

AirDefense 10.2.1-07 Release Notes

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AirDefense 10.2.1-07 Release Notes

1. New Features in AirDefense 10.2.1-07

The AirDefense 10.2.1-07 (Service Module) release introduces the following key features and functionalities:

- 802.11ax Sensor Support Identification, classification, and termination for 802.11ax devices and added support for Liveview
- Extreme X440 Switch support: Polling, port lookup, & port suppression
- New UI additions Sensor Manager for configuring Sensor Operations and Sensor Only Settings

802.11ax Sensor Support

- As part of WiNG 7.2.1 software release, the 11ax support is further enhanced in 500 series APs. This feature in AirDefense is to support sensing devices operating in 802.11ax protocol. The AirDefense server can detect and classify these devices that support the 802.11ax protocol. Also, this release enhances Liveview support with 802.11ax frames being parsed and then shown in detail.
- Detection of 802.11ax Wi-Fi clients and BSS
 - Sensor to add new HE element using which the AirDefense server will define capabilities of wireless devices.
 - HE element is a part of Beacon, Association Request, Association Response,
 Reassociation Request, Reassociation Response, Probe Request and Probe Response frames
 - HE element capabilities contains MAC, PHY, MCS and PPE properties which can be visualized using AirDefense Packet Capture.
 - BSS and Station will indicate if they are capable of 802.11ax support.

Extreme X440 Switch support

AirDefense server now supports importing Extreme X440 switch. With this, users will also be able to make use of port lookup and suppression features.

New UI Additions

Sensor Operations and Management screen are developed as part of the new user interface in this release. In the earlier UI, these were 2 different configurations and were managed separately. In the new UI, these configurations are merged and are presented in a single view. The details of these features are captured in the *Extreme AirDefense User Guide*.



2. Version Compatibility

The 10.2.1-07 SM version is upgradable from 10.2.0-09. Direct upgrade from any other version is not supported.

For existing customers who would like to upgrade to 10.2.1-07, AirDefense is an entitled Product and requires an active support contract.

WiNG Version Compatibility

AirDefense 10.2.1-07 SM has been tested for compatibility against

- WiNG 5.9.7.0
- WiNG 7.2.1
- WiNG 7.2.1.1 (with XCA)
- Identify 10.51.08
- XCA 4.56.02

Supported Sensor Model and Interop Build version validated

Sensor Model	WING Interop build
AP 7522, AP 7532, AP 7562	WING 7.2.1/7.2.1.1
AP 8533	WING 7.2.1/7.2.1.1
AP 8432	WING 7.2.1/7.2.1.1
AP 7602/AP 7622	WING 7.2.1/7.2.1.1
AP 7612, AP 7632, AP 7662	WING 7.2.1/7.2.1.1
AP 505	WING 7.2.1/7.2.1.1
AP 510, AP 560	WING 7.2.1/7.2.1.1
AP 650/AP6532	WING 5.9.1.7
AP 7131	WING 5.9.3.3
AP 6522/AP 6562	WING 5.9.4.1
AP 7161	WING 5.9.3.3
AP 8132	WING 5.8.6.0
AP 8163	WING 5.9.6.0

Sensor Model	Identifi Interop build
AP 3915, AP3917	10.51.08
AP 3935, AP3965	10.51.08
AP 3912, AP3916	10.51.08

Please see the section titled "DFS Tables, Sensor and Radio Share" in the corresponding WiNG release notes for a detailed matrix of sensor features supported for each access point in that WiNG release.



Extreme Wireless Version Compatibility

AirDefense 10.2.1-07 SM has been tested for compatibility against

• Extreme Wireless 10.51.08

ExtremeCloud Appliance Version Compatibility

AirDefense 10.2.1-07 SM has been tested for compatibility against

• ExtremeCloud Appliance 4.56.02

Hardware Appliances

- Model NX-9500
- Model NX-9600

Virtual Platforms

• VMWare EXSi Hypervisor 5.5, 6.0, 6.5

Supported WiNG Wireless Access Points and Firmware version

- AP 6522, AP 6562
- AP 7161
- AP 7522, AP 7532, AP 7562
- AP 8163
- AP 8533
- AP 8432
- AP 7602
- AP 7622
- AP 7612, AP 7632, AP 7662
- AP 505, AP 510, AP 560

For feature support by WiNG release, please refer to the section titled "DFS Tables, Sensor and Radio Share" in the WiNG release notes.

