OmniVista 3600 Air Manager 6.4 General Release Notes

1. New Features

1.1 Cisco WLC configuration

A redesigned subtab for Cisco WLC configuration consolidates controller-level settings from multiple OV3600 pages into one easier-to-navigate tree with familiar layout and terminology. Bulk configuration for per-thin AP settings that were previously configured on the Group→LWAPP APs tab can be performed from Modify Devices on the APs/Devices→List page. Changes to LWAPP AP groups, including the option that was once under Modify Devices, is now in the Update Cisco Thin Ap Settings.

New features added for Cisco include:

- DTIM period per WLAN (version 6.0)
- Allowing AAA override (version 4.x)
- Coverage Hole Detection (version 6.0)
- RADIUS Fallback settings (versions 5.2 and 6.0)
- Configure primary/secondary/tertiary controller IP address for Cisco WLC thin APs
- 'Network User' for Cisco WLC RADIUS authentication servers
- More than three trap receivers can be configured; there is also an option to use OV3600 IP address when adding a trap receiver
- Option to map WLANs to interface names rather than VLAN ID (this defaults to yes but is set to no for SSIDs that were added before the 6.4 upgrade)
- Option to distribute self-signed certificates from the AP's manage page.
- Ability to enforce WLAN order on controllers: if toggle is set to "yes" changing the position of a WLAN will prompt unapplied changes warnings.
- OV3600 handles firmware upgrades for controllers running off their backup firmware image.

Guest LANs are not supported but will not cause mismatches in OV3600. WLAN override is not supported in OV3600 for Cisco version 5.2 and higher because it is no longer present on the device.

Prior to upgrading to 6.4 users are encouraged to make sure that their OV3600 groups have display options set to show settings for "Only devices in this group." In 6.4 the Groups→SSIDs subtab applies to all device types except for Cisco WLC, which have WLANs configured on the Cisco WLC Config page. Changing the group display options will hide the SSIDs subtab for groups with only Cisco WLC devices and will help prevent OV3600 users from inadvertently making changes to the wrong settings.

1.2 Wired management

- The Cisco 3750 can now be discovered by OV3600 or added manually. OV3600 supports both stacked and unstacked models; member switches for stacked models will be automatically discovered and appear on the master's monitoring page. CPU and bandwidth usage are reported for the master only. CDP discovery and member role transitioning are both supported, interfaces are monitored and displayed per-member on a separate tab.
- OV3600 fetches more CDP information from Cisco devices, including power drawn, platform, IP address and the ability to correlate to managed devices. OV3600 gets CDP information from IOS, LWAPP, and Vxworks devices and from routes and switches.
- OV3600 assists with root cause analysis for down devices: upstream devices can be configured for APs and switches and automatically populated by CDP.
- Wired metrics are split out from wireless metrics in OV3600's header information.

1.3 Customized reporting, header columns and list display

- OV3600 users can create their own reports by choosing the "Custom Report" type on the Reports→Definition page. They will then be able to select and order sections from the existing report catalog. Users can also edit and reorder report columns in new report definitions.

- On pages where OV3600 displays tables of data, the "Edit Columns" option allows users to remove and reorder columns to customize the information on the page. OV3600 users with permissions set on the Home→User Info page can also customize columns for other user roles.
- The columns and device types that are included in OV3600's header field are also configurable on the Home→User Info page. By default, OV3600 will display New Devices, Up (for wired and wireless types), Down (for wired and wireless types), Mismatched, Rogues, Users and Alerts.
- List preferences can be reset on the Home→User Info page.
- The status message that appears by default as 'Down' can be customized in the database. Contact Alcatel-Lucent support for more information.

1.4 Support for UTF-8

OV3600 users can now enter data with non-US English and ASCII characters.

1.5 Support for AES with SNMP v.3 monitoring

This support applies to Aruba/Alcatel-Lucent, Cisco WLC and Symbol WS2000 device types.

