AirMagnet Enterprise 11.0

Release Notes

February 2017

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Introduction

This document highlights the new features and bug fixes in this AirMagnet Enterprise 11.0 release (Build 35311).

Special Notes

This section contains information regarding the special procedures that may be required in order to use this AirMagnet Enterprise (AME) 11.0 release. It also includes potential limitations of this release.

1. AirMagnet Enterprise version 11.0 supports upgrading from version 10.8 or higher.

2. The following operating system is no longer supported: Microsoft Windows Server 2003

3. The following database products are no longer supported: Microsoft SQL 2005, Oracle Database.

4. The following features are no longer supported: Cisco WLSE ACL integration, SSA on Windows XP, DTU update on 5200 Series sensors.

5. The following sensors models are no longer supported: 5010, 5012, 5020, 5023, 5030, 5120, 5123 Series sensors

6. Before upgrading to AirMagnet Enterprise, it is necessary to perform backup procedures. It is not recommended to downgrade AirMagnet Enterprise. Refer to the *AirMagnet Enterprise User Guide* under "Performing Product Upgrades or Downgrades".

7. The following features require separate licenses: AHC, SSA, Integrated 802.11n and Spectrum Intelligence.

8. Network connectivity issues can cause the AME Sensor to upgrade very slowly or completely fail to upgrade. You should verify good network connectivity to all sensors prior to upgrade.

9. When running the AME server and console in a Windows environment, the Data Execution Prevention (DEP) feature must be set to "Turn on DEP for essential Windows programs and services only".

10. Using an Internet browser to navigate to https://localhost/ on the Enterprise Server may require user authentication. To work around this, use https://<127.0.0.1>/

11. Registered users can log into My AirMagnet at: http://airmagnet.netscout.com/my_airmagnet/ to download the available open source software used in AirMagnet Enterprise.

12. AME recommended "Medium" and "Large" server hardware configurations are required for Windows Server 2012 R2. For System Requirements and recommended hardware configurations, refer to the *AirMagnet Enterprise User Guide*.

13. A new software license is required when upgrading server software. The new license is installed automatically as long as there is an active Internet connection during installation. If no active Internet connection during installation, you must download the license before performing the upgrade installation as follows:

    a. Save the existing license (for example, A5505-xxxxxxxx.lic) to another folder to preserve it in case it is needed in the future (for example, a downgrade). The license is located in a folder typically located here: C:\Program Files\AirMagnet Inc\AirMagnet Management Server.

    b. Sign-in to your My AirMagnet account at http://airmagnet.netscout.com/my_airmagnet/.

    c. Navigate to "Registered Products/Downloads"

    d. From the "License Download" column, download and save the license to your "AirMagnet Management Server" folder.

14. If you are ordering new Series 4 sensors or have existing Series 4 sensors, you must make sure that your AirMagnet Enterprise system is at v 10.9 or later.

15. AirMagnet Enterprise sensors contain a factory failover recovery image that can be activated under certain conditions, such as, for example, the sensor not being able to start up properly or software corruption occurring.
Depending on the manufacture date of the sensor, there are certain Series 4 sensors that contain older versions of this recovery image. If a Series 4 sensor using an older recovery version of software performs an emergency recovery (older than 10.8.2), it will fail to automatically connect back to the AirMagnet Enterprise server 11.0 or above using an imported 3rd party signed certificate. Netscout recommends that you contact Technical Support for help in restoring the sensor connection back to the AirMagnet Enterprise Server, since the process involves manually updating the application and system software on the sensor. Once the system and application software have been updated, you will also need to perform a "set sensor" from the terminal. In addition, Technical Support can also manually upgrade the factory failover partition with a supported version. Series 6 sensors do not exhibit this problem.

    If you feel your AirMagnet Series 4 sensor has initiated an emergency recovery, you can login to the sensor using SSH to verify the running software version by issuing the command "show sensor". This information can be provided to the Technical Support representative.

