

# AOS-W Instant 6.5.4.21



## Copyright Information

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:

<https://www.al-enterprise.com/en/legal/trademarks-copyright>

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. ({{{Undefined variable Variables.Current Year}}})

## 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.

---

- Contents** ..... 3
- Revision History ..... 4
- Release Overview** ..... 5
- Supported Browsers ..... 5
- Important Updates ..... 6
- Contacting Support ..... 6
- New Features** ..... 8
- Regulatory Updates** ..... 9
- Resolved Issues** ..... 10
- Known Issues** ..... 12
- Upgrading an OAW-IAP** ..... 17
- Upgrading an OAW-IAP Using OmniVista 3600 Management Platform ..... 17
- Upgrading an OAW-IAP Image Manually Using WebUI ..... 17
- Upgrading an OAW-IAP Image Manually Using CLI ..... 18

## Revision History

The following table provides the revision history of this document.

**Table 1:** *Revision History*

Revision	Change Description
Revision 01	Initial release.

This AOS-W Instant release notes includes the following topics:

- [New Features on page 8](#)
- [Regulatory Updates on page 9](#)
- [Resolved Issues on page 10](#)
- [Known Issues on page 12](#)
- [Upgrading an OAW-IAP on page 17](#)

For list of terms, refer to the [Glossary](#).



---

For information regarding prior releases, refer to the corresponding Release Notes on <https://support.esd.alcatel-lucent.com/>.

---

## Supported Browsers

The following browsers are officially supported for use with the AOS-W Instant WebUI:

- Microsoft Internet Explorer 10.x and 11 on Windows 7 and Windows 8
- Mozilla Firefox 23 or later on Windows Vista, Windows 7, and macOS
- Apple Safari 5.1.7 or later on macOS
- Google Chrome 51.0.2704.103 m (64-bit)
- Microsoft Edge 25.10586.0.0 and Microsoft Edge HTML 13.10586

## Important Updates

### DPI

Starting from AOS-W Instant 6.5.0.0-4.3.0.0 onwards, DPI is not supported on OAW-AP103, OAW-RAP108, and OAW-RAP109 due to the existing memory limitations. The last release with full feature support for these platforms is AOS-W Instant 6.4.x.x-4.2.x.x.

If you have deployed OAW-AP103, OAW-RAP108, or OAW-RAP109 and require DPI functionality, ensure that you remain on AOS-W Instant 6.4.x.x-4.2.x.x or earlier versions. However, if you are willing to disable DPI functionality, upgrade to AOS-W Instant 6.5.0.0-4.3.0.0 or later releases.

### IP-Mode

The IP-mode default value changes to **v4 only** in the AOS-W Instant 6.5.4.0 release version. This change in value causes a mismatch warning for OmniVista 3600 customers that use a template file for configuration. We recommend you to change the template file in OmniVista 3600 to fix this mismatch. OmniVista 3600 UI users, please upgrade your respective versions.



---

The mismatch occurs only if the release versions used before the upgrade are from AOS-W Instant 6.5.2.0 to AOS-W Instant 6.5.3.1. There will be no mismatch if the release version used before the upgrade is earlier than AOS-W Instant 6.5.2.0 or later than AOS-W Instant 6.5.3.1.

---

## Contacting Support

**Table 2:** *Contact Information*

Contact Center Online	
Main Site	<a href="https://www.al-enterprise.com">https://www.al-enterprise.com</a>
Support Site	<a href="https://businessportal.al-enterprise.com">https://businessportal.al-enterprise.com</a>
Email	<a href="mailto:ebg_global_supportcenter@al-enterprise.com">ebg_global_supportcenter@al-enterprise.com</a>
Service & Support Contact Center Telephone	
North America	1-800-995-2696
Latin America	1-877-919-9526

Contact Center Online	
EMEA	+800 00200100 (Toll Free) or +1(650)385-2193
Asia Pacific	+65 6240 8484
Worldwide	1-818-878-4507

### Datapath

A new command, **clear datapath dns-id-map**, is introduced to enable deletion of DNS ID mappings in the OAW-IAP. The command has two parameters:

Parameter	Description
all	Deletes all DNS ID mappings in the OAW-IAP.
<domain-name>	Executing this command on the master AP in a cluster will remove DNS ID mappings in all slave APs. Whereas, executing the command on a slave AP will only remove mappings in the slave AP.



