Orange
Cyberdefense

Invensys turned to us, the independent IT security integrator, to provide remote access solutions and technologies Invensys support hundreds of devices.

Customer profile

Industry: IT
Location: Worldwide
www.invensys.com

The challenge

In order to improve its processes and efficiency, Invensys required its manufacturing plant personnel to interact with a management system on the production line using fixed terminals, handheld scanners and various other wireless devices.

The company had deployed a Plex Enterprise Resource Planning Management System (ERP) at the shop floor to achieve this.

However, to support it, and as part of a wider strategy to adopt cloud services, Invensys required a robust wireless deployment that would eventually be utilised across thirty international manufacturing plants.

Scaling a wireless deployment from a handful of office-space access points to a resilient, high-density solution, capable of supporting a mission critical environment posed a significant technical and administrative challenge for the company.

The solution

Invensys turned to long-term and trusted partner Orange Cyberdefense, the independent IT security integrator, to provide remote access solutions and technologies.

Orange Cyberdefense began the consultancy project with a significant amount of information gathering to understand the business units and the demands of wireless in the context of manufacturing.

Production floors and warehouses typically provide many physical obstacles for the reliable transmission of wireless data, with heavy equipment creating a significant source of interference, which can compromise performance.

This information was then turned into a blueprint which included a best practice design for deploying a secure, scalable wireless solution in a cost-sensitive manufacturing environment.

We had already [together] on a number of other projects requiring remote access solutions and technologies, and knew them to be a safe pair of hands. They were therefore the obvious choice to consult with us on this project

David van Rooyen,
Voice and Data Solutions
Architect Lead

With budget being a major concern, the solution was designed to be as efficient as possible to minimise the need for the deployment of equipment in manufacturing locations which had little or no IT support.

The solution was also centralised as much as possible to leverage the maximum economies of scale in deploying a global solution.

The implementation

The initial deadline for the project was very tight. Once the preliminary design had been completed, Orange Cyberdefense was given a month to survey both phase one locations, create work plans, implement the recommended solution and be ready for production testing/go live.

Initially prototyped at two key manufacturing locations, the deployment was rolled out to a further ten sites in the first half of 2012. The remaining sites are expected to go live during the remainder of 2012 and in early 2013.

The sites are now managed by the Aruba Airwave device management solution, which provides centralised policy management and reporting, enabling Invensys to obtain solid figures on the reliability and performance of the system.

Orange Cyberdefense also monitors the sites with a local AFFINITYSECURE server within the data centre. This is Orange Cyberdefense's own real-time monitoring service developed in-house and monitors the system health of the entire solution for metrics such as the number of authenticated

users and the status of access points.

As part of this project Orange Cyberdefense developed an environmental health monitoring solution to effectively emulate a 'real' user connecting to the wireless; in the event that an issue developed with the authentication process, AFFINITYSECURE would alert this in real-time and start the troubleshooting process before word spreads from the shop floor that this is an emergent issue.

The solution is currently being used to support access to the Plex ERP Management System from fixed terminals and wireless handsets. It supports every aspect of the manufacturing process from goods in, to production, to finished goods to good out. It also supports corporate wireless access for trusted devices by providing seamless and secure access, and enabled 'guest' access for visitors.

The benefits

Since the deployment of the solution the company has seen multiple benefits. Invensys has begun its strategy to develop an efficient Software as a Service (SaaS) solution which can reliably support hundreds of devices with a consistent configuration across the globe.

The partnership has proved effective in both time and cost and Orange Cyberdefense and Invensys have additional plans to work together on phase three of the project due to kick off towards the end of 2012. This will take into account manufacturing locations in the Far East, India, South America and Australia.

About Orange Cyberdefense
In 2019 SecureData UK & SecureLink UK were acquired by Orange Group to be part of Orange Cyberdefense, the Group's expert cybersecurity business unit. Today Orange Cyberdefense is Europe's leading managed security, threat detection and threat intelligence services provider. We help customers anticipate threats, identify risks, protect their IT assets, detect breaches and respond to security incidents. With a 25+ years track record in information security, 250+ researchers & analysts and 16 SOCs distributed across the world, we can offer a global protection with local expertise.