AOS-W Instant 6.4.4.3-4.2.2.1



Copyright

© 2016 Alcatel-Lucent. All rights reserved.

Specifications in this manual are subject to change without notice.

Originated in the USA.

AOS-W, Alcatel 4302, Alcatel 4304, Alcatel 4306, Alcatel 4308, Alcatel 4324, Alcatel 4504, Alcatel 4604, Alcatel 4704, Alcatel 6000, OAW-AP41, OAW-AP68, OAW-AP60/61/65, OAW-AP70, OAW-AP80, OAW-AP92/93, OAW-AP105, OAW-AP120/121, OAW-AP124/125, OAW-AP175, OAW-IAP92/93/105, OAW-RAP2, OAW-RAP5, and Omnivista 3600 Air Manager are trademarks of Alcatel-Lucent in the United States and certain other countries.

Any other trademarks appearing in this manual are the property of their respective companies. Includes software from Litech Systems Design. The IF-MAP client library copyright 2011 Infoblox, Inc. All rights reserved. This product includes software developed by Lars Fenneberg et al.

Legal Notice

The use of Alcatel-Lucent switching platforms and software, by all individuals or corporations, to terminate Cisco or Nortel VPN client devices constitutes complete acceptance of liability by that individual or corporation for this action and indemnifies, in full, Alcatel-Lucent from any and all legal actions that might be taken against it with respect to infringement of copyright on behalf of Cisco Systems or Nortel Networks.

Contents	3
Release Overview	4
Contents	∠
Contacting Support	∠
What's New in this Release	5
Regulatory Domain Updates	5
Features and Enhancements	5
Support for New OAW-IAP Devices	5
Support for MU-MIMO Steering	5
RTS Threshold Configuration	6
Static Domain Name Configuration for PAN Firewall	6
Resolved Issues in this Release	6
ARM	6
Datapath/Firewall	6
VPN	7
Known Issues and Limitations	7
Maximum Configurable Year for Absolute Time Range Profiles	7
Known Issues	7
PPPOE	
VC Management	
VPN	۶

AOS-W Instant 6.4.4.3-4.2.2.1 is a software patch release that introduces new features, enhancements and fixes to the issues found in previous releases.

For information on upgrading OAW-IAPs to the new release version, refer to the *Upgrading an OAW-IAP* topic in the AOS-W Instant 6.4.4.x-4.2.2.x User Guide.

Contents

• What's New in this Release on page 5 lists the regulatory information, new features and enhancements, and fixed issues in the Instant 6.4.4.3-4.2.2.1 release.

Contacting Support

Table 1: Contact Information

Contact Center Online	
Main Site	http://www.alcatel-lucent.com/enterprise
Support Site	https://service.esd.alcatel-lucent.com
• Email	esd.support@alcatel-lucent.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

This chapter lists the regulatory information, features, enhancements, fixed issues, known issues and limitations identified in the AOS-W Instant 6.4.4.3-4.2.2.1 release.

Regulatory Domain Updates

The following table lists the DRT file version supported by the Instant 6.4.4.x-4.2.2.x releases:

Table 2: DRT Versions

Instant Release Version	Applicable DRT Version
6.4.4.3-4.2.2.1	1.0_53631

For a complete list of countries certified with different AP models, see the respective DRT release notes at service.esd.alcatel-lucent.com.

Features and Enhancements

The following features are introduced in the Instant 6.4.4.3-4.2.2.1 release:

Support for New OAW-IAP Devices

The OAW-IAP320 Series (OAW-IAP324 and OAW-IAP325) wireless Instant access points support IEEE 802.11ac standards for high-performance WLAN, and is equipped with two dual-band radios, which can provide access and monitor the network simultaneously. MU-MIMO (Multi-User Multiple-In Multiple-Output) technology allows this access point to deliver high-performance 802.11n 2.4 GHz and 802.11ac 5 GHz functionality, while also supporting 802.11a/b/g wireless services.

The OAW-IAP320 Series wireless access points provide the following capabilities:

- Dual wireless transceiver
- IEEE 802.11a/b/g/n/ac operation as a wireless access point
- IEEE 802.11a/b/g/n/ac operation as a wireless air monitor
- Compatibility with IEEE 802.3at and 802.3af PoE
- Integrated Bluetooth Low Energy (BLE) radio

Support for MU-MIMO Steering

The 802.11ac Wave 2 access pointss such as OAW-IAP324/325 support the Multi-User Multiple-In Multiple-Output (MU-MIMO) feature. The MU-MIMO feature enables OAW-IAPs to use the enhanced beamforming technique to maximize transmission in the desired client direction, while simultaneously minimizing transmission in the direction of undesired clients through null steering. With MU-MIMO enabled, OAW-IAPs can support up to four simultaneous full-rate Wi-Fi connections, and provide more data and dedicated fullbandwidth channel to each of their associated clients. MU-MIMO is enabled by default on WLAN SSIDs. To disable MU-MIMO, use the **no vht-mu-txbf-disable** parameter in the **wlan ssid-profile** command. For more information, see Multi-User-MIMO Steering in AOS-W Instant6.4.4.3-4.2.2.0 User Guide.