1.6 Location information is displayed in all lists

In APs, Rogues, and Clients lists in OV3600 the VisualRF location (campus, building, floor plan) is also displayed. In AP, Rogue and Client monitoring pages in OV3600 the last known location in VisualRF is also displayed.

2. Enhancements/Changes

2.1 Aruba/Alcatel-Lucent Enhancements

- Aruba/Alcatel-Lucent devices with disabled radios are correctly displayed as up in AMP.
- IP address for Aruba/Alcatel-Lucent thin APs
- Air Monitor is now a per-radio mode in OV3600
- OV3600 displays the user's cipher for Aruba/Alcatel-Lucent clients (supported in AOS/OAW 3.4)
- Support for additional IDS traps
  - wlsxChannelFrameErrorRateExceeded, wlsxChannelFrameFragmentationRateExceeded, wlsxChannelFrameRetryRateExceeded, wlsxNIpSpoofingDetected, wlsxStaImpersonation, wlsxReservedChannelViolation, wlsxValidSSIDViolation, wlsxStaPolicyViolation, wlsxRepeatWEPIVViolation, wlsxWeakWEPIVViolation, wlsxFrameRetryRateExceeded, wlsxFrameReceiveErrorRateExceeded, wlsxFrameFragmentationRateExceeded, wlsxFrameBandWidthRateExceeded, wlsxFrameLowSpeedRateExceeded, wlsxFrameNonUnicastRateExceeded, wlsxChannelRateAnomaly, wlsxNodeRateAnomalyAP, wlsxNodeRateAnomalySta, wlsxEAPRateAnomaly, wlsxSignalAnomaly, wlsxSequenceNumberAnomalyAP, wlsxSequenceNumberAnomalySta, wlsxApFloodAttack, wlsxInvalidMacOUIAP, wlsxInvalidMacOUISta, wlsxStaRepeatWEPIVViolation, wlsxStaWeakWEPIVViolation, wlsxStaAssociatedToUnsecureAP, wlsxStaUnAssociatedFromUnsecureAP, wlsxAPImpersonation, wlsxDisconnectStationAttackAP, wlsxDisconnectStationAttackSta
- Support for firmware versions 3.3.1.31, 3.3.2.21, 3.3.3.0, 3.4.0.6, 3.4.1.0 and 3.3.2.18-rn3.1.3. Unless otherwise noted under new enhancements, users who upgrade to OV3600 6.4.x and one of the above firmware versions should experience the same level of support as they did previously.

2.2 Cisco Enhancements

- Association and Authentication traps for Cisco WLC are parsed by OV3600 to give real-time client information. Partial client information will be displayed in OV3600 and the clients will be reported under the 'unknown' SSID user count until the controller is polled over SNMP. Processing of Cisco WLC client traps can be enabled or disabled on the OV3600 Setup→General page.
- OV3600 displays the WDS role on the AP→Monitoring page.
- Support for bootloader upgrades and ability to track version from the controller's monitoring page
- Support for the 5500 controller
- Support for 6.x firmware
- Cisco WDS APs are correctly displayed as up in OV3600, even though the radios are disabled

2.3 HPMSM/Colubris

- Added support for AP, radio and client monitoring for all HP MSM thin APs and controllers (see the AP Matrix for more details on supported devices). This does not include support for autonomous APs.

2.4 HP ProCurve

- The serial number is now fetched correctly.