Supported Extreme Wireless Access Points

- AP 3915
- AP 3916
- AP 3917
- AP 3912
- AP 3935
- AP 3965



Supported Browsers

Flash Player 10.1 or later is required.

- Firefox 65 and higher
- Chrome 72 and higher

Internet Explorer is not supported

Supported OS

- Windows 7 Enterprise
- Windows 10 Enterprise
- Linux
- Mac (Thin Client Applications Only)

3. Installation

Please follow the steps below to upgrade an AirDefense system that is currently running AirDefense 10.2.0-09 firmware. **Direct upgrade from any other version is not supported.**

- Copy the file AD-service-SM8-10.2.1-07.tar file to the /usr/local/tmp folder on the AirDefense server using the smxmgr account. You can use any tool like scp, ssh secure file transfer client, putty etc. for this.
- Login to AirDefense as *smxmgr*. From the menu select **Software** and then **Servmod** and enter the location of the patch file /usr/local/tmp/
- The menu now shows available files. Enter the number corresponding to *AD-service-SM8-10.2.1-07* and press [Enter]. AirDefense will now install 10.2.1-07.

For full instructions on how to upload the AirDefense image onto an NX and install it successfully please see the *Extreme AirDefense Users Guide*.

4. Important Notes

- 1. Backup all config and forensics files prior to upgrade
- 2. Toolkit will need to be re-installed. Toolkits installed in prior versions should not be reused.
- 3. Anomalous Behavior Detection thresholds are lost when the system reboots or when services are restarted. Also, Live and Threshold values are shown in the Alarm Details page while the alarm is in the active state; when the alarm becomes inactive, these values are changed to "unknown".
- 4. AirDefense VM Note that the minimum virtual disk size must be 50GB for the VM solution.
- 5. With AirDefense 9.4.0 (and higher) SSLv3 (and TLS 1.0, TLS 1.1) communication for sensor to server communication can be turned off completely. For all other communications, (for example, UI/ Toolkit etc.) SSLv3 was disabled in the previous releases. By default, SSLv3 communication is left enabled in AirDefense 9.4 to permit communication with legacy sensors. To disable the SSLv3 communication entirely, please follow the steps below. Note that WiNG version 5.8.3 or higher firmware must be used on sensors when SSLv3 is turned off as only those releases support TLS v1.2
 - Login to AirDefense with *smxmgr* credentials



- Select the "Config option" (type C) item.
- At the end of the menu options, a "(SSLv3) Enable/Disable SSLv3 for Sensor-Server Communication" item is shown.
- Type "SSLv3".
- The system will display current status of SSLv3 in the system. If it is currently disabled, this option will allow the user to enable it.
- Type [E] to enable/ [D] to disable.
- Type [Q] to quit.
- System will now warn that AirDefense services will need to restart.
- Type **Yes** to continue.
- Once you exit out of the WIPSadmin login, AirDefense service will be restarted.
- 6. From AirDefense version 9.2.0, the communication between sensors and AirDefense server is switched to use 2048-bit key length and TLS 1.2. By default, AirDefense will use 2048 key length certificate. In order to fall back to 1024-bit key length (not recommended), please follow the following steps.
 - Login to AirDefense as *root* (contact support for assistance)
 - Touch file /usr/local/smx/.k/key1024
 - Restart AirDefense services.

Upon restarting, AirDefense will fall back to 1024 bit certificate for sensor toserver communication.

