Southwest Managed Service Provider CETSAT selects Juniper Networks solutions to implement secure building network for large, London-based client.

CETSAT agile technology

Juniper Networks

Mist A Juniper Company

Juniper Networks stood out from the competition with its high performance, secure and simple networking capabilities, and reliability.

In today's world, the security and reliability of control system networks are mission-critical. Building owners want and need their properties to have 'smart' functionality, as well as gaining cost efficiencies and meeting green credentials with automated environmental management, but this can leave them open to attack. The traditional corporate networks are no longer the sole target of criminals - networks that control buildings can also be compromised and held to ransom.

PROJECT BRIEF

In 2018, CETSAT was commissioned by a large, London-based bank in Canary Wharf to design and implement a network that controlled all its building's onsite amenities; to make it a 'Smart' building.

The three-year project included:

- The implementation of professional networks to control air-conditioning, water flow, pumps, monitor CO2, and oxygen.
- Leveraging the networks to enable proximity tracking through the building via Bluetooth (to track people's movements throughout the building).
- Fulfilment of 'green' credentials to implement networks that recognise when a room is not being used, and automatically adjust heat and light.
- Improved cyber-security to ensure systems are robust enough to detect and deter any criminal attacks and avoid the networks being compromised and/or held to ransom.

QUALITY ASSURANCE

For a project of this magnitude, CETSAT needed networking products that were reliable, robust, and leading-edge. For the IT provider, there was only one choice - Juniper Networks.

Having used Juniper on previous projects, CETSAT knew the quality of the products would give the project the reliability and exceptional performance required.

CETSAT Managing Director Durgan Cooper said: "When designing this solution, it was a simple choice to use Juniper as it can deliver both security and efficiency for a network which will grow exponentially as this smart building evolves. Cheaper brands just can't operate effectively and efficiently."

IMPLEMENTATION

The three-year project started in 2018, working on the core infrastructure, servers and support contracts, building control rooms, and implementing the virtual switches. It is due for completion in 2021 when the entire network will be switched on and will then be supporting several hundred devices. The solutions combined for this project were:

- Juniper Virtual Chassis, using four EX4300 switches situated in each of the four corners of the building. Using Virtual Chassis technology - currently, the only one of its type - on EX4300 switches reduces network complexity by simplifying network operations and architecture. It also allows multiple interconnected switches to behave, operate, and be managed as a single, high-bandwidth device. The network is more fault-tolerant and remains operational in the event of a single switch failure as traffic is redirected to an active member. The entire building can be managed as one device and system maintenance and management is greatly simplified.
- SRX Series Services Gateways: The SRX320 provides scalable, secure, and easy-to-manage connectivity. As network traffic grows, the high-density native Gigabit Ethernet ports offer secure connectivity that will help the client keep pace. Next-generation firewall and UTM capabilities also make it easier to detect and proactively mitigate threats to improve the user and application experience.
- Juniper Wireless Services driven by Mist AI: This system uses AI to revolutionise IT and delivers unique capabilities for both the wired and wireless LAN. It brings simplicity to end-users and, combined with automation and insights, enables IT teams to streamline operations and simplify troubleshooting, while still delivering innovative IT projects.
- Juniper Sky Enterprise: The system is managed from one intuitive dashboard that brings together all the SRX firewalls and EX4300 switches. It centralises network management and makes it quick and simple for IT teams.

Cooper added: “With a 40Gb backbone, the network will be able to cater for all building services and have superior availability with unparalleled up time.

As the network evolves, we will increasingly add more edge switches, wireless will also be expanded to integrate more capable devices at a fraction of the cost of modular cabling. Wireless has come of age and it can arguably be more secure when configured correctly.

It is a great project and another building we are pleased to put our name to.”

ABOUT CETSAT

CETSAT is a mission critical service provider and the first choice for organisations who require robust and secure technology platforms hosted within their own infrastructure or in the cloud. CETSAT’s services include network architecture, technology delivery and project management, 24/7 managed IT services, bespoke application development and an extensive range of cyber-security capabilities.

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WHY USE JUNIPER PRODUCTS?

- 24/7 robust support
- Scalable, secure connectivity
- Simplicity for end-users
- Allows IT teams to streamline operations
- Entire system brought together on one dashboard

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JUNIPER NETWORKS

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