This chapter describes the regulatory updates in AOS-W Instant 6.5.x.

Periodic regulatory changes may require modifications to the list of channels supported by an OAW-IAP. For a complete list of channels supported by an OAW-IAP using a specific country domain, access the OAW-IAP CLI and execute the **show ap allowed-channels** command.

The following DRT file version is part of this release:

- DRT-1.0\_81497

For a complete list of countries certified with different AP models, refer to the DRT Release Notes at [support.esd.alcatel-lucent.com](http://support.esd.alcatel-lucent.com).



---

This software release supports the channel requirements described in *ALE Support Advisory SA-N0033*, available for download from the [support.esd.alcatel-lucent.com](http://support.esd.alcatel-lucent.com) site.

---

The following issues are resolved in this release.

**Table 3:** Resolved Issues in AOS-W Instant 6.5.4.21

Bug ID	Description	Component	Platform	Reported Version
AOS-175268 AOS-177107 AOS-177289	<p><b>Symptom:</b> An OAW-IAP displayed incorrect web category and web reputation values for some sites. The fix ensures that the AP reaches the web classification server as expected and classifies sites correctly with the web category and web reputation values retrieved from the server.</p> <p><b>Scenario:</b> This issue occurred when a DPI-enabled OAW-IAP failed to establish a websocket connection with the cloud server and was unable to reach the web content classification server. This issue was observed in OAW-AP305 access points running AOS-W Instant 6.5.3.3 or later versions.</p>	AppRF	OAW-AP305 access points	AOS-W Instant 6.5.3.3
AOS-190183	<p><b>Symptom:</b> Clients connected to a guest SSID were able to access certain HTTP and HTTPS sites in the pre-auth role before they were taken to the splash page for authentication. The fix ensures that clients can access restricted HTTP and HTTPS sites only after completing the authentication process.</p> <p><b>Scenario:</b> This issue was observed in APs running AOS-W Instant 6.5.4.0 or later versions.</p>	Firewall	All Platforms	AOS-W Instant 6.5.4.0
AOS-200997	<p><b>Symptom:</b> A remote AP failed to connect to the switch. The fix ensures that the remote AP conversion works as expected and the remote AP is able to connect to the switch.</p> <p><b>Scenario:</b> This issue occurred under the following scenarios:</p> <ul style="list-style-type: none"> <li>• The remote AP was converted from an OAW-IAP through an Activate rule.</li> <li>• The OAW-IAP was running AOS-W Instant 6.5.4.0 or later versions.</li> </ul> <p>This issue was observed in APs running AOS-W Instant 6.5.4.0 or later versions.</p>	UAP	All platforms	AOS-W Instant 6.5.4.0