To switch back to 2048 bit certificates:

- Login to AirDefense as *root* (contact support for assistance)
- Delete the /usr/local/smx/.k/key1024 file
- Restart AirDefense services.
- 7. Upgrade from AirDefense v 9.0.3 to v 9.1.0 (and higher) is not seamless. AirDefense architecture was significantly revised in v 9.1 to improve scalability requiring changes to *config* file. Some manual changes may be required to the *config* to upgrade successfully. It is recommended that upgrades from v 9.0.3 be performed via v 9.2.0 release which has enhancements to ease the upgrade.
- 8. When upgrading firmware to v 9.2.0 (from v 9.0.3), a *config restore* MUST be performed using the 9.0.3 backup config file. In several cases, this will help restore config items that might be lost during the upgrade.
- 9. Alarm action manager profiles exception option has been removed from GUI in 9.1.2 and added to the advanced filter.
- 10. By default, notification emails are sent once every 5 minutes. E.g. To increase this to one day emails change the repetition periods as follows:

In file /usr/local/smx/notification/lib/notification.properties,

email.repetitionPeriod = 86400 // In seconds; Default = 300 seconds syslog.repetitionPeriod = 86400 // In seconds; Default = 300 seconds Restart AirDefense after the file is modified for the changes to take effect.

- 11. Bluetooth Beacon using unauthorized URL: EddyStone URLs are validated against the configured URLs in /usr/local/smx/etc/adbleurl.conf file. Advertised URLs from EddyStone BLE beacons are validated against these allowed URL list for checking whether authorized or not. AirDefense will check the sensed URL from beacons against the configured URLs and trigger an alarm if any violation is detected. There are two types of configurations allowed.
 - a. List of allowed URLs
 - b. Allowed URLs for a specific BLE beacon mac address [Note: there is no short mac address and tiny URLs are not allowed]



10/31/2019

Instructions to configure the URLs in a file:

In AirDefense 10.0, this configuration is done via the CLI. Login to the AirDefense CLI using the *smxmgr* credentials

```
* * * A D S P a d m i n * * *

(M) Manage (D) Dbase (S) Software (C) Config

(D) to quit -> letmeout

[smxmgr@localhost ~]$ vi /usr/local/smx/etc/adbleurl.conf
[smxmgr@localhost ~]$
```

On the menu item, type letmeout and get the prompt smxmgr#localhost ~]\$

Edit the file using vi /usr/local/smx/etc/adbleurl.conf

#Enter allowed URLs (for all macs (or) for specific mac)
#URL=https://www.google.co.in
#Means URL is allowed for all macs and alarm is NOT triggered when this URL is used.
#URL=https://www.google.co.in, MAC=f8:d8:d1:39:63:ae
#Means URL is allowed only for specified mac

Users can add/edit the URL and MAC address as required.



5. SPR/Issues Fixed

The following SPRs/ CQs have been fixed in this release.

SPR/ CQ	Description
AD-10993	Termination java app will not open with radioshare wips only license
AD-11013	Protocol Analysis Engine down
AD-11014	Intermittent core crash when multi-threading is enabled
AD-11016	Custom Syslog notification variable OffernerVendorPrefix not working
AD-11018	ADSP 10.1 AP39xx model is unknown in new UI
AD-11021	GUI password changed after process restart
AD-11027	null ssid with space floating in the network ssid = causing core crash

6. Vulnerabilities Fixed

Vulnerabilities Fixed in AirDefense 10.2

AirDefense 10.2 includes upgrades to several internal packages (including kernel to: 2.6.32-754.18.2, openssh: 5.3p1-124.el6_10 and etc.) to provide fixes for several vulnerabilities including:

- CVE-2018-10902
- CVE-2018-12126
- CVE-2018-12127
- CVE-2018-12130
- CVE-2018-13405
- CVE-2018-17972
- CVE-2019-1125
- CVE-2019-11477
- CVE-2019-11478CVE-2019-11479
- CVE-2019-3896
- CVE-2019-5489
- CVE-2018-15473

Vulnerabilities Fixed in AirDefense 10.1

AirDefense 10.1 includes upgrades to several internal packages (including kernel to: 2.6.32-754.10.1, openssh: 5.3p1-123.el6_9 and etc.) to provide fixes for several vulnerabilities including:

- CVE-2018-14634
- CVE-2018-5391
- CVE-2018-5390



- CVE-2018-3693
- CVE-2018-10901
- CVE-2018-3620
- CVE-2018-7566
- CVE-2018-1000004
- CVE-2016-6210

Vulnerabilities Fixed in AirDefense 10.0

AirDefense 10.0 includes upgrades to several internal packages (including kernel to: 2.6.32-754.2.1, microcode ctl: 1.17-33.1 and Java) to provide fixes for several vulnerabilities including:

- CVE-2018-10675
- CVE-2018-10872
- CVE-2018-1130
- CVE-2018-3639
- CVE-2018-3665
- CVE-2018-5803
- CVE-2017-1000111
- CVE-2017-1000112
- CVE-2017-1000251
- CVE-2017-1000253
- CVE-2017-1000364
- CVE-2017-1000364
- CVE-2017-1000410CVE-2017-11176
- 602 2017 11170
- CVE-2017-12190
- CVE-2017-14106

CVE-2017-13166

- CVE-2017-15121
- CVE 2017 13121
 CVE-2017-18017
- CVE-2017-18203
- CVE-2017-2636
- CVE-2017-2671

- CVE-2017-5715
- CVE-2017-5753
- CVE-2017-5754
- CVE-2017-6001
- CVE-2017-6214
- CVE-2017-7308
- CVE-2017-7541
- CVE-2017-7542
- CVE-2017-7616
- CVE-2017-7889
- CVE-2017-7895
- CVE-2017-8824
- CVE-2017-8890
- CVE-2017-9074
- CVE-2017-9075
- CVE-2017-9076
- CVE-2017-9077
- CVE-2016-7910
- CVE-2016-8650
- CVE-2015-8830
- CVE-2012-6701

Vulnerabilities Fixed in AirDefense 9.5

AirDefense 9.5 includes upgrades to several internal packages to provide vulnerability fixes (including kernel to 2.6.32-696.10.1, nss, bind, ca-certificates, glibc, jasper, openIdap, rpcbind and sudo)

Vulnerabilities Fixed in AirDefense 9.4

AirDefense 9.4 includes upgrades to several packages (including bindlibs, bindutils, kernel, openssh, openssl) and fixes the vulnerabilities below.

- CVE-2017-6074
- CVE-2017-3136
- CVE-2017-3137
- CVE-2016-7545



- CVE-2015-8325
- CVE-2010-5107

<u>Vulnerabilities Fixed in AirDefense 9.3</u>

AirDefense 9.3 includes upgrades to several packages (including kernel, openssh, openssl, nss, ntp, glibc, perl etc.) and additionally fixes the vulnerability below.

CVE-2016-2107

Vulnerabilities Fixed in AirDefense 9.2

AirDefense 9.2 includes upgrades to several packages (including openssh, openssl, Java and Tomcat) – fixing the vulnerabilities below:

- NTP Vulnerability CVE-2015-7871
- OpenSSL vulnerabilities CVE-2015-3194, CVE-2015-3195, CVE-2015-3196, CVE-2015-3197
- OpenSSH vulnerability CVE-2016-3115 (X11 forwarding)

Vulnerabilities Fixed in AirDefense 9.1.3-10b6

glibc: getaddrinfo stack-based buffer overflow CVE-2015-7547

Vulnerabilities Fixed in AirDefense 9.1.3-10a8

• OpenSSL vulnerability – LOGJAM - CVE-2015-4000

Vulnerabilities Fixed in AirDefense 9.1.3-10

- GHOST CVE-2015-0235
- Unzip Multiple Heap Buffer Overflows Vulnerabilities Zero Day CVE-2014-8139, CVE-2014-8140, CVE-2014-8141
- OpenSSL vulnerabilities security advisory dated 11 Jun 2015 (see http://openssl.org/news/secadv_20150611.txt), CVE-2014-8176, CVE-2015-1789, CVE-2015-1790, CVE-2015-1791, CVE-2015-1792, CVE-2015-3216
- OpenSSH vulnerabilities CVE-2014-2532, CVE-2014-2653

Vulnerabilities Fixed in AirDefense 9.1.2-17a6

- NTP vulnerabilities 2014-9293, 2014-9294, 2014-9295, 2014-9296
- Bash shellshock CVE-2014-6271, CVE-2014-7169, CVE-2014-7186, CVE-2014-7187, CVE-2014-6277 and CVE 2014-6278
- Poodle SSLv3 CVE 2014-3566

7. Known Issues and Recommendations

General Note

- AP5XX sensors do not show supported protocols as "ax" even though these access points are capable of supporting the protocol.

