

AirMagnet Survey PRO 10.0.0

Release Notes

July 2020

Table of Contents

▪ Introduction.....	1
▪ Special Notes	1
▪ New Features in v10.0.0.....	2
▪ System Requirements.....	4
▪ Supported Site Map Image Formats	5
▪ Guideline for Use of Wi-Fi Adapters.....	5
▪ Limitations of Other Network Adapters.....	5
▪ Bug Fixes.....	6
▪ Known Issues.....	7
▪ Release History.....	7
▪ Technical Support	7

Introduction

AirMagnet Survey PRO is a powerful, easy-to-use WLAN site survey tool that empowers WLAN professionals with everything they need to plan and survey any 802.11a/b/g/n/ac/ax wireless network.

This *Release Notes* highlight issues addressed in the 10.0.0 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 using the Control Panel before installing the released version of Survey PRO/Planner 10.0.0. 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, or 10 it is highly recommended to install all available Microsoft updates before installing and running AirMagnet Survey.
- Survey PRO 8.8 and later releases use the *.svdx* file extension for survey data files, which is different from the *.svd* file extension used in all previous releases. **It is important to note that you cannot open *.svdx* files in any previous version of Survey PRO. If you have done a survey using Survey PRO v8.8 or later, you MUST open the survey data (*.svdx*) file in Survey PRO 8.8 or later.** You can still open or import survey projects and data files saved in *.svd* format from earlier versions of the application. However, when you open an *.svd* file for the first time in Survey PRO 8.8 or later, the application will first convert the file to the new *.svdx* file format. The conversion may take longer than just opening a file. You can view the progress of the conversion from the progress bar at the bottom of the screen.

- For AP-on-a-stick surveys performed in previous versions of Survey, in which multiple surveys were performed using the same AP, NetAlly recommends merging the survey files in Survey PRO 8.7.* first and then converting them to .svdx format in Survey PRO 9.1 or later. This preserves AP alias names as unique for each source survey.
- 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.
- You must have a Cisco "Plus" license to use the Cisco Prime Infrastructure feature.
- To use 802.11ac USB adapters with this AirMagnet Survey PRO 10.0.0 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
- When performing AP-on-a-stick active surveys with an 802.11ac 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 v10.0.0

- AirMapper Support 2
- Planner Wi-Fi 6 Support 3
- New Antenna Patterns 4

AirMapper Support

No laptop, dongles, or tethered devices required! You can now perform a survey with the AirMapper application on your AirCheck G2 or EtherScope nXG and analyze the data with AirMagnet Survey PRO. Simple to use, the AirMapper application is ideal for quick site surveys of new deployments, change validation, and performance verification.

You will have two options to transfer survey data from an AirCheck G2 or EtherScope nXG:

- **Link-Live Download**
 - When saving an AirMapper survey, select Link-Live as the destination.
 - Login to your Link-Live account.
 - You can download AirMapper projects to your PC with AirMagnet Survey PRO v10.0 using the Export for Survey PRO option on Link-Live.
- **USB Transfer**
 - When saving the survey on the AirCheck G2 or EtherScope nXG, select Local as the destination.

- Plug a USB thumb drive into one of the USB-A ports on your handheld tester.
- Transfer the AirMapper (.amp) file that was saved to the USB thumb drive (refer to the AirCheck G2 or EtherScope nXG user guide for details).
- Remove the USB thumb drive from the handheld tester and plug it into a PC with AirMagnet Survey PRO v10.0.
- Open the AirMagnet Survey PRO application.
- Go to File and select the Open Project option.
- Browse to the location of the .amp file.
- Select the .amp file and click the Open button.
- When asked where to save the new project, browse to preferred destination and click on the OK button.

After the import has been completed a new Survey Project (.svp) file will be created using the data collected by the AirMapper application. You will now be able to use all the functionality available on AirMagnet Survey to analyze your AirMapper survey data. This includes Heatmaps (Signal Strength, Noise, SNR, Interference, Predictive PHY Data Rates, Max MCS, AP Operating Mode, Channel Width), Simulation Mode, MultiView, DiffView, AirWISE, and Reports.

Please be aware of the following while using this new functionality:

- You will not be able to import an AirMapper (.amp) file into an existing Survey Project (.svp) project, a new project will always be created. Still, after the new project has been created you will be able to import the .svdx file in that project into other projects.
- A converted AirMapper project will have the same name as the .amp file.
- The Adapter Name under Survey Properties will say AirMapper.
- Open Space Office will be used as the Environment by default, but it can be changed through the Project Properties screen. Signal Propagation Assessment will match the value used on the AirMapper application.
- The AP Default Power will be set as 100.0 mWatts, but it can be changed if needed through the Project Properties screen. **Note:** This setting is only used by the Simulation tool.
- An AirMapper (.amp) project cannot be directly imported into MultiView, but you can import it after converting it into a Survey Project (.svp).

Multi-Floor Planner Wi-Fi 6 Support

Support for Wi-Fi 6 (802.11ax) multi-floor planning is now available. The following improvements have been made to support this new functionality:

- The media type for simulated AP's on the Multi-Floor Planner can now be set to 802.11ax on both the 2.4GHz and 5.0GHz bands.
- A new and unique icon is now available on the Multi-Floor Planner to highlight access points that support Wi-Fi 6.
- Information regarding new modulation and coding schemes (MCS) values introduced on Wi-Fi 6 is now available on the Multi-Floor Planner.
- Information regarding the high efficiency (HE) operating mode introduced on Wi-Fi 6 is now available on the Multi-Floor Planner.

