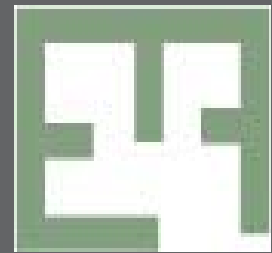




# AirMagnet Survey



AirMagnet Survey delivers fast, scientifically accurate site surveys for any 802.11a/b/g/n/4.9 GHz indoor and outdoor wireless network. This revolutionary software automatically gathers critical Wi-Fi and RF spectrum information from your enterprise network using multiple data collection methods, including real-world measurements, and generates detailed Wi-Fi performance maps of the results for easy network deployment, capacity planning and optimization. AirMagnet Survey is available in “Express” and “PRO” versions. AirMagnet Survey Express offers a lighter version of the solution that allows users to perform the basics of Wi-Fi site surveying with ability to map out signal, noise and even user performance. AirMagnet Survey PRO extends those capabilities found in the Express version and adds powerful, industry-defining features including 802.11n deployments, multi-floor deployments, outdoor surveys, network design verification, voice readiness verification and surveys, RF spectrum analysis, and many more.

## FAST SCIENTIFIC SITE SURVEYS

Survey 802.11a/b/g/n Networks

Identify Coverage Areas and Dead Spots

Set Ideal AP Placement and Power Settings

Identify Areas of RF Interference, Roaming & Noise

Measure True End-User Experience

Perform Voice & RF Spectrum Surveys

Plan for End-User Capacity & Simulate Network Changes for Ongoing WLAN Optimization

Visualize Coverage Differences Over Time

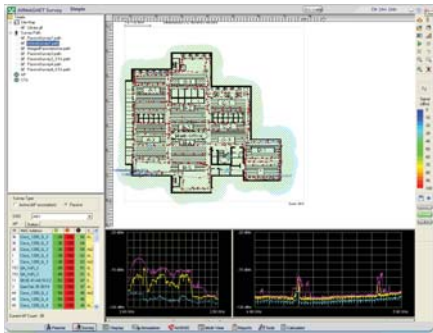
Establish a Secure Network

Use AirMagnet Planner for WLAN Design and Modeling



# AirMagnet Survey

## Unmatched Analysis



Survey view

### Real World Performance

Unlike other solutions that rely only on passively collected data such as signal strength, AirMagnet allows users to perform active/Iperf surveys to ensure a superior site survey. During an active/Iperf survey, AirMagnet actually associates to an AP to test the real quality of the connection. This allows surveyors to see exactly how real world clients will perform at specific locations in terms of connection speed, retry rates, and packet loss.

### Simulation and Optimization

After a survey, users can simulate a variety of changes to the network and preview the impacts. This includes changing AP Transmit Power, Channel, SSID, and even added environmental noise. Users can simulate moving APs to new locations and preview the effect of adding additional APs. AirMagnet Survey can also automatically recommend a channel plan for your APs that avoids interference and over-allocation.

### Detailed Analysis

AirMagnet Survey automatically displays survey results on a map of your location, providing unlimited options for visual analysis.

**Complete View of Wireless Statistics** - View the distribution of Signal, Noise, Signal/Noise, Frame data rates, Retry Rates, and Packet Losses.

**Interference Analysis** - Measure the total cumulative interference from all sources that can impact the performance of your APs.

**View by Channel, SSID, or Device** - Sort results based on SSID or channel to easily balance RF issues against VLAN and service level requirements.

**Overlap and Roaming Analysis** - Instantly see areas of over-provisioning or where clients are prone to consistent roaming or "thrashing" between APs.

**Simulate wireless adapters** - Take an existing survey and view exactly how another Wi-Fi adapter would view the survey environment.