General note for EW 39XX series access points:

 Support for Extreme Wireless Access Points has been added beginning with the AirDefense 9.5 release. Therefore, any upgrade issues from prior releases documented in the "Upgrade Related" section are not applicable.



- As features supported for EW 39xx access points are WIPS, Advanced Forensics and Liveview. Known issues in the Network Assurance, Proximity and Bluetooth sections below are not applicable to these access points.
- Any WING sensor specific issues documented below are not applicable to Extreme Wireless access points.

Pre-requisites for multicore configuration

- All the floors in the same building should be created under one area of network tree structure
 - This is mandatory as not doing so will result in devices being seen multiple times and may result in undefined WIPS behavior
- Auto-placement rules are mandatory for network devices placement
 - o Messages from sensors in unplaced folder will not be processed
 - o Polled devices in unplaced folder will not be considered for any WIPS processing
 - Do not manually move Sensor/AP within your network tree if these devices were placed using auto-placement rules.

Issues specific to EW access points

 The following alarms do not trigger on EW AP 39XX –Fake AP flood attack, AirSnarf (3912, 3915)

Upgrade related

- In 9.1.x Device/Alarm action manager, *None(Any)* filter and *None(All)* filters were reversed compared to 9.0.3. This is fixed in 9.2.
 - If upgrading from 9.0.3 this conversion happens automatically when restoring the
 9.0.3 config
 - o If upgrading from 9.1.x Any rules that were deliberately reversed by the administrator after upgrading from 9.0.3 to workaround such configs need to be reversed manually on upgrading to 9.2 (after restoring the config)
- Alarm action Manager: In AirDefense 9.1 and higher releases, a maximum of 25 filters are supported in the filter list as well as in the expression filter list.
- Alarm Action Manager rule descriptions may not be preserved on upgrade to 9.1 and higher releases.
- Alarm Action Manager: In some cases, on upgrade from 9.0.3 to 9.2 you may see special characters in expression filers (e.g.' %' or ')') in the advanced filter expression editor. These characters are needed for internal operation. They do not impact end user functionality and can be ignored from an administrator perspective.
- Device and Alarm Action Managers: On upgrading from 9.0.3 to 9.2, an AAM profile that was left disabled at the global scope appears to be enabled. However, with 9.1 and higher releases, there is a separate "Enable Profile" checkbox to really enable the profile.

Platform

- Those sanctioned wireless clients not seen in your network for more than 10 days will not be shown in the UI till they sensed or polled again. This duration can be configured via *airids.conf* parameter.
- Import devices via CLI will not be able to place the devices based on firmware version filter in Auto placement rule.
- Moving BT_Sensor between floors will not move the respective BT/BLE devices.



