomes locked, and a failure timeout of 60 minutes must elapse before the switch attempt s another upgrade. In OV3600 8.2, if you configure a non-default value for this failure timeout, the switch state might lock for 60 minutes <i>plus</i> the new failure timeout period. For example, if you configure a custom failure timeout period of 15 minutes, that setting might keep a switch locked for 75 minutes.
DE24417	Symptom: Firmware updates on Alcatel-Lucent switches may fail when firmware changes are simultaneously sent to switches in a multi-level switch topology, where an upstream switch is located between a downstream switch and the OV3600 server.
	Scenario: This issue occurs when an upstream switch downloads the firmware image and reboots, temporarily disrupting the firmware download on the second, downstream switch. This disruption may cause the firmware upgrade on the second switch to fail.
	Workaround: Perform separate firmware upgrades on switches at different levels. (For example, upgrade the first-level (upstream) switches before you upgrade any second level (downstream) switches.
DE24406	Symptom: Backup configurations downloaded from the OV3600 WebUI are not compressed properly, cannot be restored.
	Scenario: This issue occurs when a nightly backup file is downloaded using the Chrome web browser.
	Workaround: Use a different web browser to download the backup file.
DE24163	Symptom: The Current Secondary Version column in the System > Firmware Upgrade Job Detail > Devices Being Upgraded table displays incorrect image information for an Aruba switch.
	Scenario: The Devices Being Upgraded table should display the version number for the software stored in the secondary flash in the Current Secondary Version column. This column may instead display the boot ROM software version.
	Workaround: Access the switch command-line interface and issue the command show flash to view the primary and secondary image versions.
DE24019	Symptom: The Member Switches table on the APs/Devices > Monitor page for an Aruba switch may display incorrect stack member information.
	Scenario: If a HPE 3810 stack is discovered via SNMP discovery on the network, and the stack member with commander status is moved to another stack, an invalid stack record may appear in the Member Switch table for members of the original stack.
	Workaround: Adding another stack to the OV3600 server may clear these invalid entries.
DE23592	Symptom: VisualRF does not correctly save modifications to floor plans.
	Scenario: When modifying floor plans using the VisualRF section of the OV3600 WebUI, changes to the floor plans settings (like the floor name or number) are not correctly saved.
	Workaround: Measure the floor plan again to your save modifications.

ID	Description
DE23289	Symptom: VisualRF floor plans do not open correctly for clients accessing the OV3600 WebUI via the Microsoft Edge browser.
	Scenario: When viewing the VisualRF section of the OV3600 WebUI using the Microsoft Edge browser on a Windows 10 client, double clicking on a building or floor does not open the page for that building or floor.
DE23281	Symptom: If the APs/Devices > Monitor page for a device displays a VPN IP address, hovering your mouse over that VPN IP address displays a HTTPS and SSH tooltip that contains invalid links.
	Scenario: This issue occurs because the VPN IP address displayed on that page is an internal IP address. Clicking the HTTP link in the tooltip displays a blank page, and on the SSH link does not log a user into any device.
DE19402	Symptom: Reports exported via FTP are not sent if the report is modified, as the modified report fails to authenticate to the FTP server.
	Scenario: This issue occurs when you modify an existing FTP report and do not re-enter the FTP server passwords in the Export Options section of the Reports > Definition > Export Options page.
	Workaround: Redefine the FTP server password when you modify a report to be exported via FTP.
US14365	Symptom: PVOS commands values are unnecessarily grouped in the device running-config
	Scenario: Some ArubaOS-Switch Operation System commands that run individually on the switch appear grouped on the device running the configuration. OV3600 supports a 1:1 comparison of commands from the template and the device running the configuration. As a result, the grouped commands might incorrectly cause a mismatch.
	For example, the template might show two separate commands:
	loop-protect transmit-interval 10 loop-protect disable-timer 3000
	While the running configuration groups them into a single command:
	loop-protect transmit-interval 10 disable-timer 3000
	Workaround: Use the grouped commands directly in the template to avoid a mismatch.
US14468	Symptom: PVOS commands values may vary between the template and device running-config
	Scenario: When using template configuration to configure Power over Ethernet settings, the template command power-over-ethernet pre-std-detect is modified in the running configuration to add port values. OV3600 supports a 1:1 comparison of commands from the template and the device running-config, so this modification of the value may incorrectly cause the device to show a mismatch.
	For example, the template may show the command:
	power-over-ethernet pre-std-detect
	While the running-config adds port number values
	power-over-ethernet pre-std-detect ports 1-48