16. Downgrading AirMagnet Enterprise version 11.0 to 10.x or lower is not recommended. If downgrading is your only option, make sure your installation is using the default AirMagnet Enterprise SSL certificate before beginning the downgrade. If you have imported a third-party SSL certificate or imported your own self-signed certificate, you must first import the default AirMagnet Enterprise certificate. There is a backup of this certificate saved in the "cert-bak-*" under the AirMagnet installation directory. In addition, ensure that after importing the default AirMagnet certificate, all AirMagnet sensors have reported in and have downloaded the new certificate.

17. When upgrading AirMagnet Enterprise from 10.9.x or older to 11.0, it is recommended to upgrade all connected console applications to the new 11.0 version before making any certificate changes. Failure to do this will result in the console being unable to connect/upgrade automatically. If you have imported a new custom certificate into the AirMagnet Enterprise server and you have consoles running a software version 10.9.x or older, you will need to manually upgrade those consoles. To download the new console version, login to your AirMagnet Enterprise server URL (using HTTPS) and download the installation package.

18. Starting with AirMagnet Enterprise 11.0, you are given the option to import you own SSL certificate and private key. In some cases when you generate a new certificate from a third-party certificate authority, it will come as a bundled certificate. The bundled certificate contains a chain of intermediate certificates. AirMagnet Enterprise does not support importing bundled certificates. You will need to split out the server certificate into separate files.

Features and Enhancements

This section explains the product features and enhancements implemented in this AirMagnet Enterprise 11.0 release:

Support for the New Series 6 Sensor

AirMagnet Enterprise SmartEdge Series 6 Sensor is a new generation of the AirMagnet SmartEdge Sensor family. It features the new high performance 1.8 GHz ARM based processor, a 10/100/1000 MB Ethernet Base-T port with IEEE 802.3af Power over Ethernet (PoE) compliance, 3 x 3 802.11ac Wi-Fi chipset(s) and RF spectrum analysis chipsets (Wi-Fi or Cellular).

Sensors that include the Wi-Fi spectrum analyzer option can identify and monitor virtually all sources of RF activity in the unlicensed bands that 802.11 networks share with other devices (such as cordless phones and headsets, Bluetooth devices, microwave ovens, and so on). This provides network engineers with remote visibility of the RF environment in which their WLANs operate so that they can proactively enhance their WLAN's performance and security in the face of interferers, network congestion, and security attacks.

If you purchased sensors (model SENSOR6-R1S1W0-E) that include the AirMagnet Remote Cellular Spectrum Analyzer, you can use AirMagnet Enterprise to remotely monitor the cellular spectrum environment. The Remote Cellular Spectrum Analyzer monitors cellular frequencies and identifies call events and call attributes such as the cellular technology (GSM|CDMA|UMTS|LTE) as well as identifying wide band jammers.

The following models are currently available:

| Sensor Model	Features
SENSOR6-R2S1-E	AIRMAGNET WIFI SPECTRUM SENSOR, 6TH GEN, 2 X 11ac RADIO, EXTERNAL ANT.
SENSOR6-R2S1-I	AIRMAGNET WIFI SPECTRUM SENSOR, 6TH GEN, 2 X 11ac RADIO, INTERNAL ANT.
SENSOR6-R1S0W1-E	AIRMAGNET CELLULAR SPECTRUM SENSOR, 6TH GEN, 1 X 11ac RADIO, EXTERNAL ANT.

Support for Microsoft SQL Database 2014

AME now supports Microsoft SQL database 2014.

Support for Importing Custom SSL Certificate and Private Keys

AirMagnet uses Enterprise grade Transport Layer Security (TLS) to encrypt the communication between the sensors, server and console. Starting with Release 11.0, AirMagnet Enterprise provides the option to import a 3rd party SSL Certificates and Private Keys from a trusted Certificate Authority. Self-Signed certificates are also supported.