- Custom dashboards created in the old Flex UI will not show up in the new UI.
- The following alarms do not trigger on AP 7612/7632/7662 Airsnarf.
- The following alarms do not trigger on AP 7662 Honeypot, Multipot, Hotspotter and Hunter-Killer.
- AirDefense Toolkit is only supported on Windows. It is not supported on Linux.
- "DeviceVendorprefix,AssociatedVendorPrefix and DeviceManufacturer should be used with the full name when used with =,!=,IN and NOT IN operators"". It is recommended that operators LIKE/ ILKE be used for DeviceVendorprefix,AssociatedVendorPrefix and DeviceManufacturer filters.
- WSP-8561: CMC Server Unreachable message in tooltip After adding the CMC appliance to Master AirDefense, it says "Server Unreachable" even though the server is reachable. After some time the "Server Unreachable" message disappears and "login failed" appears. Ignore the unreachable message - go ahead and share the certificate and restart the appliance to get the CMC working.
- NOT IN operator is not supported in AirDefense Alarm Action Manager.
- AirDefense does not generate the alarm "Frequency hopping interference detected" when using AP 7532 as a sensor.
- WIPS-OCS: LiveView does not display frames on channel 1 configured in OCS channel list.
- WIPS: Wipsd (on the AP) sometimes restarts when radio is changed from radio share to dedicated sensor.
- WIPS Rogue AP Detection In select cases like enterprise class rogue AP that is set up as a
 router (not an AP) and the BSSID of the wireless interface is completely unrelated to the
 MAC address of the wired interface, AirDefense uses a data pattern matching technique to
 classify the device as a rogue. For the sensor to see the wired side data from the AP, the port
 on the L2 switch should be configured as a SPAN port. If this is not done, the rogue AP will
 be marked as an unsanctioned device but AirDefense will not be able to classify it as a rogue.
- Forensics does not show the all of the data when the date range is long (15 days or longer). Workaround is to run multiple reports each of duration less than 15 days.
- Scheduled Configuration or Forensic Backup using TFTP protocol is not supported. Please use FTP or SFTP.
- "Wireless devices overload observed" alarm is only generated on NX 9500 in Standalone AirDefense (not supported on other appliances nor in Unified mode)
- Action Rules on demand discrepancy in Job Status, rules are not applied –Recommendation
 is Admin needs to apply the Action Manager rule before running "Action Manager Rules on
 Demand" option. Action Manager Rule runs every minute by default.
- Job list in job status does not age out after 7 days
- Backup and Restore does not work when the profile name has a space at the end. Edit the profile to remove the extra "space" character.
- When Korean language is selected, the following do not work correctly
 - Cannot delete some SNMP Community settings when others are in use.
 - Unable to display "device name" correctly when number of characters exceeds 10.
- Port suppression fails on an RFS6000
- Backslash in LDAP authenticated user name causes loss of all user permissions on restart of services.
- The CMC slave authentication mechanism has been changed significantly in AirDefense 9.1.0. It is recommended that the user review the on-line help for CMC for a description of how to configure slave servers.



- After adding a Slave Server on a CMC Master Server, the user is not able to view configuration or other pages on the Slave Server from the Master Server because of a permission error. The workaround is to click the Reset button, log out of master server, and restart browser.
- 'Copy settings to all appliances' action in CMC results in GUI application error with numeric value as prefix in profile name.
- Data collection on WiNG 5.2.x devices was changed to occur over SNMP vs HTTPs. Data
 collection and configuration management requires the communication profile settings for
 SNMP timeout interval and retry to be set to 9999 milliseconds and 3 retrys to avoid
 excessive timeouts which might disrupt connection resulting in incomplete data collection
 and device showing as offline when it is not actually offline to the network.
- Data collection set to a short interval may result in devices going offline; it is recommended
 to set the time between data collections to an interval longer than the time a complete data
 collection takes.
- SFTP is not supported with the internal relay server, it is only supported with an external relay server.
- The format of the folder for CLI variables must be:
 /<serverName>/<country>/<region>/<city>/<campus>/<building>/<floor>
 For example, /AirDefense/USA/South/Atlanta/Alpharetta/Atlanta_main/Floor_2
 All other profiles accept the following folder format:
 <country>/<region>/<city>/<campus>/<building>/<floor>
- CQ 201328 AP 7532 device icons displayed incorrectly when device goes offline

