One Point Wireless Suite

Design and Manage Trusted, High Value Wireless Networks
BroadbandPlanner shows sophisticated mesh and Point-to-Multipoint coverage predictions in Google Earth maps.

A Revolution in Ease-of-Use

Networks today are evolving more and more towards a primarily wireless architecture. Because the performance of wireless networks depends on many different factors, the process of network design and management used to be complicated and ponderous and did not always yield the desired results. The Motorola One Point Wireless Suite has changed all that. The suite is an innovative set of software solutions designed to work together to make the design, deployment and management of indoor wireless LAN and outdoor wireless broadband networks something they’ve never been before. Simple.

A New Holistic Approach
Advanced prediction engines in the suite’s design tools leverage Motorola’s deep expertise in wireless technology and take the guesswork out of designing each network layer for optimal coverage, capacity and performance. With innovative unified, map-based network visualizations, the One Point Wireless Suite lets you see every network node at its actual location and manage your entire wireless network from one screen — including indoor and outdoor access, distribution and backhaul layers.

Enabling Streamlined Deployment
Historically, deploying a wireless network has been a time consuming effort that included unpredictable and costly field-based activities. Not any more. Portable enough to run on a laptop in the field, Motorola design tools give installers all the information they need and allow unexpected challenges to be quickly addressed by adjusting the network design on the fly. The One Point Wireless Suite helps ensure the right coverage, capacity and performance for each device and application while reducing unplanned deployment and capital equipment costs.

One Point Design and Deployment Solutions
The One Point Suite includes three powerful design/deployment solutions:

- **BroadbandPlanner** is a powerful and efficient software solution that helps you propose, design, deploy and measure Point-to-Multipoint and Mesh Wide Area Networks systems. The tool’s advanced RF modeling engine automates the process of determining optimum equipment placement while taking into consideration the impact of the physical environment on the wireless signals. BroadbandPlanner offers integration with Google Earth and streamlined network measurement and verification. It makes designing and optimizing networks easy with signal strength heatmaps, optimal urban-canyon relay locations and terrain obstruction path profiles.

- **PTP LINKPlanner** simplifies design of Point-to-Point links by accurately predicting achievable data rates, taking into account terrain profile and obstructions between links, antenna heights and antenna type/size. Through integration with Google Earth™, PTP LINKPlanner allows for exceptional real-world link path visualization of single or multiple link designs. Additionally, you can create “what if” scenarios while determining important performance measurements such as link reliability, throughput and path loss.

- **LANPlanner** uses an intuitive 3D interface with multi-floor building coverage visualizations and an advanced RF performance modeling engine to help customers design and install 802.11 a/b/g/n wireless LANs that deliver maximum performance at minimum cost. This powerful tool can model not only signal strength and interference but also throughput for 802.11n MIMO access points. LANPlanner makes it easy to see how a planned network will perform for applications like web surfing, file downloads, FTP file transfers, video conferencing, wireless VoIP or location based triangulation with specialized application coverage maps that integrate RSSI, AP Coverage Overlap, SINR, Utilization, and Data Rate information into an easy-to-understand good/bad heat-map view. LANPlanner designs can be transferred into RFMS to improve coverage visualizations.
Trusted Networking: Managing for Maximum Reliability and Security

ONE POINT WIRELESS MANAGER
One Point Wireless Manager is Motorola’s powerful, flexible and scalable deployment and management solution. Its breakthrough map-based visualization capabilities use embedded Google maps, and combine with advanced configuration, provisioning, alerting and reporting features to empower network managers to holistically control the network’s indoor and outdoor access layer, distribution layer and backhaul layer. Wireless Manager features one-click access to the RF Management System and allows operators to view PTP LINKPlanner and BroadbandPlanner network designs in a Google Earth view. This helps operators more quickly localize, diagnose and correct network issues, improving network performance and availability.

Wireless Manager Capabilities
Wireless Manager provides a single consolidated network view that delivers new levels of system visibility while reducing training time and costs.

- **Unified Map-based Visibility.** Wireless Manager visually shows relationships between network layers and provides detailed Google map visualizations of network devices and connectivity on both macro and micro levels. You can instantly view estimated network coverage and real-time link performance data.

- **Automatic Discovery.** The solution automatically discovers certain installed equipment in the network and adds them to the inventory list. This functionality enables faster network deployment and setup, while helping to reduce errors and significantly lower deployment costs.

- **Template-Based Provisioning.** By providing streamlined provisioning via the application of template-based device configuration, Wireless Manager makes it simple to create your own custom-defined configuration templates and apply them to devices automatically. Once your devices are configured, you can also make template-based adjustments.

- **Network Performance Monitoring.** Through real-time network polling, the solution determines the current status of all network elements, identifies issues and generates alerts according to customized user parameters. You can easily see the causes and effects of issues in both high-level and minute detail, from a full network overview to detailed information on individual devices. You can also just as easily troubleshoot and resolve these issues, improving network performance and enhancing user satisfaction.

- **Client Monitoring.** Wireless Manager also helps you monitor the customer experience with automated collection of performance statistics from each 802.11 client. By measuring signal strength and functioning as an error counter, the solution transmits threshold reports that help you locate, investigate and debug underperforming segments of your network.

RF MANAGEMENT SYSTEM
The RF Management System is a robust and scalable WLAN manager. It provides alerts, configuration, customized graphs for key statistics, planned versus discovered device lists, heat maps of coverage, channel map visualization and the ability to recognize interference in multi-floor environments. WLAN sites managed by the Motorola RF Management System (RFMS) are displayed in Wireless Manager, along with real-time performance metrics and alert status. Easy one-click access is provided from the map view to the RFMS for troubleshooting, configuration and monitoring of WLANs down to the access point level. RFMS provides aggregate alert/status from, and easy one-click access to, industry-leading Motorola AirDefense solutions.

MOTOROLA AIRDEFENSE SOLUTIONS
- **Intrusion Protection.** It’s essential to guard your network against unauthorized access. Motorola AirDefense solutions provide 24x7 monitoring of your wireless LAN, safeguarding proprietary information and enabling compliance with government regulations for protection of personal and financial information such as health and credit card data. Motorola AirDefense solutions allow you to identify hackers, attacks and network vulnerabilities, and to instantly terminate the connection to any rogue device.

NETWORK VISUALIZATION WITH GOOGLE MAPS
Motorola One Point Wireless Manager overlays network elements onto a sophisticated real-time embedded Google map. This allows you to visualize and analyze a wide range of crucial information including connectivity between nodes, link quality, range, and device and network availability. Graphical representations of data help you quickly determine network status, identify problems and determine the severity of impact on the network and end users. In this map-based view, you can scale and pan to view an entire city or a specific area. Satellite, terrain, roadmap or hybrid views can be selected and intuitive, context-sensitive bubbles appear over the map which give quick access to key management functions.
Motorola's comprehensive portfolio of reliable and cost-effective wireless broadband solutions together with our WLAN solutions provide and extend coverage both indoors and outdoors. The Motorola Wireless Broadband portfolio offers high-speed Point-to-Point, Point-to-Multipoint, Mesh, WiFi and WiMAX networks that support data, voice and video communications, enabling a broad range of fixed and mobile applications for public and private systems. With Motorola’s innovative software solutions, customers can design, deploy and manage a broadband network, maximizing uptime and reliability while lowering installation costs.