Abstract

The challenge of optimizing access point deployment

Slow WiFi and connectivity issues are typical problems encountered in a wireless network. Often, these problems arise due to improper designing and planning of the wireless network.

Before deploying your access points (APs), it is critical to understand your environment and the type of deployment required. Wireless networks can be designed for coverage or density. A coverage-based model will ensure that you are covered for minimum density while providing sufficient coverage, whereas a density-based model will ensure that your network can withstand high density and coverage. Hence, it is important to plan your network based on density. This ensures you are prepared for data traffic during peak hours on your wireless network.

Another problem is that wireless network engineers are needed on-site to perform such analysis or IT staff must be extensively trained. There is a need to provide a tool that addresses the above pain points and empowers you to make informed decisions prior to deployment.

Best practice

An ideal solution could be used to perform a site survey before deploying your wireless network. It would help determine how many access points are required, and what type of coverage you can expect with your APs.

Such an advanced site survey tool would be able to predict the coverage automatically or provide the coverage pattern for APs placed manually. It would also let you choose the coverage zones, and identify what type of obstacles and areas are present in your location. Optimally, the tool would be easy-to-use and intuitive, without requiring any extensive training to use it.
Optimally design and plan your wireless network prior to AP deployment for multiple sites. SonicWall WiFi Planner provides comprehensive heat map analysis, granular control and flexibility, at no added cost.

**Solution: SonicWall WiFi Planner**

The SonicWall WiFi Planner is an intuitive, easy-to-use, advanced wireless site survey tool that enables you to optimally design and deploy a wireless network for enhancing wireless user experience. Environment variables can be easily customized, and APs can be manually placed in the map or automatically placed by the advisor after performing various calculations to obtain maximum coverage with the fewest number of access points.

Available as part of the Capture Security Center, this tool is ideal if you are planning to deploy new access points or if you want to ensure excellent coverage in your existing wireless network. Coverage patterns can be obtained automatically or by manual AP placement in 2.4GHz or 5GHz bands. Auto channel assignment to prevent interference on a best effort basis. Identify and eliminate dead spots in existing deployment.

Multiple options are available for granular customization, such as:

- Obstacles (e.g., dry, wood, concrete, metal walls and windows)
- Area (e.g., cubicle area, warehouse, elevator shaft)
- AP exclusion and WiFi coverage zone
- AP channel, channel width, power, radio band and name

SonicWall WiFi Planner is easy to use. Collaborate with teams across the globe to manage multiple projects and floor plans from a single self-intuitive dashboard. Create customized reports that can be downloaded in PDF or Word format. Customization options include environment setting, AP location, AP list and signal coverage.

Predict deployment or upgrade cost. Advisor functionality provides a rough estimate on the number of access points required, based on the selections. You can adjust scale and specify floor plan dimensions and measure distances with its Ruler feature.

WiFi Planner supports a variety of SonicWall indoor and outdoor products. SonicWave APs, SonicPoint APs and wireless-enabled TZ series firewalls are supported.

[Learn more about SonicWall WiFi Planner at www.sonicwall.com/WiFiPlanner.](www.sonicwall.com/WiFiPlanner)
About Us

SonicWall has been fighting the cybercriminal industry for over 27 years, defending small, medium-sized businesses and enterprises worldwide. Our combination of products and partners has enabled an automated real-time breach detection and prevention solution tuned to the specific needs of the more than 500,000 organizations in over 215 countries and territories, so you can do more business with less fear. For more information, visit www.sonicwall.com or follow us on Twitter, LinkedIn, Facebook and Instagram.

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