Access this feature from the Start Menu as follows: **AirMagnet Enterprise Server>Enterprise Server Import Certificate.**
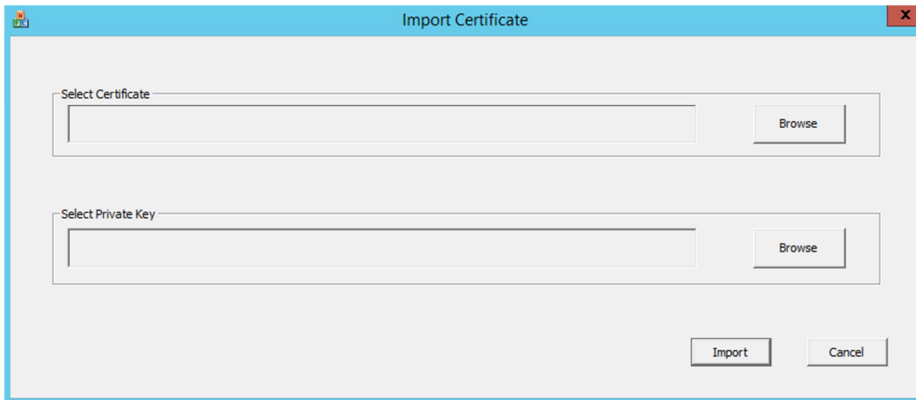

Note: Do not change both a certificate and a shared key at the same time. Let the system recognize one of them before setting the other one. If this is not done, a sensor connection failure will occur.

Addition of an Alarm Exclusion List

This release provides a way to create a list of devices for which no alarms should be triggered.

Note: 52xx Series Sensors do not support the exclusion list feature.

You can use this for testing devices or neighboring devices. It is accessed with a tab in the Server Options dialog. It consists of a list with two columns: MAC Address and Note. You can Add/Remove/Import/Export this information. It allows no duplicate MACs, and can contain a maximum of 1000 entries with a maximum name field length of 100 characters. Perform these tasks from the following screen at **Manage>ACL...->AirWISE exclusion list** tab:
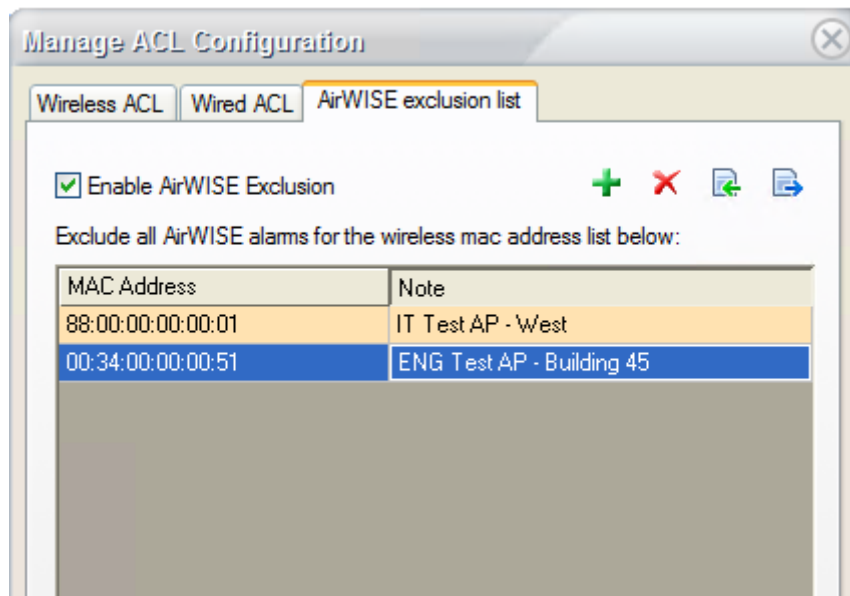
Support for Wired 802.1X on Series 6 Sensors

This feature provides additional methods of authenticating to secure networks. Configuration is available both on the sensor using the **set 802.1X** CLI command and through the AME console as follows: **Manage>Server Options> Sensor** tab**>Enable 802.1X** checkbox and click the **Configure** button. This allows you to incorporate AME sensors into your existing infrastructure. This commonly-used standard provides additional and more secure methods of authentication and network access for your future use.