ID	Description
US14468	Symptom: PVOS commands values may vary between the template and device running-config
	Scenario: When using template configuration for 5400R, 3810, and 3800 Aruba switches, if the template command ip aspath list does not include a sequence number, the running configuration applies a sequence value of 5 . OV3600 supports a 1:1 comparison of commands from the template and the device running-config, so this modification of the value may incorrectly cause the device to show a mismatch.
	For example, the template may show the commands:
	ip aspath-list listname deny abcd
	While the running-config adds a sequence number to the running configuration:
	ip aspath-list "listname" seq 5 deny "abcd"
US14471	Sympto: PVOS commands values may vary between the template and device running-config
	Scenario: On 2530 and 2620 Aruba switches, some ArubaOS-Switch Operation System commands which are executed individually on the switch appear in a modified format in the device running-config, where leading zeros in a configuration value are added or deleted, and hexadecimal values in a template configuration may appear in a decimal value in the running configuration. OV3600 supports a 1:1 comparison of commands from the template and the device running-config, so this modification of the value format may incorrectly cause the device to show a mismatch.
	For example, the template may show the command:
	qos rate-limit dscp 0 1 kbps 0
	While the running-config adds one or more leading zeros to the value:
	qos rate-limit dscp 000000 1 kbps 0
	Workaround: Use the expanded command set in the template to avoid a mismatch.
US14471	Symptom: Individual PVOS commands values are unnecessarily divided in the device running-config
	Scenario: Some ArubaOS-Switch Operation System commands which are executed individually on the switch appear in multiple lines in the device running-config. OV3600 supports a 1:1 comparison of commands from the template and the device running-config, so this grouping may incorrectly cause the device to show a configuration mismatch.
	For example, the template may show one individual command:
	ip source-interface all vlan 1
	While the running-config divides the values from this command into multiple lines:
	ip source-interface tacacs vlan 1
	ip source-interface radius vlan 1 ip source-interface syslog vlan 1
	ip source-interface telnet vlan 1
	ip source-interface tftp vlan 1
	ip source-interface sntp vlan 1 ip source-interface sflow vlan 1
	Workaround: Use the expanded command set in the template to avoid a mismatch.

ID	Description
N/A	Symptom : Due to a known issue on an Aruba switch (CR191863), the switch state does not change from Factory to Non-Factory unless the switch reboots. If OV3600 pushes a partial configuration that does not require a reboot, OV3600 continues to see the switch in the Factory state.
	Scenario : The switch UI page that allows you to fetch a template includes a Push complete configuration file: Device is rebooted after config push option. If a user selects No for this option on a factory-default switch provisioned via a DHCP server, OV3600 only pushes a delta configuration, which does not result in a switch reboot. If a user adds settings via OV3600 that are not supported by OV3600 8.2, the full configuration is not pushed and hence the unsupported commands are not applied on the switch.
N/A	Symptom : If a user decides to reset the switch to a factory default state from the switch command-line interface, all stored passwords, security credentials and system settings will reboot in a factory default state.
	Scenario : This issue occurs because OV3600 always executes the include-credentials command when pushing a configuration to a switch.
N/A	Symptom: Unrecognized PVOS command syntax.
	Scenario: OV3600 may not recognize some syntax for some ArubaOS-Switch Operating System commands, and therefore will not allow to users to configure these commands via OV3600.
N/A	Symptom: Unrecognized PVOS defaults and values.
	Scenario: OV3600 may not recognize some default values or the "no" syntax for some ArubaOS- SwitchOperating System commands, and therefore will not recognize these values when these commands are configured via OV3600.
	For example, if a template has the command ipv6 hop-limit 100 , OV3600 would be expected to push the default value for this command (64 hops) if that line is removed from the template. If the default value is missing from the command and not recognized by OV3600, the device could not return to its default value, and a configuration mismatch could occur.
	Workaround : Issue the default value for the command within <push_to_exclude></push_to_exclude> tags in the template, as shown below.
	<pre><push_to_exclude> ipv6 hop-limit 64 </push_to_exclude></pre>
N/A	Symptom: Commands are hidden in the running-config.
	Scenario : Some commands may be hidden by the switch in the running-config and CLI help. Additional steps may be required to add these command settings via template configuration.
	Workaround: Add a hidden command to a device running config by including within <push_to_exclude> tags. For example, to ad the commands crypto key zeroize autorun rsa and crypto key zeroize ssh- client-key, to the template, use the following format:</push_to_exclude>
	<pre><push_to_exclude> crypto key zeroize autorun rsa</push_to_exclude></pre>
	<pre>crypto key zeroize adcordin isd crypto key zeroize ssh-client-key </pre>

You can upgrade directly to OV3600 8.2.5 from OV3600 8.0.8 or later.