**Table 3:** Resolved Issues in AOS-W Instant 6.5.4.21

Bug ID	Description	Component	Platform	Reported Version
AOS-207781	<p><b>Symptom:</b> An OAW-IAP learnt wrong IP addresses for certain domain names. The fix ensures that the AP learns the correct IP addresses of domain names as expected.</p> <p><b>Scenario:</b> This issue was observed in APs running AOS-W Instant 6.5.4.0 or later versions.</p>	Datapath	All platforms	AOS-W Instant 6.5.4.0
AOS-199907 AOS-212671 AOS-220266 AOS-221707	<p><b>Symptom:</b> An OAW-IAP assigned incorrect IP addresses to domain names in the <b>datapath dns-id-map</b>. The fix ensures that the correct IP addresses are mapped to the domain names in <b>datapath dns-id-map</b>.</p> <p><b>Scenario:</b> This issue was observed in APs running AOS-W Instant 6.5.4.0 or later versions.</p>	Datapath	All platforms	AOS-W Instant 6.5.4.0
AOS-219523	<p><b>Symptom:</b> An OAW-IAP reported DMA hang errors. The fix ensures that the AP does not report DMA hang errors and works as expected..</p> <p><b>Scenario:</b> This issue occurred under the following scenarios:</p> <ul style="list-style-type: none"> <li>• When both mesh point and eth0-bridging was enabled on the AP.</li> <li>• When there was minimal traffic between the downlink ethernet device and the AP.</li> </ul> <p>This issue was observed in APs running AOS-W Instant 6.5.4.0 or later versions.</p>	CLI	All platforms	AOS-W Instant 6.5.4.0

This chapter describes the known and outstanding issues identified in this release.



We have migrated to a new defect tracking tool. Some bugs are listed with the new bug ID, which is prefixed by AOS.

**Table 4:** *Known Issues in AOS-W Instant 6.5.4.21*

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-140975 AOS-175951 AOS-180447	171577 168254 189776	<b>Symptom:</b> An OAW-IAP reboots unexpectedly. The log file lists the reason for the event as: <b>Reboot caused by kernel panic: Take care of the HOST ASSERT first.</b> <b>Scenario:</b> This issue occurs when the messaging between the WLAN firmware and UMAC goes out of sync. This issue is observed in slave APs in an AOS-W Instant cluster running AOS-W Instant 6.5.1.0-4.3.1.2 or later versions.	Wi-Fi Driver	All platforms	AOS-W Instant 6.5.1.0-4.3.1.2
AOS-140296 AOS-143139 AOS-143162 AOS-143164 AOS-144977 AOS-148856 AOS-172741 AOS-172788 AOS-173084 AOS-173085 AOS-173704 AOS-174078	170643 174326 174359 174361 140296 151748 151871 152748 152749 155683 156758 157826	<b>Symptom:</b> An OAW-IAP reboots unexpectedly. The log file lists the reason for the event as: <b>Reboot caused by kernel panic: softlockup: hung tasks.</b> <b>Scenario:</b> This issue occurs when DMO is enabled. This issue is observed in APs running in AOS-W Instant 6.4.4.8-4.2.4.3 or later versions.	Datapath	All platforms	AOS-W Instant 6.4.4.8-4.2.4.3
AOS-145183 AOS-175730	167198 177034	<b>Symptom:</b> An OAW-IAP crashes unexpectedly. The log file lists the reason for the event as: <b>Kernel panic - not syncing: softlockup: hung tasks.</b> <b>Scenario:</b> This issue is observed in OAW-AP303H access points running AOS-W Instant 6.5.3.4 or later versions.	Datapath	OAW-AP303H access points	AOS-W Instant 6.5.3.4