### Establish a Secure Network

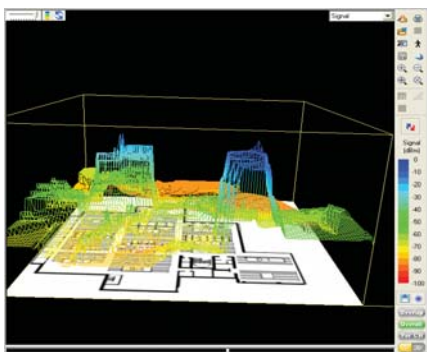
While satisfying the performance needs, AirMagnet Survey can be used to monitor for RF spillage outside the corporate building. This spillage should be kept to a minimum, unless service is to be provided in the parking lot or an outside area. Users can also locate unauthorized or performance intensive stations during a survey on the floor map.

### Visualize Coverage Differences Over Time

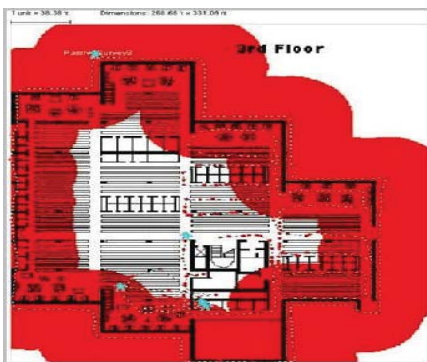
AirMagnet Survey's Diff View feature allows side-by-side visualizing of differences between two separate surveys. This helps show how a site's wireless environment has changed over time. Likewise, users can use this feature to quickly compare AirMagnet Planner results with actual survey results.

### Multiple Form Factor Support

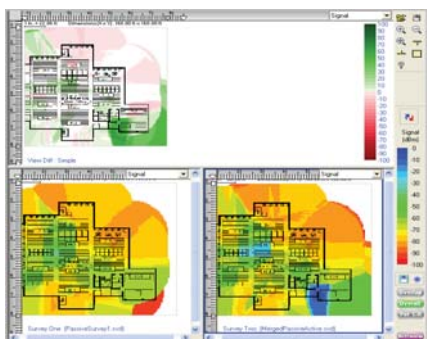
AirMagnet Survey can be installed on a variety of platforms including Windows-based Laptops, Tablet PCs and Netbooks/Ultra Mobile PCs. With the NetBook support, users – for the first time – can plan and design all aspects of the WLAN with a PC that can easily be held in one hand. Site Surveyors can now conveniently walk the corporate premises with a light-weight tool in their hand and collect live signal, speed and packet information.



3D view to visualize highest/lowest signal



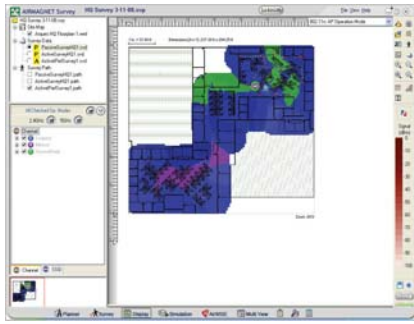
RF Spillage outside the corporate building



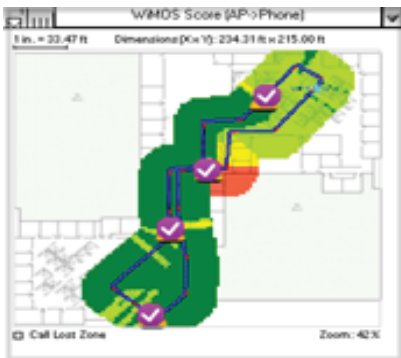
Diff view to compare surveys

# AirMagnet Survey PRO

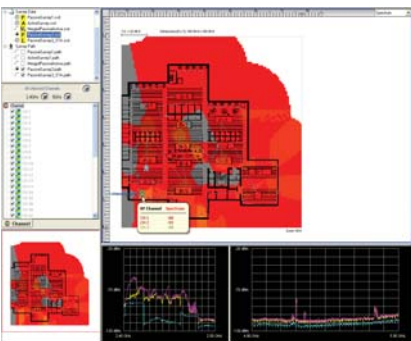
AirMagnet Survey PRO contains all the functionality of the “Express” version plus an additional set of features tailored to the needs of the wireless expert. Additional features include:



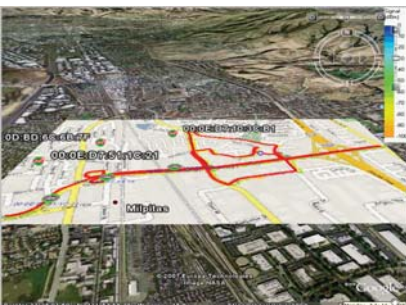
802.11n Operation Mode coverage map



Voice call quality coverage map



Wi-Fi and non Wi-Fi data in a single survey



Google Earth integration for outdoor surveys

## 802.11n Site Surveys

AirMagnet Survey includes the industry's only 802.11n Iperf & Active surveys that take into account the real-world impact of multi-path encountered at each individual location to actively test both uplink and downlink performance of the 11n network. AirMagnet Survey PRO includes built-in coverage maps that are specific to 802.11n networks, such as Operating Mode coverage map, MCS Rate Transmit/Receive coverage map **and** the Channel Width coverage map.

## Voice over Wi-Fi Surveys

AirMagnet Survey addresses challenges faced by network installers and IT staff to not only design and deploy the network optimally at the start using AirMagnet's built-in voice readiness verification system (includes pre-configured support for Cisco 792X phones and Vocera badges, plus the option to add profiles for other vendors), but also to perform real-world voice surveys on an ongoing basis. With the industry's first voice survey capability, users can validate and plot the phone call quality, capacity and other voice specific parameters at every location on a floor map, to help identify and minimize issues that may be causing low call quality.

Coverage maps that are built specifically for voice networks, including, WiMOS score or call quality, number of active calls on the AP, phone roaming zones (includes roaming statistics), channel utilization, retries and many more, are included in the application and allow users to visualize and troubleshoot any voice quality issue.

*Note: Ability to perform VoFi surveys requires AirMagnet VoFi Analyzer PRO to be installed on the same machine as AirMagnet Survey PRO.*

## Integration with Spectrum Analyzers

Users who also own the AirMagnet Spectrum Analyzer or Cisco Spectrum Expert (must be installed on same machine as Survey PRO) can collect both Wi-Fi and spectrum analysis data in a single survey. This lets users see the physical spectrum at any particular location, and even automatically identify and display the presence of non-802.11 devices that are interfering with the WLAN. Users can visualize the average power level in the RF spectrum for each channel at any given point on the map.

## Multi-Floor deployments

Survey users can load multiple floors of a single building to see if AP signals are bleeding to adjacent floors. This provides users with the ability to reuse services of a single AP across multiple floors to lower equipment and deployment cost.

## AirWISE for Site Surveys

The AirWISE engine lets users set design requirements for their network and immediately identify any problem areas. Users can quickly test the network against a variety of criteria and get expert advice on how to resolve any problems. There is also a capacity planning section that allows surveyors to account for the number of end users the WLAN will need to support.

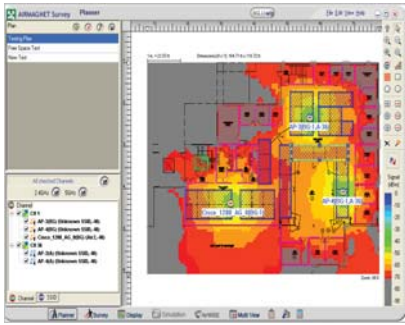
## Professional Reporting

AirMagnet Survey PRO includes a completely integrated reporting module that can instantly create custom outputs of your site surveys and simulations. Reports include coverage and interference assessments of every channel, SSID, and AP. Reports can be output in over 15 formats including PDF, XML, HTML, Microsoft Excel and Microsoft Word.

