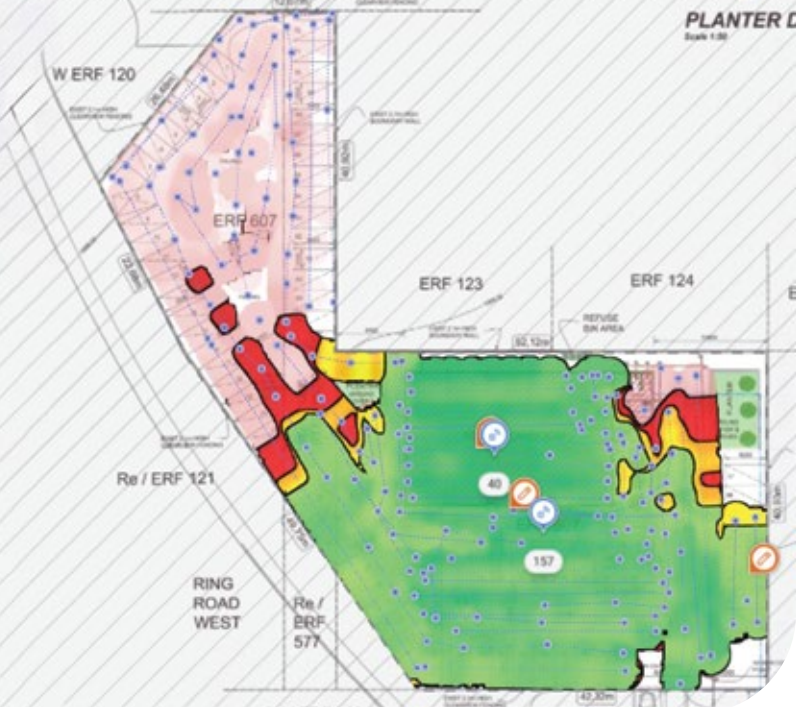




PASSIVE WIRELESS SURVEY

Professional Assessment of Existing Wi-Fi Networks



UNDERSTANDING WIRELESS NETWORK PERFORMANCE

Wireless networks operate in environments influenced by building materials, interference, device density and access point placement. When performance problems occur, the root cause is not always visible through configuration reviews or monitoring tools.

A Passive Wireless Survey measures how an existing Wi-Fi network performs in real operating conditions. By analysing signal strength, interference, channel usage and access point behaviour, organisations gain a clear view of what is affecting network performance.

This allows IT teams to identify issues based on measured data rather than assumptions.



WHAT A PASSIVE WIRELESS SURVEY REVEALS

- Heatmaps showing where coverage is weak or unstable
- Signal-to-noise analysis to identify interference and background noise
- Channel overlap and congestion affecting performance
- Access point placement issues impacting coverage and roaming
- Non-Wi-Fi interference from nearby devices or neighbouring networks



HOW PASSIVE WIRELESS SURVEYS IMPROVE EXISTING WIRELESS DEPLOYMENTS

Challenge	Passive Survey Benefit
Coverage gaps	Heatmaps reveal areas where signals are weak or unstable
Roaming instability	Secondary coverage analysis ensures smooth device transition between APs
Poor signal-to-noise ratio	Identifies locations where interference degrades performance
Interference	Detects co-channel congestion and non-Wi-Fi interference sources
Access point misplacement	Maps AP locations against coverage to identify positioning issues
Channel Congestion	Highlights overlapping or crowded channels impacting performance

OUR PASSIVE WIRELESS SURVEY PROCESS

-  **Understand Requirements**
Review building floor plans and discuss the survey objectives and known wireless challenges.
-  **On-Site Survey**
Conduct a detailed walkthrough while capturing wireless measurements across the site.
-  **Data Analysis**
Analyse collected data to identify root causes and optimisation opportunities.
-  **Comprehensive Report**
Provide a detailed report outlining findings and recommended improvements.
-  **Client Review Session**
Present the results and discuss practical steps to improve wireless performance.

OUTCOMES OF A PASSIVE WIRELESS SURVEY

- Clear insight into the current wireless environment
- Identification of root causes affecting performance
- Recommendations to improve coverage and stability
- Guidance on access point placement and channel planning
- A documented reference for future network improvement

Email support@duxnet.co.za to book a Passive Wireless Survey

Duxbury Networking | www.duxbury.co.za | info@duxnet.co.za

Johannesburg (011) 351 9800 | **Cape Town** (021) 423 7115 | **Durban** (087) 943 9076