

AirMagnet Survey Express 11.0.0

Release Notes

November 2022

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Introduction

AirMagnet Survey Express is a powerful, easy-to-use WLAN site survey tool that empowers WLAN professionals with everything they need to survey any 802.11a/b/g/n/ac/ax wireless network on the 2.4GHz, 5GHz, and 6GHz bands.

This *Release Notes* highlights issues addressed in the 11.0.0 release in addition to the new features. It also provides basic instructions and important notes regarding the installation and operation of the software.

Special Notes

- You must uninstall any previous version of AirMagnet Survey Express using the Control Panel before installing the released version of Survey Express 11.0.0. Do not use the 'Repair' function. Using Repair has resulted in unreliable performance in some versions of Windows.
- Note when installing on Windows 8, 8.1, 10, or 11, it is highly recommended to install all available Microsoft updates before installing and running AirMagnet Survey Express.
- When using any of the USB wireless adapters, you may need to re-create the wireless profiles when plugging the same adapter into a different USB port. This is because wireless profiles are stored based on the port, not the adapter itself.
- To use 802.11ac USB adapters with this AirMagnet Survey Express 11.0.0 release, you must have the following versions of the Microsoft Windows operating system:

- ✓ Microsoft Windows 8 Pro/Enterprise 64-bit
 - ✓ Microsoft Windows 8.1 Pro/Enterprise 64-bit
 - ✓ Microsoft Windows 10 Pro/Enterprise 64-bit
 - ✓ Microsoft Windows 11 Pro/Enterprise 64-bit
- When performing AP-on-a-stick active surveys with an 802.11ac/ax adapter, NetAlly recommends the following configuration scenarios:

Scenario	AP Configuration	Gateway Configuration	Adapter Configuration
1	DHCP server	Yes (using AP's IP address)	DHCP
2	DHCP server	No, not configured	DHCP
3	Not configured as DHCP server; static IP address assigned to AP	No, not configured	Static IP Address (within AP's IP address range)

New Features in v11.0.0

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Wi-Fi 6E Site Survey Support

You will now be able to analyze, troubleshoot, and validate Wi-Fi 6E networks using AirMagnet Survey Express! This release introduces the ability to perform Wi-Fi 6 site surveys on the 6 GHz band. Some of the new site survey functionality now available includes:

- Support for Wi-Fi 6E adapters like the Intel ax211.
- Support for Active and Passive surveys on the 6GHz band.
- Support for the new Wi-Fi channels on the 6 GHz band (including 20/40/80/160 MHz channels widths).
- Support for channel interference calculations on the 6GHz band.
- Support for measured or predicted PHY data rates on the 6GHz band.
- 6 GHz band filter options under the Display, DiffView, and Reports modes.
- Options to merge or filter site survey projects with 6 GHz band data.
- Support for AP grouping on the 6 GHz band.
- Support for 6 GHz Wi-Fi channels in the site survey reports.
- Support for 6 GHz Wi-Fi channels while using the Export AP Config option.
- Support for 6 GHz Wi-Fi channels Access Control List (ACL) option under the Reports mode.
- Support for Wi-Fi 6E APs in the AP Properties screen.

Please keep the following in mind while using this new functionality:

- This release does not include support for the 6 GHz band in the Throughput Simulator.
- When upgrading to this release, old Access Control List (ACL) data will be lost.
- This release does not include support for Signal Adjustment on channels in the 6GHz band. This may be added in a future release.

Support for Wi-Fi 6E AirMapper Site Surveys

It will now be easier than ever to perform Wi-Fi 6E site surveys! No dongles, no laptops or tablets, and no tethered devices required! Starting on this release you will be able to import 6 GHz Wi-Fi site survey data collected using AirMapper on the AirCheck G3 or EtherScope nXG into AirMagnet Survey Express.

Note: The process to import an AirMapper project works the same way as before.

Updated Wi-Fi Naming Convention

To make it easier to differentiate between the different versions of Wi-Fi currently available in the market, in this release we have started using the new Wi-Fi Alliance naming convention.

- Wi-Fi 4 - Refers to APs using the 802.11n standard.
- Wi-Fi 5 - Refers to APs using the 802.11ac standard.
- Wi-Fi 6 - Refers to APs using the 802.11ax standard.

Please keep the following in mind while using this new functionality:

- The naming convention for legacy versions of Wi-Fi (802.11a/b/g) did not change.
- New icons will be used to differentiate between Wi-Fi 4, Wi-Fi 5, and Wi-Fi 6.



- To differentiate between APs supporting dual band Wi-Fi 6 and those supporting tri-band (Wi-Fi 6E) an 'E' suffix has been added to the new Wi-Fi 6 icon.



- To differentiate between the 2.4/5 GHz channels and the 6 GHz channels a new icon with a '6' suffix has been added.



- Custom report templates will need to be regenerated to apply the new Wi-Fi Alliance naming conventions.