2.5 Meru/Foundry

2.6 Symbol

- Support for 2.4.1 for the WS2000
- Support for smart-rf template

2.7 Trapeze and OEM Trapeze Controllers

- Support for 7.x firmware

2.8 Tropos

- Support for mesh nodes behind a NAT

2.9 RAPIDS

- Ability to deauth clients connected to Cisco and Aruba/Alcatel-Lucent thin APs (both manually and via an XML API) if the controller is in manage mode in OV3600. Deauthed clients are not added to a blacklist.
- Wireless-to-wireless rogue correlation
- Updated OS scan classifications
- Option to auto OS scan rogue devices with an IP address
- Pie charts for operating systems and acknowledged devices added to the RAPIDS→Overview page
- Links to rogue list from summary tables on the RAPIDS→Overview page
- RAPIDS audit log on the RAPIDS→Overview page. All changes to rogue devices, classification rules and the RAPIDS→Setup page are logged.
- Script to copy RAPIDS rules between OV3600 servers. For customers with multiple OV3600 servers there is now a command-line script to copy classification rules from one server to another. Please contact Alcatel-Lucent support for more information.
- RAPIDS processing priority can be configured on the OV3600 Setup→General page under performance tuning. Please contact Alcatel-Lucent support if you have any questions about tuning these settings.

2.10 VisualRF Visualization and Location Module

- Usability enhancements
    - Search box on floor plans page to locate user, rogue or device
    - Client history trail
    - Tree view for APs by Group List
    - Ctrl+click selects devices for easy deletion or updates
    - User names no longer display in VisualRF as ‘unknown’ when no username is available. The label will now display the MAC address of the device. The username field in the focused menu will display ‘-‘ instead of unknown to match the OV3600 server.
    - Sensors are now a per-radio attribute
    - Support for 2007 and 2010 CAD files
    - Users with audit or monitor-only OV3600 roles can be configured to have read/write access to VisualRF

  - Voice overlays are now supported. They provide insight into the amount of radio overlap provided by your current AP deployment.
- Accuracy
  - 'Locate Now' button on the floor plan polls all monitored devices on the floor for their most recent signal data. VisualRF then recalculates all user locations.
  - Location Accuracy report – right-click on a client icon and select 'Open Location Accuracy Diagnostic'. This will open the diagnostic engine allows users to test the accuracy of the VisualRF location engine.
- Planning
  - The Environment dropdown was replaced with a slider. Previously the only choices were Open, Cubes or Offices. The options now range from Open to Concrete with many additional options in between.
  - Added the ability to plan new networks based on any AP supported by OV3600.
  - Ability to simulate device failure, hiding the radios from the heatmap, voice and data rate overviews.
  - New VisualRF Plan allows offline planning of device location

2.11 Security

- Upon upgrading to 6.4 the script will check the version of the Linux kernel running on the server. If the version is prior to 2.6.18-128.4.1.el5PAE the script will give instructions for upgrading to the latest kernel, which is included with the upgrade package. Upgrading the kernel requires a server reboot. The newest version of the kernel contains third-party security fixes as described here: https://rhn.redhat.com/errata/RHSA-2009-1193.html
- Upgraded gnutls package: https://rhn.redhat.com/errata/RHSA-2009-1232.html
- Upgraded dnsmasq package: https://rhn.redhat.com/errata/RHSA-2009-1238.html
- Updated subversion package: https://rhn.redhat.com/errata/RHSA-2009-1203.html
- Updated cURL package: https://rhn.redhat.com/errata/RHSA-2009-1209.html

2.12 Performance Improvements

- Performance enhancement in RAPIDS processing time – overall speedup and parallelizable processes.
- Lists in OV3600 load faster.

2.13 Misc Enhancements

- Client search XML API includes more information (radio mode, VLAN, SSID, vpn hostname) and can be limited to connected users.
- Configuration audit for devices can be disabled on a per-group basis on the Groups→Basic page. Devices in groups with configuration audit turned off will not have an audit page or have the option to be managed. Their status will appear as '-' in lists and they will not be counted in the compliance pie chart on the Home→Overview page or be subject to mismatch alerts.
- The Failover server can now monitor and take over for the Master Console.
- The Master Console now displays Upstream Device and Root Cause Device information on the APs→Down list.
- Neighbor AP information is displayed on the AP→Monitoring page.
- The start_OV3600_upgrade script prevents customers from entering a command to downgrade.
- Global Group changes are tracked in the Audit log.
- The number of APs attached to a controller is displayed.
- The group dump-and-restore scripts now contain data for clients, rogues and Aruba/Alcatel-Lucent configuration.
- The device uptime report does not consider a device to have been down if the device was not monitored by OV3600 for the entire duration of the report.
- Users on a folder's monitoring page link to the Users→Connected page filtered by the same folder.