Network Assurance

- In AP505, liveview is not showing any data when it is enabled in radioshare mode
- Clearing configuration in Appliance Manager may prevent edits to Live-RF application configuration. If the system gets into this state, please contact the support team or re-install AirDefense.
- Changes to duty cycle field in the Advanced Spectrum Analysis window will cause all channel extensions to be set to 0 on the sensor. A manual stop and start of ASA fixes the issue.
- Cannot schedule Advanced Spectrum Analysis dedicated scan with default values change atleast one value from default to turn on the OK button.
- The Advanced Spectrum Analysis on AP 6522 displays spurs when the frequency range is extended to cover Channel 14. These spurs cause the Advance Spectrum Analysis alarm "Utilization Exceeded Threshold" to be triggered.
- Spectrum Analysis On changing chart options Duty cycle, Device count, Spectral density and Real time FFT data is lost. Do not change chart options to preserve existing data.
- AP Test AP Test with Captive Portal is not supported. It requires a custom plugin to be created for the specific captive portal. Workaround: Use the ping test to verify reachability to the captive portal.
- AP Test WEP keys entered in ASCII characters prevent successful testing of WEP networks when using M5x0 sensors. WEP keys entered as hex code work fine.
- AP Test Due to hardware limitations AP testing using EAP-TLS or PEAP-TLS is not supported on the M5x0 sensor platforms.
- AP Test The AP Test supplicant does not support certificates which are protected with a
 passphrase, only certificates which do not require a passphrase to access the key are
 supported.



- AP Test AP Test scheduled using alarm action manager does not run according to the chosen profile
- AP Test AP Test license does not get automatically applied when Auto Licensing is selected
- AP Test and Wireless Vulnerability assessment works at a BSS level only and not at a floor/ scope level.
- AP Test Scheduled AP Test disappears from menu despite the presence of a radio-share AP
 Test license. Support can issue an AP test license which will re-enable this functionality.
- AP Test SPR 27984 AP-Test with EAP-TLS fails with error message "Network
- AP Test AP Test Downlink test fails for AP 7522 and AP 7532 with WiNG 5.8.4
- AP Test AP 8432 and AP 6522 Uplink test fails while running AP test with WiNG 5.8.4
- AP Test When using TKIP-CCMP, AP 622 acting as a client does not get an IP address via DHCP with WiNG 5.8.4
- Authentication: EAP authentication failed" has been fixed in WiNG 5.8.1 & higher releases.
- Multiple Vlan IDs cannot be removed they can only be removed one at a time.
- Live view: SSID and RSSI value do not appear in devices tab occasionally.
- Live RF with AP 75xx is only supported at 11n rates

Bluetooth Monitoring

- Bluetooth Devices imported via a csv file and with a selected folder are placed in unplaced devices folder. They are moved to the correct folder when the device is seen
- Some Eddystone tags have non-standard fields and may not be correctly recognized by the AP. Some tags do not advertise a URL in the beacon such tags cannot be protected with the BT 4.0/ BLE security feature. The following tags have been tested against AirDefense:
 - o Kartographer eddystone beacons UFOBeacon Odyssey
 - o Ibeacons used Wing Devices as advertisers. Apple ibeacons were also sensed.
 - BLE simulator app TxEddystone
 - BLE Scanning app -- Beacon simulator
- Some tags advertise additional ".com"'s in the URL field. This does not impact URL matching, however, they will show up in the alarm description text.

HTML5 UI

- In Network page, polled device count mismatch, neighboring bss/wireless client are not computed properly.
- In user management, custom profile permissions do not get updated in user associated with that custom template. The workaround for this issue to modify at individual user level
- In License management page, Delete Devices in License Assignment screen does not delete these devices as expected. The UI shows these devices as being deleted successfully. However, these devices are not deleted and their license will not get released. To work around this issue, use the legacy UI for releasing these licenses.
- In the new user work flow, creation of Discovery Profile with SNMP fails. Use the *Advanced Configurations* option to overcome this issue.
- The image is broken in Mozilla Firefox in the toolkit download page.
- The new UI is supported for the *admin* user in this release. Support for other user roles will be added in a future release.
- New UI Unknown devices turned into rogue devices widget does not show data. Will be addressed in a future release.



- New UI In the network snapshot grid, the total BT device count does not match the old UI.
 Sensor details are missing. Will be addressed in a future release.
- New UI Radio Bands on WLAN do not show the correct count of WLANs.
- NEW UI: Search filter for the "polled devices" column does not work.
- New UI: BLE device classification widget doesn't show correct counts.