## Outdoor Surveys

With the combination of GPS support, 4.9 GHz support and integration with Google Earth, Microsoft® MapPoint and Microsoft® Virtual Earth. AirMagnet Survey PRO provides a clear path to fast, fully automated outdoor surveys. Users can leverage their NMEA compliant GPS device to automatically collect outdoor wireless data. The results can then be analyzed in the AirMagnet user interface or exported into Google Earth.

# Integration with AirMagnet Planner



Automated WLAN modeling

AirMagnet Planner is built into AirMagnet Survey PRO, providing a single, seamless application with the industry's most complete approach to wireless LAN design, deployment and ongoing optimization for 802.11a/b/g/n networks. With this integrated solution, users can use Planner to accurately design their WLANs and plan for speed; then validate the results with real-world data in AirMagnet Survey PRO using active end-user performance metrics, such as actual connection speed and performance metrics, allowing users to further perfect their planning models over time. No other solution combines state-of-the-art predictive modeling with real-world performance data. Users also gain additional planning capabilities with the ability to test network plans against the AirWISE engine for design requirements; and the Throughput coverage map to visualize predicted WLAN performance at every location on the floor map.

AirMagnet Planner also integrates with AirMagnet Survey Express.

## Product Facts

Product	Part Number	Minimum System Requirements
AirMagnet Survey PRO (Incl. Planner)	AM/A4018	<p>Microsoft® Windows Vista™ Business/Ultimate (SP1) or XP™ Professional (SP3) / Tablet PC Edition 2005 (SP3) or MAC OS X Leopard™ (Apple® MacBook® Pro running Windows XP™ PRO/SP3 using Boot Camp®). <b>Note:</b> Use Windows XP™ SP2 if using AirMagnet Spectrum Analyzer as a standalone application on the same machine.</p> <p>Intel® Pentium® M 1.6 GHz (Intel® Core™ 2 Duo 2.00 GHz or higher recommended)</p> <p>1 GB memory (2 GB recommended) for Windows XP™. 2 GB or higher required for Windows Vista™</p> <p>800 MB of free disk space</p> <p>An AirMagnet Spectrum Analyzer Adapter and license (Required for viewing spectrum data and classifying non-802.11 devices)</p> <p>Installed Microsoft® MapPoint 2004 or higher OR Internet connection for using Microsoft® Virtual Earth for outdoor surveys</p> <p>A site map in a format supported by AirMagnet Survey (supported formats are: .bmp, .dib, .dwg, .dxf, .emf, .gif, vsd, .jpg, or .wmf.)</p> <p>Google Earth must be installed in order to export the GPS data for outdoor surveys to Google Earth</p> <p>A CardBus, ExpressCard, USB port or Mini PCI slot</p> <p>AirMagnet supported wireless adapter</p> <p><b>For NetBook platform support:</b> Intel® Atom N270/1.6 GHz CPU, Microsoft® Windows XP™ Home Edition, 1 GB memory (2 GB recommended), 1024X600 resolution; AirMagnet supported wireless adapter; CardBus, ExpressCard slot, USB port, or built-in slots (whichever applicable); Supported for Survey Express only</p>
AirMagnet Survey Express	AM/B4010	
AirMagnet Survey Express to Survey PRO (upgrade model)	AM/A4016-UGD	
AirMagnet Spectrum Analyzer (optional)	AM/A4030	
AirMagnet Planner Module for existing A4015 customers	AM/A4013-UGD	

**Patents:** U.S. Patent No. 7009957, 7236460, 7292562, 7289465, ZL030807586, 7385948, 7613139B1 and 7130289. Additional patents pending.

## For More Information

**SALES:** [http://www.airmagnet.com/company/contact\\_airmagnet.php?type=sales](http://www.airmagnet.com/company/contact_airmagnet.php?type=sales)

**DEMO DOWNLOAD:** <http://www.airmagnet.com/products/demo-download.php?demo=survey>

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