- Neighbor AP information moved from the AP→Manage page to the AP→Monitor page.

3. Issues Addressed

3.1 *Fix for a race condition where managed devices could be discovered as rogues within a short window after they were first discovered (DE2101, DE2024).*

3.2 *Fix for the Symbol 5131 to not templatize the "set name" under aaa-setup as %hostname% (DE2689).*

3.3 *Fix for problems fetching the full running config from the Symbol 5131 (DE3148).*

3.4 *When memory cache allocations need to be resized OV3600 now handles the process without requiring user input to restart daemons.*

3.5 *The 'aruba-ap' SSID is never displayed on the Groups→List page.*

3.6 *If scheduled configuration change jobs fail, they show in OV3600 as failed until they are manually deleted.*

3.7 *OV3600 will only fetch Cisco WLC devices' hreap VLAN settings if the controller is on firmware version 4.0.0.0 or greater.*

3.8 *The calculation for Airespace BSSIDs now gives radio BSSID lists to radios based on radio interface. The second radio now gets a different block than the first.*

3.9 *If a controller does not have a PEF license OV3600 will not desire or push anything related to user roles, policies, time ranges or bandwidth contracts.*

3.10 *Encryption type and radio vendor columns are now filterable on the Rogue APs page.*

3.11 *OV3600 will not mismatch if failures configuring guest users are ignored.*

3.12 *Usernames and passwords of guest users can now contain spaces. Guest users with no email address defined will not cause issues in OV3600.*

3.13 *Help links are no longer shown for users with the role of Guest Access Sponsor.*

3.14 *A longstanding issue where the OV3600's web interface is slow when the DNS information on the OV3600 Setup→Network page was not accurate has been addressed.*

3.15 *Generated reports with details included no longer have an option to be emailed.*

3.16 *Wireless users are no longer incorrectly detected as rogues in certain circumstances.*

3.17 *Aruba/Alcatel-Lucent AP 120 and 121 devices are no longer incorrectly detected as AP 50s in certain circumstances.*

3.18 *OV3600 does not reboot Cisco WLC thin APs if WLAN override is not desired.*

3.19 *RADIUS authentication does not fail if the OV3600 server's Eth0 interface does not have an IP address.*

3.20 Read-only RAPIDS users no longer see the classifying rule as a link.

3.21 The Daily Inventory report shows the serial number of devices.

3.22 Auth_aps.pl can no longer move devices into global groups.

3.23 The automatic configuration verification now runs at a more predictable time based on the nightly maintenance time.

3.24 OV3600 will not mismatch on blank lines in a template or actual blank lines in a device's config. This particularly affects 3Com WX1200 and HP/ProCurve 530 devices.

3.25 Symbol managed devices no longer have their second BSSIDs reported as rogues.

4. Known Issues

4.1 1250 IOS devices running 12.4(10b)JDA3 will be marked down in OV3600 when the server is upgraded to 6.4. The next time OV3600 polls the device's group for up/down status the device will come back up and OV3600 will do a database migration to correctly display the radio type. The device is not rebooted or disabled as part of the upgrade.

4.2 The Cisco 3750 switch should be added to OV3600 by running SNMP discovery and turning off CDP. Leaving CDP on will cause the blades to be discovered multiple times.

4.3 In OV3600 6.3 and earlier the default administrator role was called "AMP Administration". In 6.4 fresh installs this role was changed to be called "Admin." All other properties and permissions are the same, and no other roles were changed.