RTS Threshold Configuration

Along with MU-MIMO, the 802.11ac Wave 2 access points such as OAW-IAP324/325 support the configuration of the RTS threshold. The (Request to Send) RTS /(Clear to Send) CTS mechanism allows the devices to reserve the RF medium and minimize the frame collisions introduced by hidden stations. When RTS is enabled, a higher number of retransmissions occurring on the WLAN trigger the RTS/CTS handshake and the transmitter station sends an RTS frame to the receiver station. The receiver station responds with a CTS frame. The RTS/CTS frames are sent when the packet size exceeds the RTS threshold.

By default, the RTS threshold is set to 2333 octets. Using the **rts-threshold** parameter in the **wlan ssid-profile** command, you can configure a threshold value within the range of 0–2347 octets. For more information, see *Multi-User-MIMO Steering* in *AOS-W Instant 6.4.4.x-4.2.2.x User Guide*.

Static Domain Name Configuration for PAN Firewall

The OAW-IAP will check the domain information in client user IDs (used for authentication) for all login and logout requests sent to the PAN firewall. If the user id already has a domain prefix, the request is forwarded to the PAN firewall. Otherwise, the static client domain configured in the PAN firewall profile will be prefixed to the user ID and then sent to the PAN firewall.

For more information, see:

- Integrating an OAW-IAP with Palo Alto Networks Firewall in AOS-W Instant 6.4.4.x-4.2.2.x User Guide.
- **firewall-external-enforcement** command in AOS-W Instant 6.4.4.x-4.2.2.x CLI Reference Guide.

Resolved Issues in this Release

The following issues are fixed in the Instant 6.4.4.3-4.2.2.1 release.

ARM

Table 3: ARM Fixed Issue

Bug ID	Description
136007	Symptom : The IDS table was full of reclassification entries and could not be updated because it reached the maximum entry limit. This issue is resolved by not saving the reclassification entries to the IDS table. Scenario : This issue was not limited to a specific OAW-IAP model or software version.

Datapath/Firewall

Table 4: Datapath/Firewall Fixed Issue

Bug ID	Description
129304 127348 128118 130490	Symptom : Client devices running the Android 6.0+ or Windows 10 software were unable to connect to the 802.1x SSID of the OAW-IAP. The fix ensures that the client devices are able to connect to the 802.1x SSID. Scenario : This issue occurred when 802.1x termination was enabled on the OAW-IAP and was observed in all OAW-IAPs running Instant 6.4.3.4-4.2.1.0 release.

VPN

Table 5: VPN Fixed Issue

Bug ID	Description
125698	Symptom : MTU size was not displayed in the output for the CLI commands used for configuring primary and secondary VPN tunnels. The fix ensures that the MTU size is displayed in the output of the CLI commands. Scenario : This issue was observed in all OAW-IAPs running Instant 6.4.3.1-4.2.0.0 and later releases.

Known Issues and Limitations

The following known issues and limitations are identified in the Instant 6.4.4.x-4.2.2.x releases.

Maximum Configurable Year for Absolute Time Range Profiles

When creating an absolute time-range profile, the year selected for the Start Day and End Day cannot exceed 2037.

Known Issues

The following known Issues are identified in the Instant 6.4.4.x-4.2.2.x releases:

PPPOE

Table 6: PPPOE

Bug ID	Description
130433	Symptom: OAW-IAP with PPPoE uplink crashes. Scenario: This issue occurs when OAW-IAPs that use PPPoE as uplink with VPN enabled, crash due to an internal PPPoE device reference count. The issue is observed in OAW-IAPs running Instant 6.4.4.3-4.2.2.0 release. Workaround: None.

VC Management

Table 7: VC Management Known Issue

Bug ID	Description
128737	Symptom : When assigning a time-range profile to an SSID, the OAW-IAP UI throws a "Profile Not Found" error if the time-range profile name is configured with a special character " or a blank space. Scenario : This issue is found on OAW-IAPs running Instant 6.4.3.4-4.2.1.0 release. Workaround : Avoid configuring the time-range profile names with a special character " or blank space.

VPN

Table 8: VPN

Bug ID	Description
131554	Symptom: Clients are not able to get the IP address while connecting to a centralized L2 mode of an OAW-IAPusing the GRE mode of operation. Scenario: This issue is found in OAW-IAPs with a centralized L2 SSID using the GRE mode of operation. This issue is not limited to a specific OAW-IAP model or software version. Workaround: None.