**Table 4:** *Known Issues in AOS-W Instant 6.5.4.21*

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-176463	170478	<b>Symptom:</b> An OAW-IAP delays the ICMP response from the wired server to a wireless client connected to the AP on the 2.4 GHz radio. <b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.3.0 or later versions.	Wi-Fi Driver	All platforms	AOS-W Instant 6.5.3.0
AOS-176815	171948	<b>Symptom:</b> An OAW-IAP sends DLNA responses with the IP address of the DLNA server as the source IP address, causing a network outage. <b>Scenario:</b> This issue occurs when the DLNA response packets reach the DLNA server with its IP address as the source IP address and the DLNA server falsely detects a network loop. This issue is observed in APs running AOS-W Instant 6.5.4.3 or later versions.	AirGroup	All platforms	AOS-W Instant 6.5.4.3
AOS-176934	172460	<b>Symptom:</b> An OAW-IAP logs multiple checksum-mismatch alerts. <b>Scenario:</b> This issue occurs because of a mismatch in the authentication server configuration in the OAW-IAP. This issue is observed in APs running AOS-W Instant 6.5.4.2 or later versions.	VC Management	All platforms	AOS-W Instant 6.5.4.2
AOS-176946	172554	<b>Symptom:</b> The OAW-IAPs in a cluster are displaying huge volumes of the error message: <b>KERNEL(AWAP-AM-US-Mil-3-1-F36_Shipping@10.249.1.192): [ 8081.995439] protocol 0000 is buggy, dev br0 nh=d92120d8 d=d9212070 =d92120cb.</b> <b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.3.3 or later versions.	Platform	All platforms	AOS-W Instant 6.5.3.3
AOS-177621	175913	<b>Symptom:</b> An OAW-IAP crashes and reboots unexpectedly. The log file lists the reason for the event as: <b>Reboot Time and Cause: Reboot caused by kernel panic: Fatal exception in interrupt and Reboot caused by kernel panic: softlockup: hung task.</b> <b>Scenario:</b> This issue is observed in OAW-AP315 access points running AOS-W Instant 6.5.4.3 or later versions.	Wi-Fi Driver	OAW-AP315 access points	AOS-W Instant 6.5.4.3

**Table 4:** *Known Issues in AOS-W Instant 6.5.4.21*

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-177624	175958	<b>Symptom:</b> An OAW-IAP does not receive an IP address when the uplink fails over to LTE. <b>Scenario:</b> This issue occurs when the datapath route cache entry is set to 3G/4G fails. This issue is observed in APs running AOS-W Instant 6.5.3.3 or later versions.	3G/4G Management	All platforms	AOS-W Instant 6.5.3.3
AOS-177963	177761	<b>Symptom:</b> Users are unable to delete the clients that are dynamically blacklisted after an authentication failure. <b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.4.0 or later versions.	Authentication	All platforms	AOS-W Instant 6.5.4.0
AOS-178111	178761	<b>Symptom:</b> An OAW-IAP displays an error message: <b>domain name has reach the max number</b> when a user tries to add a new rule. <b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.4.6 or later versions.	Datapath	All platforms	AOS-W Instant 6.5.4.6
AOS-178134	178915	<b>Symptom:</b> DNS and HTTP traffic are not categorized by the OAW-IAP. <b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.4.3 or later versions.	AppRF	All platforms	AOS-W Instant 6.5.4.3
AOS-178688	180846	<b>Symptom:</b> An OAW-IAP performs source NATing of traffic with its inner IP address and a client is assigned an IP address from the distributed L3 scope. <b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.4.7 or later versions.	AppRF	All platforms	AOS-W Instant 6.5.4.7
AOS-179683	185975	<b>Symptom:</b> Some characters in the running configuration are missing when the entire running configuration is copied and pasted into the CLI access. <b>Scenario:</b> This issue occurs only when the AP console is used and not SSH. This issue is observed in APs running AOS-W Instant 6.5.4.5 or later versions.	Configuration	All platforms	AOS-W Instant 6.5.4.5

**Table 4:** *Known Issues in AOS-W Instant 6.5.4.21*

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-180288	188738	<b>Symptom:</b> An OAW-IAP crashes and reboots unexpectedly. The log file lists the reason for the event as: <b>Reboot caused by kernel panic: Fatal exception in interrupt.</b> <b>Scenario:</b> This issue is observed in OAW-AP315 and OAW-AP325 access points running AOS-W Instant 6.5.4.7 or later versions.	Platform	OAW-AP315 and OAW-AP325 access points	AOS-W Instant 6.5.4.7
AOS-180904	191443	<b>Symptom:</b> Users are unable to hear audio in a VoIP call after 10 minutes. <b>Scenario:</b> This issue occurs if the SIP server is outside the client's network and the OAW-IAP performs NAT on the SIP control session packets. This issue is observed in APs running AOS-W Instant 6.5.4.7 or later versions. <b>Workaround:</b> Place the SIP server in the same network as the SIP clients. This ensures that NAT is not performed on the SIP control session packets.	VC Management	All platforms	AOS-W Instant 6.5.4.7
AOS-181453	193816	<b>Symptom:</b> An OAW-IAP reboots unexpectedly. The log file lists the reason as: <b>Reboot caused by kernel panic: Fatal exception.</b> <b>Scenario:</b> This issue occurs due to a memory access issue in the OAW-IAP. This issue is observed in APs running AOS-W Instant 6.5.4.9 or later versions.	Datapath	All platforms	AOS-W Instant 6.5.4.9
AOS-181829	195194	<b>Symptom:</b> Downstream traffic for a wireless client from the old VLAN is still sent to the old VLAN after the client changes over to a different VLAN and SSID on the same AP. <b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.4.9 or later versions.	Datapath	All platforms	AOS-W Instant 6.5.4.9