Note: PEAP Authentication only supported.

```
config>set 802.1x
Enable 802.1X (Y/N)? y
Authentication Method: PEAP
User Name: hevinned
Password: *******************
Anonymous Identity: testuser
PEAP Version:
        1. Use automatic PEAP version
        2. Use PEAP version 0
        3. Use PEAP version 1
Enter the number corresponding to the PEAP version: 1
Inner Authentication:
        1. MSCHAPV2
        2. GTC
        3. MD5
Enter the number corresponding to the authentication type: 1
802.1X is Enabled. You must reboot the sensor to apply these chan
ges.
Do you want to reboot now (Y/N)?
```
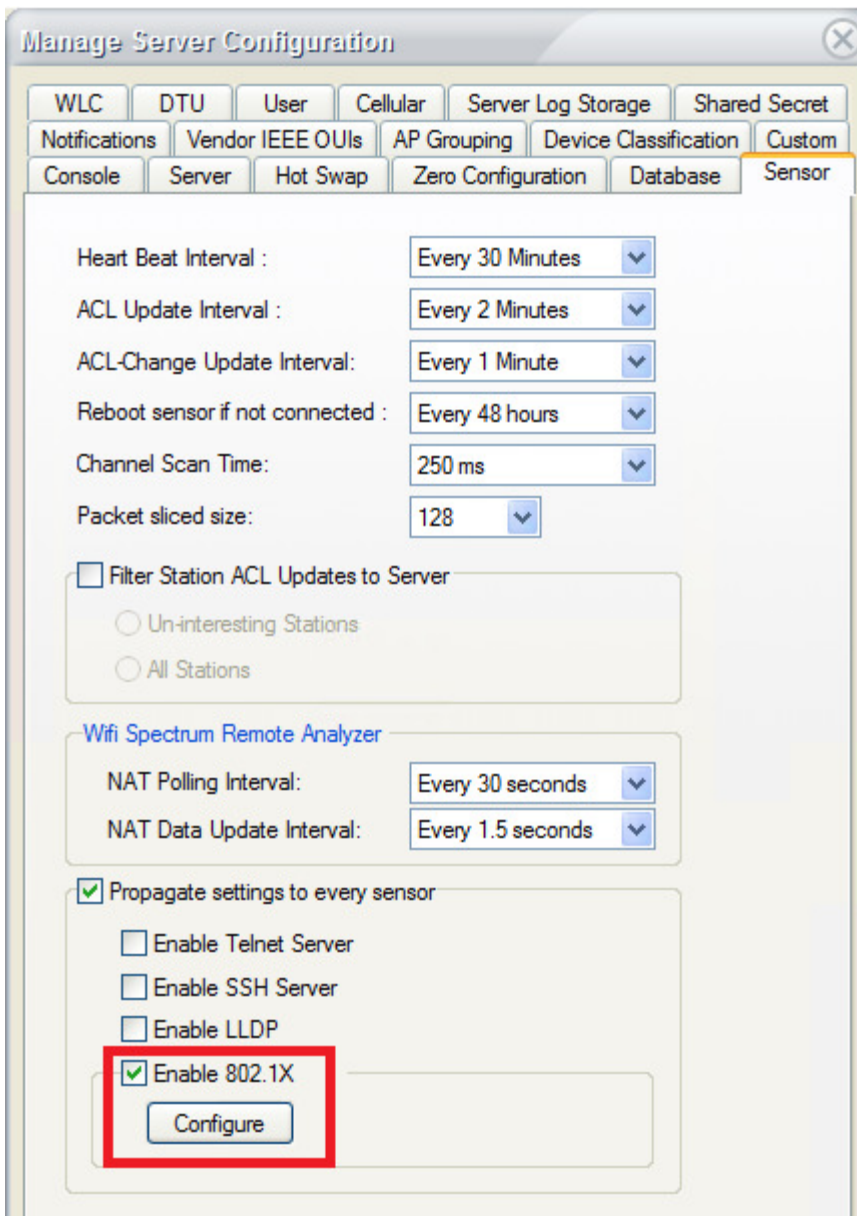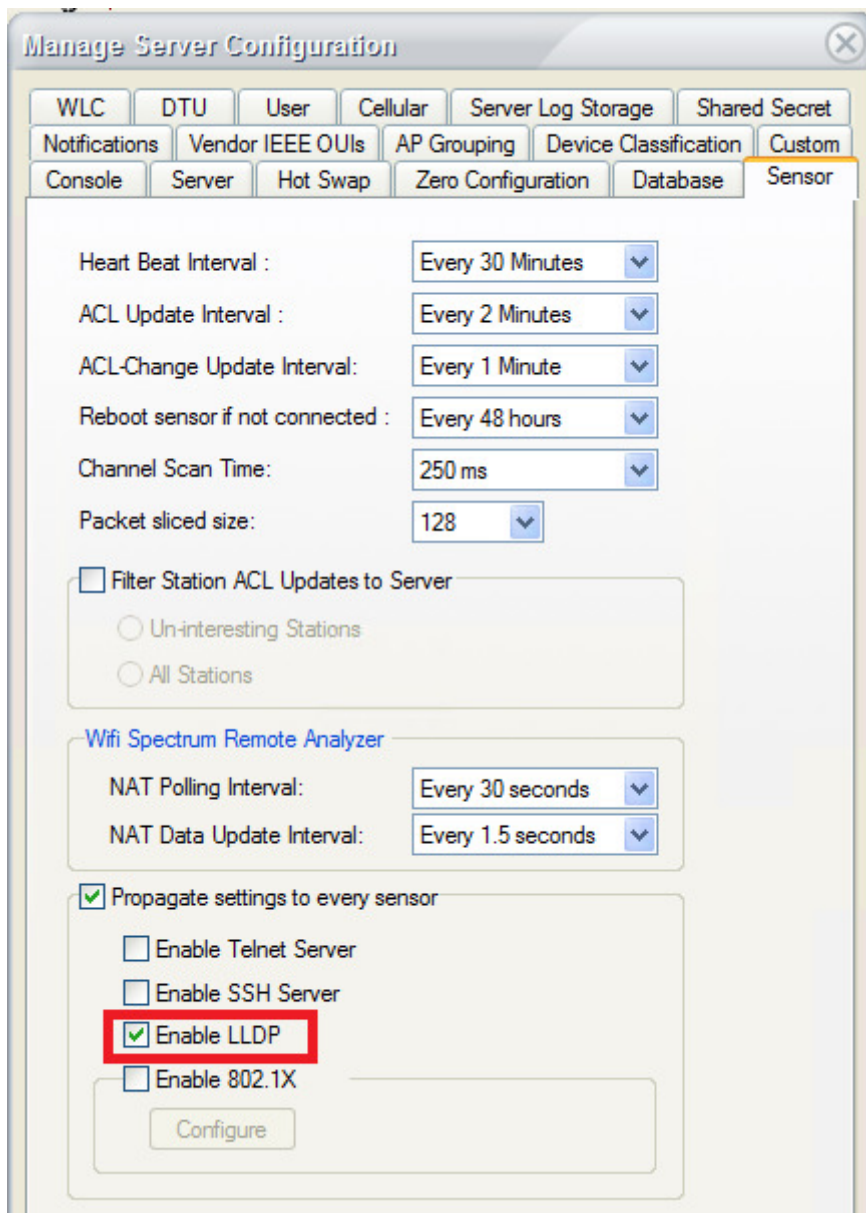
LLDP Available on Sensors