Bug Fixes

This section covers the defects that have been fixed in this release.

Survey 11.0.0 Release

Defect ID	Description
183480966	PHY rate shown in survey details table is incorrect.
183525817	AP channel interference is not correctly reported in the survey details table.

Known Issues

This section documents the major known issues with this AirMagnet Survey Express 11.0.0 release.

Defect ID	Description
178103361	Survey Report: Deleted section is still included in the body of the report.
182968271	A change in Region/Language causes the floor plan to shift.
183582600	Report page for 30 Top APs is missing strongest BSSIDs in all 3 bands.
181290737	View Per AP: AP Properties Color setting is not saved.
181904334	Incorrect AP Power is shown in AP List section of reports.
182224824	Individual Signal Distribution Report - Legend doesn't match the color of the heatmaps.

System Requirements

Laptop/Notebook PC/Tablet PC

- Operating Systems: Microsoft Windows 8 Pro/Enterprise 64-bit, Microsoft Windows 8.1 Pro/Enterprise 64-bit, Microsoft Windows 10 Pro/Enterprise 64-bit, or Microsoft Windows 11 Pro/Enterprise 64-bit.
- Intel® Core™ i5 2.00 GHz (Intel® Core™ i7 or higher recommended).
- 4 GB memory (8 GB or higher recommended).
- 800 MB free HDD or SSD space.
- AirMagnet-supported wireless network adapter(s).
- USB port for external adapter use.

Apple® MacBook® Pro

- Operating Systems: MAC OS X v10.9 or higher running a supported Windows OS (as noted under the Laptop/Notebook PC/Tablet PC section) using Boot Camp®.
- Intel® Core™ i5 2.00 GHz (Intel® Core™ i7 or higher recommended).
- 4 GB memory (8 GB or higher recommended).
- 800 MB free HDD or SSD space.
- USB port for external adapter use.
- AirMagnet-supported wireless network adapter(s).

Supported Site Map Image Formats

.bmp, .dib, .dwf, .dwg, .dxf, .emf, .gif, .vsd, .jpg, .wmf, .vdx, and .png.

Guideline for Use of Wi-Fi Adapters

AirMagnet Survey Express requires that a Wi-Fi adapter be installed on the same computer running the application to capture Wi-Fi data.

AirMagnet mobile products categorize Wi-Fi adapters into the following types:

- **Preferred Adapters:** These adapters have been tested by AirMagnet and are recommended for use with AirMagnet products. Drivers have been customized for extended feature support. For a complete, up-to-date listing of AirMagnet Preferred wireless adapters, visit <https://www.netally.com/products/airmagnet-survey-pro/#SupportedAdapters>.
- **Other Adapters:** These adapters can be used with AirMagnet Survey Express but have not been tested by AirMagnet. Drivers have not been customized, will provide limited features, and could provide inaccurate data.

Note: When installing Intel® and USB adapters, it is important that you uncheck the option to install the adapter's client utility in addition to the driver software.

Limitations of Other Network Adapters

Any 802.11 adapter supported by Windows other than the Preferred Adapters falls into the Other network adapters category. They can be used with AirMagnet Survey Express to perform a survey but have not been tested by AirMagnet. These adapters drivers have not been customized, provide limited feature support, and could provide inaccurate information. **It is important to note that NetAlly is not responsible for the quality of the test results collected using these adapters.**

The following are noted limitations of generic adapters in AirMagnet Survey Express.

- No ability to scan specific channels: all channels are scanned. There is no Scan or 802.11 tab under the **File>Configure** menu.
- No noise or signal-to-noise ratio (SNR) measurements.
- Measured PHY data rates in the uplink and downlink directions are not separated. Only a single PHY data rate for the connection is reported.
- No packet retries and loss measurements on active surveys.
- Limitations in the wireless channels that they scan: They may only be able to scan channels that are approved for wireless use in a specific country, and unable to scan channels assigned as Dynamic Frequency Selection (DFS) channels.
- There is no roaming control for active surveys.
- Due to the inability to disable roaming on the adapter, only the "by SSID" (not by AP) method is available for active surveys.

Release History

Release Month	Release Version
07/2020	AirMagnet Survey Express 10.0.0
12/2020	AirMagnet Survey Express 10.1.0
01/2021	AirMagnet Survey Express 10.2.0
05/2021	AirMagnet Survey Express 10.3.0
07/2021	AirMagnet Survey Express 10.3.1
11/2021	AirMagnet Survey Express 10.4.0
05/2022	AirMagnet Survey Express 10.5.0
11/2022	AirMagnet Survey Express 11.0.0

Technical Support

If you need help with this AirMagnet Survey Express 11.0.0 release, contact NetAlly, as follows:

Contact Venue	Description
Web:	https://www.netally.com/support/technical-support/
Phone:	1-844-878-2559 or 1-719-755-0770 and select Option 2

Note: International direct dial phone numbers are available at <https://www.netally.com/contact-us/>.