**Table 4:** Known Issues in AOS-W Instant 6.5.4.21

New Bug ID	Old Bug ID	Description	Component	Platform	Reported Version
AOS-182578	—	<p><b>Symptom:</b> Certificates with an encrypted private key fail to upload and return the following error message: <b>rsa_key_validation_error</b>.</p> <p><b>Scenario:</b> This issue occurs when the encryption type is <b>aes-128-cbc, aes-192-cbc, or aes-256-cbc</b>. This issue is observed in APs running AOS-W Instant 6.5.4.8 or later versions.</p> <p><b>Workaround:</b> Upload the certificate using a decrypted private key.</p>	Captive Portal	All platforms	AOS-W Instant 6.5.4.8
AOS-187350	—	<p><b>Symptom:</b> An OAW-IAP does not update the client's username received from the ClearPass server.</p> <p><b>Scenario:</b> This issue occurs when captive portal authentication is used. This issue is observed in APs running AOS-W Instant 6.5.4.0 or later versions.</p>	Authentication	All platforms	AOS-W Instant 6.5.4.0
AOS-209870	—	<p><b>Symptom:</b> An OAW-AP205 access point fails to add new client entries to the Analytics and Location Engine.</p> <p><b>Scenario:</b> This issue occurs when the potential station list of the AP reaches the maximum threshold. This issue is observed in OAW-AP205 access points running AOS-W Instant 6.5.4.17 or later versions.</p>	IDS	OAW-AP205 access points	AOS-W Instant 6.5.4.17
AOS-209889 AOS-209944	—	<p><b>Symptom:</b> An OAW-IAP fails to establish SSL connection with BrightCloud server and clients are able to access websites blocked using WebCC.</p> <p><b>Scenario:</b> This issue is observed in APs running AOS-W Instant 6.5.4.15 or later versions.</p>	AppRF	All platforms	AOS-W Instant 6.5.4.15
AOS-218235	—	<p><b>Symptom:</b> The switch logs random IP and MAC pairing information in its user table in an IAP-VPN deployment.</p> <p><b>Scenario:</b> This issue occurs when clients roam to a different OAW-IAP in the cluster before completing the DNS process with the source OAW-IAP. This issue is observed in APs running AOS-W Instant 6.5.4.18 or later versions.</p>	IAPMgr	All platforms	AOS-W Instant 6.5.4.18



This chapter describes the AOS-W Instant software upgrade procedures and the different methods for upgrading the image on the OAW-IAP.

Topics in this chapter include:

- [Upgrading an OAW-IAP Using OmniVista 3600 Management Platform on page 17](#)
- [Upgrading an OAW-IAP Image Manually Using WebUI on page 17](#)
- [Upgrading an OAW-IAP Image Manually Using CLI on page 18](#)

## Upgrading an OAW-IAP Using OmniVista 3600 Management Platform

If the multiclass OAW-IAP network is managed by OmniVista 3600, image upgrades can only be done through the OmniVista 3600 UI. The OAW-IAP images for different classes must be uploaded on the AMP server. When new OAW-IAPs joining the network need to synchronize their software with the version running on the virtual switch, and if the new OAW-IAP belongs to a different class, the image file for the new OAW-IAP is provided by OmniVista 3600. If OmniVista 3600 does not have the appropriate image file, the new OAW-IAP will not be able to join the network.