LLDP support on wire allows the sensor side to facilitate discovery of sensor identity and capabilities by other devices on the network.

Note: This feature is only for Sensor 4 and 6 models.

On the AME Console, configure this as follows: **Manage>Server Options>Sensor** tab**>Enable LLDP** checkbox.

Support for Aruba Clearpass Guest Captive Portal with Automatic Health Check (AHC)

Starting with release 11.0, Automatic Health Check (AHC) supports creating jobs to run against an Aruba Clearpass Guest Captive portal system. The AirMagnet sensors can connect to the Guest access point, authenticate to the Clearpass captive portal system and perform a variety of performance tests including ping, FTP download, HTTP/HTTPS download and traceroute.

On the AME Console, configure this as follows: **Manage->AHC Jobs->Security Profiles tab.**

Load New Button to Import IEEE OUI Files

This feature provides an easy way to load OUI files when the server is not connected to the internet, as shown below using **Manage>Server Option**, selecting the **Vendor IEEE OUIs** tab and clicking the new **Load New** button. Users can get this OUI file from the IEEE website or from https://airmagnet.netscout.com/my_airmagnet/
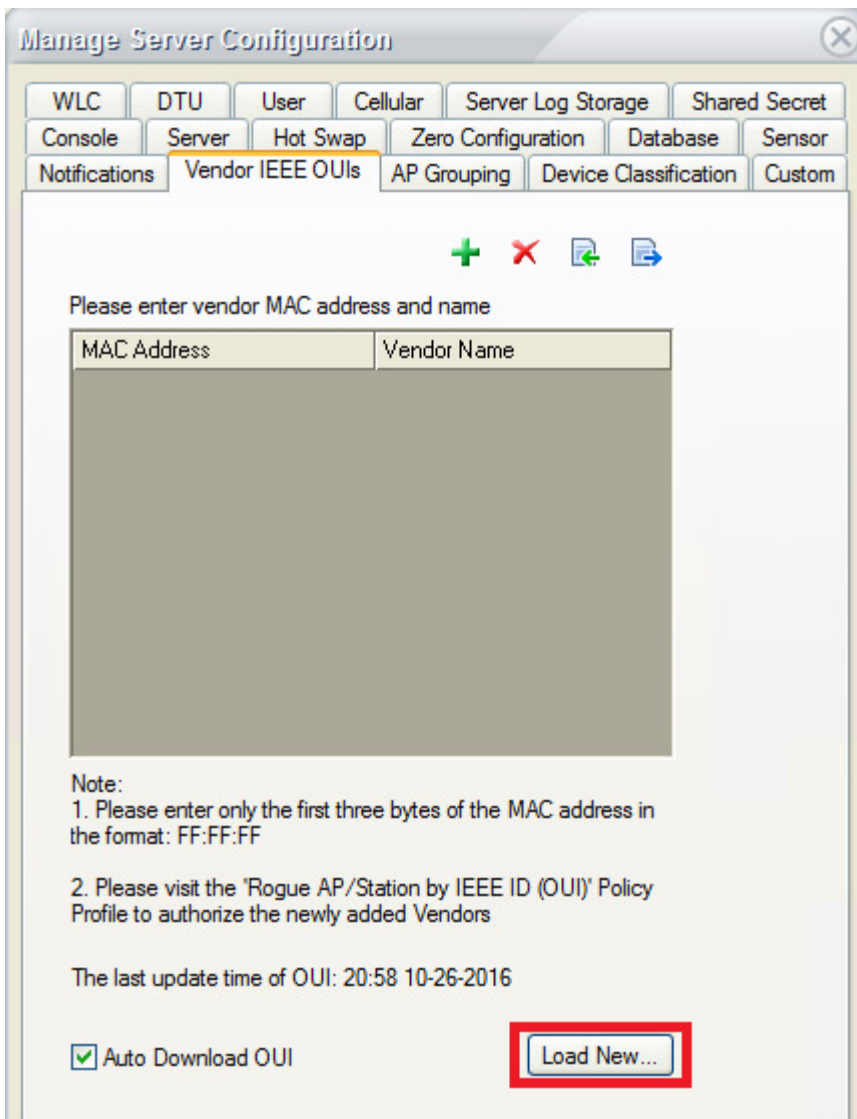
Bug Fixes

This section lists the defects that are fixed in this release.

ID	Description
DE15117	Windows LAN Controller (WLC) location fails to work when a Windows network login Id is used for authentication.
US4920	AP down alarm logic enhancement.
US6245	New alarm "Rogue Station detected inside" added.
US8209	The Hotswap Server is not getting configuration information.
US8338	Console error while accessing reports with view filter.
US8485	Added threshold for Unclassified Cellular Energy (UCE) Cellular Alarm.
DE11457	amconsole-StandardUser.exe install error.