Upgrade from OV3600 8.2.3.1 or Earlier Versions

If you upgrade from OV3600 8.2.3.1 or earlier, you will no longer have root user access to the Linux shell after the upgrade to OV3600 8.2.5, and your system will be converted to use the new AMP CLI. For information about using the AMP CLI, see the *OmniVista 3600 Air Manager 8.2.5 User Guide*.

Follow these steps to upgrade from OV3600 8.2.3.1 or earlier:

- 1. Log in to the OV3600 server as the root user.
- 2. Run the upgrade utility:

```
#start amp upgrade -v 8.2.5
```

The upgrade utility looks for the local upgrade package.

After the download completes, the following message appears while the software compiles:

Validating the upgrade package... Upgrade package is OK. Using upgrade script extracted from local package. Upgrade package found in local cache.

If the software is not available, manually download the software and then perform this step again.

3. After the OV3600 services restart, you will see the following message:

```
Setting up secure accounts...
Setting admin user name...
Admin Username (default 'ampadmin'):
Admin user is admpadmin
Done
Setting admin password...
Admin Password:
Verify Password:
Done
Done
Removing alias for less...
Done
AMPCLI Setup completed
```

Enter the new ampadmin password. If you don't enter a user name, OV3600 uses the default "ampadmin".

4. After setting the password, you will see the following message:

```
Your system has been converted to use AMPCLI. You may now
log in as ampadmin. If you lose the password for ampadmin you
may log in as amprecovery (password recovery) on the console to reset
the ampadmin password
```

5. Finally, remove any OS user accounts to prevent unauthorized access.

Upgrade from OV3600 8.2.4.x

Use the AMP CLI to install the upgrade package on your system. If your network doesn't allow OV3600 to connect to the Internet, you must <u>manually download the software</u> and upload the software before performing this upgrade.

Follow these steps to upgrade from OV3600 8.2.4.x:

- 1. Log in to the OV3600 server with the "ampadmin" user name and password. If you subsequently changed the ampadmin user name and password, enter the current admin name and password.
- 2. Enter **7** to select Upgrade.
 - a. At the next prompt, enter **1** to select Upgrade OV3600 Management Platform.
 - b. Enter **8.2.5**.
 - c. Enter **y** to enable OV3600 to connect to a proxy server. Or, you can enter **N** to bypass this step and go to step d on page 44 to download the software.

At the next prompt:

- (1) Enter the server address and port number (for example, *test.proxy.com* and port 22).
- (2) Enter **y** to enter the proxy user name and password (for example, *jsmith* and *password*).
- d. Enter 1 or 2 to log in to your customer portal with your support user name and password.
- e. Follow the onscreen instructions to download the software.

Manually Download the Software

You can manually download the software if your OV3600 server can't access the Internet.

- 3. Enter your Alcatel-Lucent support user name and password to get the software from the Alcatel-Lucent Support Center.
- 4. Click the upgrade package, then click **Save** and install the file later.
- 5. Upload the file:
 - If you are upgrading from OV3600 8.2.3.1 or earlier, copy the file to the OV3600 server's /root directory using an SCP file transfer application.
 - If you are upgrading from OV3600 8.2.4, upload the software:
 - (3) Enter **1** to upload the file from the AMP server to a source location using SCP to transfer the file.
 - (4) At the prompt, enter the location of the source file (for example, *user@host:path*. User is the name of the account on the host computer, host is the hostname of the computer on which the source file exists, and path is the location of the directory that contains the upgrade package).
 - (5) At the prompt, enter the password on the source location.

Minimum Requirements

Ensure that you have sufficient disk storage, memory, and hardware or software versions. As additional features are added to AirWave, increased hardware resources become necessary and hardware requirements vary by version. For the most recent hardware requirements, refer to the *OV3600 8.2.4 Server Sizing Guide* on the **Home > Documentation** page.

Supported Upgrade Paths

You can upgrade directly to OV3600 8.2.5 from the following software versions:

- 8.0.8 through 8.0.11.2
- 8.2.0 through 8.2.3.1
- 8.2.4 through 8.2.4.1

There is no direct upgrade between OV3600 7.7.x and 8.2.5. If you are upgrading from AirWave 7.7.x, you must first upgrade to AirWave 8.0.x or AirWave 8.2.x.