

Wireless Site Survey

Knowing how to effectively deliver enterprise wireless services is the first step to unlocking true mobility for your workforce

Independent studies have shown that most wireless networks are poorly designed and do not provide the required quality of service. Given the proliferation of mobile EUC solutions, an RF site survey is essential to deliver robust wireless capabilities, including VoIP and real-time location services. Ultima can help you overcome these challenges by designing a wireless network which delivers coverage, data rates, capacity, roaming capability and QoS, taking into consideration the risks associated with RF interference and the most optimal location for each access point.

Powered by Ekahau's pro-grade wireless survey tools, we take into consideration real-world environmental factors such as floor plans and building materials, in order to ensure that you are deploying the right number of access points across your office or campus. Using heat maps, we provide a visual representation of the wireless signal and strength, in order to pinpoint existing 'not-spots', extend your existing wireless LAN or even plan for the deployment of Wi-Fi 6 access points, delivering higher capacity, better coverage, fewer disconnects and lower latency.



Design, optimize, & maintain any size of WLAN networks



Supports all Wi-Fi APs and old / new Wi-Fi standards



Automatically determine APs, units & locations



Determine network config for optimal performance



Creates multi-floor WLAN plan for coverage / capacity



WLAN surveys for all stages of your wireless lifecycle!

Our Approach

Analyse

Review requirement, scope, floor plans and existing WLAN configuration. Visual inspection to identify any construction concerns. Perform survey with heat maps, photos of mounting points, radio frequency (RF) and signal-to-noise ratio (SNR).

Review

We'll examine the data to ensure optimal placement of existing or new WLANs, alongside suggested wireless infrastructure and switching to support your requirement.

Define

A WLAN improvement report will be created including frequencies, coverage, interference and SNR details. Heat maps and AP location, and suggestions for power / cabling will be documented if applicable.

Present

We present the report, drilling into the findings and giving you an opportunity to ask questions, get advice and plan for potential next steps, including a WLAN replacement or costed remediation.

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→ Scope

- **Predictive** - Visual inspection of the plans, together with predictive placement of access points based on DWG files
- **Pre-Deployment Survey** - An on-site visual inspection, to define the most appropriate AP locations, plus heat maps
- **Post-Deployment Survey** - An on-site visual inspection, plus a heatmap survey of your existing wireless network
- **Health Check** - A visual inspection and workshop to review existing WLAN infrastructure and configuration

Deliverables	Predictive	Pre-Deploy	Post Deploy	Health Check
Review requirements and specification questionnaire	✓	✓	✓	✓
Review floor plans of the areas to be covered	✓	✓	✓	-
Assess existing WLAN and establish required coverage	✓	-	✓	✓
Undertake a visual inspection of the site	-	✓	✓	-
Identify known RF interference risks & signal to noise ratio	-	✓	✓	-
Position APs to test coverage & determine logical location	-	✓	-	-
Establish and photograph potential mounting points	-	✓	-	-
Draft AP location plan, inc nearest power and networking	Partial	✓	-	-
Troubleshoot known issues	-	-	-	Partial
Real-Time Frequency Monitoring	-	-	-	Partial
Existing Configuration Review	-	-	-	✓
Confirmation of existing frequencies in use across the site	-	-	✓	✓
AP cell size and coverage based on 2.4Ghz and 5Ghz	✓	✓	✓	-
Coverage of single access point, in relation to other APs	✓	✓	✓	-
The channels each access point will use on 2.4Ghz and 5Ghz	-	-	-	✓
Map RF interference and signal-to-noise ratio to floor plan	-	✓	✓	-
Produce heat "coverage" map of the site in question	Projected	✓	✓	-
Document AP location, antenna, power and Ethernet source	Limited	✓	✓	-
Produce final wireless site survey	Basic	Standard	Standard	Standard
Confirmation of existing frequencies in use across the site	-	-	✓	✓
Access point cell size & coverage based on 2.4Ghz and 5Ghz	✓	✓	✓	-

About Us

As a Premier Integrator, we have experience spanning Cisco's WLAN, wide area, core and edge-based networking, perimeter and endpoint security solutions. As an Aruba partner, we are capable of delivering Large Public Venue (LPV) engagements, based on their ecosystem of wired, wireless, security and location-based analytics platforms.



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