ID	Description
DE13892	AME may trigger a false positive "Rogue AP using Corporate SSID alarm".
DE13952	Inconsistent severity on console for cellular alerts.
DE14220	Rogue Station Alarms - Threshold UI Text typo.
DE11109	Profile Report does not include latest DTU signatures.
US8775	Excessive User Datagram Protocol (UDP) 1326 Zero Configuration information coming from sensors.
DE15943	AP using Non-Standard SSID generating false positive alarm.
DE16281	False alarm of Rogue AP using corporate SSID due to some special BYOD device.
US7789	Anonymous authentication vulnerability needs to be fixed on AME Server.
DE11174	Windows LAN Controller (WLC) location – the AP does not display the AP name instead of the vendor prefix.
DE11457	The console file (*StandardUser.exe*) failed to compile.
DE12606	The file *amconsole.exe* shows "unknown" publisher.
DE14093	The Console crashes after working for some time.
DE14501	When the sensor configuration is changed from the Console. It may cause the sensor to keep using the factory default configurations.
DE15735	Trying a new shared key for all sensors with an apostrophe character disables the use of the Remote Wifi Analyzer.
DE16227	An Automatic Health Check (AHC) result isn't displayed on the AME console when a configured AHC job for an "an" AP.
DE7968	An ICMP Tunnel Bypass Detected a false positive.
DE13696	When exporting a report in AME to PDF, a 0 byte file is the result. The workaround is to uninstalling Microsoft KB3102429.
DE10091	You cannot select a Policy to be applied to a sensor when you are not logged in as an administrator.

System Requirements

Refer to the *AirMagnet Enterprise User Guide*.

Release History

Release Date	Product Version (Build Number)
2/7/2017	AirMagnet Enterprise Version 11.0 release (35311)

Technical Support Resources

This section explains NetScout's technical support resources.

Netscout's MasterCare Support Program

NETSCOUT MasterCare Support is our comprehensive support and maintenance programs that offers expanded coverage for NETSCOUT'S products and accessories. This program is designed to make sure your products are always up to date, and provide you with a premium level of support to minimize business downtime and ensure the highest return on your investment. MasterCare Support can save you thousands over the life of your product*.

Benefits of MasterCare Support

Software Upgrades
Make sure your product is always up to date with the latest software. Your My Account, My AirMagnet or My NetScout portal will provide you access to the latest product enhancements, improving efficiency and troubleshooting. Upgrades also include Management Information Base (MIB) library updates for applicable products. Software upgrades may be released multiple times throughout the year, and these free upgrades are only available to MasterCare members.

Priority, 24x7 Technical Support**
MasterCare customers receive priority access to our world-class technical assistance center (TAC) via members-only phone numbers. Our highly-trained technical experts are stationed around the globe, ready to answer your complex troubleshooting questions when you need them, 24x7.

Priority, Free Repair Service & Loaner Units***
If your unit or original accessories become defective and need repair, you are covered under the MasterCare Support program. Plus, loaner units are available next day, for you to use free-of-charge on many products, so your downtime is minimized while your unit is in for repair. Even your shipping costs are covered.

Advanced Replacement Hardware Units***
Reduce your system downtime should your MasterCare covered system hardware become defective with our advanced replacement process. A replacement unit will be shipped as quickly as reasonably possible, and only upon receipt will you return the defective hardware. Again, shipping costs are covered.

Training Programs
As a MasterCare member, you have access to our growing library of specialized online training materials including "AirMagnet Certified Professional" web-based training for many AirMagnet products and virtual training for OneTouch and OptiView XG products.

Members Only Promotions and Programs
Only by being a MasterCare member will you have exclusive access to special promotional programs. Programs could include product discounts, access to reconditioned equipment at special prices and other incredible values.

*Your saving depends on the MasterCare Support features you take advantage of.
**Refer to MasterCare Support terms and conditions for TAC staffed hours.
***Refer to MasterCare Support terms and conditions for details regarding repairs, applicable accessories, advance replacement and loaner units as this may not be available in all countries.

Customer Support Contact

You can contact us for product support using any or all of the following ways:

- [Sign in](#) to your My AirMagnet account to access the "Exclusive" MasterCare member-only phone numbers for your region.

- Submit a support request.
- Email to techsupport@netscout.com

To help us better assist you, be sure to have the following information ready when contacting us for support:

- Server hardware configuration
- Operating system
- Database
- Current version of AirMagnet Management, or the version prior to software upgrade (if the issue was caused by updating)
- Type(s) of sensors currently deployed in your enterprise environment (for sensor-related issues)