



Secure Wireless LAN



Martello Secure Overview



Prolinx has successfully designed and deployed secure wireless LAN solutions across multiple large-scale logistics and operational sites, including facilities exceeding 80,000 square metres.

These environments often present significant physical and architectural challenges such as high-density racking, thick structural materials, and fluctuating RF conditions which make traditional, off-the-shelf Wi-Fi systems unsuitable.

Unlike conventional Wi-Fi offerings, which often rely on consumer-grade hardware and generic configurations, Prolinx Martello Secure wireless solutions are tailored for mission-critical enterprise use. It is engineered to meet the unique operational, security and environmental demands of each specific site.

Case Study

In this deployment scenario, we conducted a comprehensive wireless site survey as part of the Secure Wireless design phase, assessing:

- Physical layout and structural materials.
- Device density, movement patterns and coverage requirements.
- Security classification and data sensitivity.

Our engineers then developed a bespoke deployment plan aligned to the customer's operational goals and risk posture.

High-Coverage, Resilient Infrastructure

To ensure uninterrupted, high-performance wireless coverage:

- Over 100 enterprise-grade Wireless Access Points (WAPs) were installed within the facilities, optimised for signal penetration, user density and high availability.
- Externally mounted directional antennas extended coverage to designated outdoor operational zones, enabling seamless device connectivity throughout the site.

The result: a highly available, resilient wireless infrastructure that supports business-critical applications without disruption.

Fully Managed and Secure by Design

Unlike standard Wi-Fi solutions that often leave security and monitoring to the customer, Martello Secure includes:

- End-to-end encryption and access control using certificate-based authentication, managed within our UK-sovereign Assured Cloud.
- 24/7 monitoring by our Security and Network Operations Centre (SOC / NOC options), including:
 - Real-time Intrusion Detection and Prevention Systems (IDS/IPS).
 - Continuous performance monitoring and anomaly detection.
 - Automated patching and threat intelligence integration.

A Fully Integrated Service Ecosystem



Beyond Prolinx Secure Wi-Fi Connectivity

To enhance operational capability further and reduce IT overhead, we integrated additional services from our catalogue:

- **Secure User Devices:** Preconfigured and policy-hardened endpoints enabling users to access wireless services securely and compliantly.
- **Mobile Device Management:** full control over deployment and support of large quantities of devices, leading to a quicker roll-out
- **Citadel Secure / Citadel Red:** An industry leading collaboration environment, allowing processing, creation and sharing of protectively marked data utilising M365 tooling at OFFICIAL-SENSITIVE and SECRET.
- **Fortress / Fortress Red** (Platform as a Service): Hosting for critical tools including application onboarding and deployment, custom workloads and development environments — available on-demand within the protected network environment at OFFICIAL-SENSITIVE and SECRET.



Key Advantages vs Off-the-Shelf Wi-Fi Solutions

Feature	Prolinx Wi-Fi	Off the Shelf Wi-Fi
Scalability	Designed for high-density, large-footprint deployments	Limited range and performance in large or complex buildings
Security	End-to-end encrypted, monitored and policy-enforced	Basic security, often dependent on user configuration
Compliance	Designed for classified and sensitive data environments	May not meet government/commercial assurance requirements
Management	Fully managed infrastructure, monitoring and updates	Requires in-house expertise to deploy, secure and support
Integration	Seamlessly extends to secure devices, SaaS and PaaS	Typically siloed, requiring third-party tools and configuration

Business Outcome

The result was a fully managed, enterprise-grade Secure Wireless LAN solution, seamlessly integrated with access devices and hosting services. The customer gained a resilient, scalable and highly secure wireless environment - without the complexity or resource burden of managing infrastructure, access, or application services internally.

This enabled the customer to:

- Focus IT resources on mission-critical activities.
- Support high-assurance connectivity across all operational zones.
- Ensure end-to-end data protection aligned with UK government and regulatory standards.



Prolinx are industry leading experts at delivering innovative cloud solutions to Defence, National Security, Academia and Research sectors and their partners where seamless connectivity and collaboration is the key to enabling secure data driven success.

Our digital solutions protect your data in our trusted hosting environments while supporting your projects and business objectives by providing assured, secure, UK sovereign cloud to your organisation and partners.

We have a fully assured workforce and offer engineering excellence delivered by our skilled and empowered workforce in transparent partnership with our clients.

Prolinx already supports industry partners and their supply chains by securely protecting their data achieving information advantage in mission critical projects.

*Service is dependent on each clients network configuration. Contact us to find out more:



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27 Years of experience.
Over two decades of
experience delivering
secure cloud solutions.

100% UK Sovereign.
A British-owned SME with
assured UK sovereign data
centres delivered by highly-
skilled, security cleared UK
workforce.

24/7 Support
Continuous support
(NOC & SOC options)
for our Citadel Secure/
Red and Fortress
Secure/Red.