8. AirDefense WiNG Feature Matrix

This section defines features supported by access point/ sensor module.

As a dedicated sensor	WIPS & Advanced Forensics	Spectrum Analysis	Advanced Spectrum Analysis	Live RF	Live View	AP Test	Connecti on Troubles hooting	WVA
AP 6522/6562	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
AP 7161	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
AP 7532/7522/7562 ¹	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
AP 8163	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
AP 8533 ²	Yes	No	Yes	No	Yes	Yes	Yes	Yes
AP 8432 ²	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
AP 7602/7622	Yes	No	No	No	No	No	No	No
AP 7632/ 7662/ 7612 ¹	Yes	No	No	No	Yes	No	No	No
AP 505/ 510/ 560 ⁶	Yes	No	No	No	Yes	Yes	No	Yes

Notes:

3. Radio Share functionality (allows for enabling the Network Assurance toolkit in AirDefense, without dedicating a radio as a sensor) is available on the 802.11n/802.11ac APs with some caveats – please see details below:

In Radio Share mode	WIPS & Advanced Forensics	Spectrum Analysis ²	Advanced Spectrum Analysis ³	Live RF	Live View	AP Test ⁵	Connecti on Troubles hooting	WVA
AP 6522/6562 ¹	No	No	Yes	Yes	Yes	Yes	Yes	No
AP 7161	No	No	No	Yes	Yes	Yes	Yes	No
AP 7532/7522/7562 ⁴	Yes	No	No	Yes	Yes	Yes	Yes	No
AP 8163	No	No	Yes	Yes	Yes	Yes	Yes	No
AP 7502	No	No	No	No	No	No	No	No
AP 8533	No	No	No	No	No	No	No	No
AP 8432	Yes	No	No	No	Yes	Yes	Yes	No
AP 7602/7622	No	No	No	No	No	No	No	No

¹AP 7522, AP 7532, AP 7562, AP 7632, AP 7662, AP 7612 radios are band-locked, entire AP needs to be dedicated as sensor

²Support is limited to the dedicated sensor (Radio 3) for AP 8533. For AP 8432 – either Radio 1 can be used as a dedicated sensor and Radio 2 for data or the entire AP can be dedicated as sensor.



In Radio Share mode	WIPS & Advanced Forensics	Spectrum Analysis ²	Advanced Spectrum Analysis ³	Live RF	Live View	AP Test ⁵	Connecti on Troubles hooting	WVA
AP 7632/ 7662/ 7612 ⁴	Yes	No	No	No	Yes	No	No	No
AP 505/ 510/ 560 ⁶	Yes	No	No	No	Yes	No	No	No

Notes:

¹AP 6522, 6562 – The first radio is band-locked to 2.4Ghz. The second radio is capable of ABGN sensor operation.

- o In Radio 1 = Sensor, Radio 2 = Wlan configuration, the sensor will only scan 2.4Ghz channels on Radio 1.
- In Radio 1 = Wlan, Radio 2 = Sensor configuration, the sensor will scan both bands on Radio 2
- In Radio 1 = Sensor, Radio 2 = Sensor configuration, the sensor will scan 2.4GHz on Radio 1 and 5GHz on Radio 2

⁴AP 7522, AP 7532, AP 7562, AP 7632, AP 7662, AP 7612 radios are band-locked, both radios are required for sensing

⁵AP Testing in radio share mode - only single-cell/internal BSS AP testing is supported. AP Testing on remote BSS is not supported.

⁶WIPS, Advanced Forensics and Liveview are only supported in centralized mode with AP5XX

9. AirDefense Extreme Wireless Feature Matrix

For the EW 39xx series access points operating as dedicated sensors, AirDefense supports the following features:

- WIPS
- Advanced Forensics
- Liveview

AirDefense also supports the following features for AP 39xx operating as radio-share sensors.

- WIPS
- Advanced Forensics

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²Spectrum Analysis is not supported with Radio share enabled.

³Advanced Spectrum Analysis in RadioShare mode may impact WLAN performance.