## Upgrading an OAW-IAP Image Manually Using WebUI

You can manually obtain an image file from a local file system or from a TFTP or HTTP URL.

The following procedure describes how to manually check for a new firmware image version and obtain an image file:

1. Navigate to **Maintenance > Firmware**.
2. Under Manual section, perform the following steps:
  - Select the Image file option. This method is only available for single-class OAW-IAPs.

The following examples describe the image file format for different OAW-IAP models:

    - For OAW-AP203H—AlcatelInstant\_Vela\_6.5.4.x\_xxxx
    - For OAW-AP334/335—AlcatelInstant\_Lupus\_6.5.4.x\_xxxx
    - For OAW-AP314/315 and OAW-AP324/325—AlcatelInstant\_Hercules\_6.5.4.x\_xxxx
    - For OAW-AP224/225, OAW-AP228, OAW-AP214/215, OAW-AP274/275, OAW-AP277—AlcatelInstant\_Centaurus\_6.5.4.x\_xxxx
    - For OAW-AP204/205 and OAW-AP205H—AlcatelInstant\_Taurus\_6.5.4.x\_xxxx
    - For OAW-RAP155/155P—AlcatelInstant\_Aries\_6.5.4.x\_xxxx

- For OAW-RAP108/109, OAW-AP103, and OAW-AP114/115—AlcatelInstant\_Pegasus\_6.5.4.x\_xxxx
- Select the **Image URL** option. Select this option to obtain an image file from a HTTP, TFTP, or FTP URL.
  - HTTP - http://<IP-address>/<image-file>. For example, http://<IP-address>/AlcatelInstant\_Hercules\_6.5.4.x\_xxxx
  - TFTP - tftp://<IP-address>/<image-file>. For example, tftp://<IP-address>/AlcatelInstant\_Hercules\_6.5.4.x\_xxxx
  - FTP - ftp://<IP-address>/<image-file>. For example, ftp://<IP-address>/AlcatelInstant\_Hercules\_6.5.4.x\_xxxx
  - FTP - ftp://<user name:password>@<IP-address>/<image-file>. For example, ftp://<alcatel:123456>@<IP-address>/AlcatelInstant\_Hercules\_6.5.4.x\_xxxx



The FTP server supports both **anonymous** and **username:password** login methods.

Multiclass OAW-IAPs can be upgraded only in the URL format, not in the local image file format.

3. Clear the **Reboot all APs after upgrade** check box if required. The **Reboot all APs after upgrade** check box is selected by default to allow the OAW-IAPs to reboot automatically after a successful upgrade. To reboot the OAW-IAP at a later time, clear the **Reboot all OAW-IAPs after upgrade** check box.
4. Click **Upgrade Now** to upgrade the OAW-IAP to the newer version.

## Upgrading an OAW-IAP Image Manually Using CLI

To upgrade an image using a HTTP, TFTP, or FTP URL:

```
(Instant AP)# upgrade-image <ftp/tftp/http-URL>
```

To upgrade an image by using the username and password in the FTP URL :

```
(Instant AP)# upgrade-image ftp://Alcatel:123456@192.0.2.7/AlcatelInstant_Hercules_6.5.4.x_xxxx
```

To upgrade an image without rebooting the OAW-IAP:

```
(Instant AP)# upgrade-image2-no-reboot <ftp/tftp/http-URL>
```

To view the upgrade information:

```
(Instant AP)# show upgrade info
```

```
Image Upgrade Progress
```

```
-----
```

```
Mac IP Address AP Class Status Image Info Error Detail
```

```
-----
```

```
d8:c7:c8:c4:42:98 10.17.101.1 Hercules image-ok image file none
```

```
Auto reboot :enable
```

```
Use external URL :disable
```