4.4 The Network-wide Capacity Planning Report is missing the aggregate bandwidth graph (DE3368).

4.5 The RADIUS Authentication Report is missing pagination options (DE3384).

4.6 Search on the Master Console does not include tags (DE3378).

4.7 OV3600 has been tested against ASCII and UTF-8 character sets. The use of non-ASCII or UTF-8 characters may cause unexpected issues in OV3600.

4.8 When upgrading firmware for 3Com devices via OV3600 the firmware version the user enters on the upload files page should be five numbers separated by decimal points. For example, '7.0.5.6.0' but not '7.0.5.6'. Nortel and Trapeze customers should enter the four-number version ('7.0.5.6'). Firmware downgrades for these devices are not recommended from OV3600 and may fail. Users may need to remove the backup running config before using OV3600 to downgrade the controller.

4.9 If OV3600 has aggressive client polling (ie., two minutes or less) it is possible that processing client traps will be overloaded. Therefore, if client trap processing is enabled and OV3600 is receiving client traps, the effective client data poll period will be set to 10 minutes if it is currently set in the UI to be less than 10 minutes. This change will not be visible in the UI except in the frequency of updating graphs and other data.

4.10 When replacing hardware on the AP 651 you must also replace hardware on the device's internal AP.

*4.11 If OV3600 is monitoring an Alcatel-Lucent WLAN switch with read-only credentials it will be unable to run the encrypt disabled command and passwords will show as "***". This will result in a mismatch in OV3600.*

4.12 If Trapeze and OEM partner devices have thin APs that have been discovered by the controller but not yet added or provisioned they will still be discovered by OV3600. The user can use the thin AP template to add or provision them to the controller after they have been added to OV3600.

4.13 OV3600 lets the user desire any transmit power value between 1 dBm and 22 dBm. The actual transmit power that a device accepts depends on such factors as the radio's channel and the AP model. If the user desires a power level and channel combination that is not supported by a particular AP OV3600 will show a mismatch that cannot be resolved by pushing a config. The user should refer to the documentation for their device type to determine what power levels are supported by channel and AP type.

4.14 The Helpdesk incident form does not work well in the Chrome browser (DE3354).

4.15 VisualRF: When APs are deleted from OV3600, the floorplan on which they were located is hidden from the user until the VisualRF server is restarted (DE3345).

4.16 VisualRF: In QuickView, the "show channel in label" checkbox is checked by default, but does not display the channel for planned APs unless it is toggled once (DE3161).

4.17 VisualRF: Monitor-only users can create and edit floorplans (DE2206).

4.18 VisualRF: There are several known issues surrounding metric support (the use of metric units can be enabled on the VisualRF →Setup page). There are no metric units in the Bill of Materials report. The automatic recommended floor height is 10 meters when metric units are enabled; VisualRF users should adjust the height manually by right-clicking on the floor plan from the Network View screen. Use of metric units will also cause larger than desirable grid cell sizes; contact Alcatel-Lucent support for assistance fixing them.

4.19 VisualRF: client positions are not recalculated when AP placement on a floorplan changes (DE1979) or when the site is resized (DE2613).

4.20 VisualRF: Signal strength for rogues may not match between RAPIDS and VisualRF (DE2660).

4.21 VisualRF: The Location Accuracy report occasionally displays 'Undefined Fit' for the accuracy value (DE2629).

4.22 VisualRF: Using the Locate Now button repeatedly may cause VisualRF to lose the proper AP of association (DE2347).

4.23 VisualRF: If the MDM or VisualRF schema creation fails during upgrade, the upgrade will continue but OV3600 will display an error message on the Home →Overview page. Contact Alcatel-Lucent support for assistance with the errors.

4.24 VisualRF: In VisualRF Plan the user may need to quit the application in order to escape the dialog frame.

4.25 VisualRF: Security settings in Internet Explorer may block some functionality of the VisualRF Plan application. Windows 7/Vista users are recommended to run in Compatibility Mode. When opening VisualRF Plan in IE for the first time there may be an information bar prompting the user to make changes to internet settings. Allowing the changes will allow the application to run normally.