- Information regarding higher Data Rate values that can be achieved while using Wi-Fi 6 is now available on the Multi-Floor Planner.
- The legend used by the throughput heatmaps on the Multi-Floor Planner has been updated to support higher speeds. Because of that the color coding used on the throughput heatmaps has changed. Colors used on this release may not match those used on previous versions of the software.
- Support for Wi-Fi 6 and related metrics is now available on the Reports included with the Multi-Floor Planner.

New Antenna Patterns

This Survey PRO 10.0.0 release adds the following antenna patterns.

Vendor	Antenna Pattern
Cisco	C9120 AXI C9120 AXE C9130 AXI C9130 AXE
Mist	AP21 AP41 AP43 AP61
Spark	Tri_R0A-Tun

System Requirements

Laptop/Notebook PC/Tablet PC

- Operating Systems: Microsoft Windows 8 Pro/Enterprise 64-bit, Microsoft Windows 8.1 Pro/Enterprise 64-bit, or Microsoft Windows 10 Pro/Enterprise 64-bit.
- Intel® Core™ 2 Duo 2.00 GHz (Intel® Core™ i5 or higher recommended).
- 4 GB memory or higher.
- 800 MB free HDD or SSD space.
- AirMagnet-supported wireless network adapter(s).
- USB port or ExpressCard slot for external adapter use.
- When using multiple adapters, AirMagnet recommends the use of its multi-adapter kit. Otherwise, multiple slots/ports in the PC are required.
- Optional AirMagnet Spectrum XT adapter and license for integrated spectrum survey on Survey PRO. This is required for viewing spectrum data and heat map.
- Google Earth must be installed to export the GPS data for outdoor surveys to Google Earth (Survey PRO only).

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®-based CPU 2.0 GHz or higher.
- 4 GB memory or higher.

- 800 MB free HDD or SSD space.
- USB port for external adapter use.
- AirMagnet-supported wireless network adapter(s).
- Optional AirMagnet Spectrum XT adapter and license for integrated spectrum survey on Survey PRO. This is required for viewing spectrum data and heat map.
- Google Earth must be installed to export the GPS data for outdoor surveys to Google Earth (Survey PRO only).
- When using multiple adapters, AirMagnet recommends the use of its multi-adapter kit. Otherwise, multiple slots/ports in the MacBook® Pro are required.

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/Planner 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 PRO 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 PRO 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.

- 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 and iPerf surveys.
- iPerf throughput performance may vary, depending on the model of the generic adapter in use.

- 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.
- Only one 802.11ac adapter can be used when utilizing multiple adapters. Refer to “Utilizing Multiple Adapters” in the *AirMagnet Survey User Guide*.
- There is no roaming control for active and iPerf surveys.
- Due to the inability to disable roaming on the adapter, only the “by SSID” (not by AP) method is available for active and iPerf surveys.

Bug Fixes

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

Survey 10.0.0 Release

Defect ID	Description
172980933	MultiView: Channel Width and Operating Mode allow for multiple selections.
172966884	Operating mode heatmap is not showing when all AP's use Greenfield mode.
172966965	Crash when selecting some data types in DiffView.
172960052	AP gets wrong name when saving captured data into database.
173183413	Report Text Strings Translations are Incomplete.
173295791	WatchGuard 325 antenna pattern fix.
172367555	Floor plan image is blank when a .vsd image is imported.
171058153	Unable to import Survey Mobile projects created on Android 8.1.0, 9.0.0, 10.0.0 into Survey PRO.
173138274	Incorrect channel range displayed for 802.11ac AP.
171238271	Signal distribution heat map color and legends do not match in some reports.
171364228	MAC address(es) are displayed below the legend on Section 1.10 of the Per AP report.
171068237	Edited attenuation area type is not saved completely in Planner.
170903963	Operating mode is different between AirWise and AirWise report.
171363561	Channel information is truncated on Overall Coverage Report by Channel.
171364771	Channel information is truncated on Channel Interference Report.
171363857	Channel information is truncated on Passive Survey Report & Overall Coverage Report by AP.
173481703	Unable to run Survey v9.3 on Windows 8.1.
173165527	Deleted regions in AirWISE return when reloading Survey project.

Known Issues

This section documents the major known issues with this AirMagnet Survey 10.0.0 release.

Defect ID	Description
170134584	User interface issues with high resolution displays. Workaround: Lower the display resolution to 1920 x 1080.
171839005	Automatic wall extraction does not work when dimensions are set to be less than one feet. Workaround: Correct the dimensions on the CAD file.
170194773	Fortinet U223EV AP is not detected as an AP when using preferred adapters. Workaround: Use the PC's internal Wi-Fi adapter.
171759243	Active surveys fail with bad data when using a non-preferred adapter
173426597	Sometimes incomplete AutoCAD image displayed after import.

Release History

Release Month	Release Version
07/2020	AirMagnet Survey PRO 10.0.0

Technical Support

If you need help with this AirMagnet Survey PRO 10.0.0 release, contact NetAlly, as follows:

Contact Venue	Description
Web:	https://www.netally.com/support/#TechnicalSupport
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/>.