



SOUTH DUBLIN COUNTY COUNCIL BUILDS AI-DRIVEN, THREAT-AWARE NETWORK WITH JUNIPER

Summary

Company:
South Dublin County Council

Industry:
Government

Business Challenges:
Deliver innovative public services that protect and enhance residents' lives and drive economic prosperity for businesses.

- Technology Solution:**
- Juniper Connected Security, including Junos Space Security Director with Policy Enforcer and Juniper Advanced Threat Prevention
 - Mist Wireless LAN Platform
 - EX3400 Ethernet Switch
 - QFX5110 Switch
 - SRX1500 Services Gateway

- Business Results:**
- Protects internal systems and apps from malware and other security threats
 - Improved network performance up to 40 percent
 - Streamlined network operations with cohesive wired and wireless network
 - Meets GDPR compliance for protecting data privacy

Traveling less than a half hour south of Ireland's historic capital of Dublin leads visitors to South Dublin County. In contrast to Ireland's centuries-old capital, South Dublin County has only a few decades behind it but an exciting future of innovation and economic growth ahead.

The South Dublin County Council is committed to building a culture of public service that both drives business success and helps its citizens thrive. The council spearheads local government services, including housing and community, roads and transportation, urban planning and development, and tourism and culture, as well as environmental sustainability. It serves more than 270,000 people and 7000 businesses.

Creating that future depends on having the most advanced information and communications technology (ICT) available so that the council can rapidly respond with services that businesses and residents need and want.

In 1994, when South Dublin County was established, Juniper Networks was named the network vendor. In 1996, the council started working with Agile Networks as the primary network integrator. The initial installation of firewalls has since grown to include switches and, more recently, automated, cloud-managed wireless LAN and a threat-aware network. Throughout its long relationship with Juniper and Agile, the South Dublin County Council has been satisfied with the reliable service, support, and expertise from its networking partners.

Network Simplicity from Core to Edge and Beyond

With Juniper, South Dublin County Council built an AI-driven, threat-aware network to better serve its constituents.

Juniper networking and security can be found everywhere, from the core to the edge of South Dublin County's network. Juniper switching, including Juniper Networks® QFX5110 Switch and Juniper Networks EX3400 Ethernet Switch, serve in the data center, main office, and remote sites, while Juniper Networks SRX1500 Services Gateway protects the perimeter.

Agile Networks deployed a trio of integrated security solutions from Juniper to protect the local government's citizens and government apps and services.

Agile Networks deployed a trio of integrated security solutions from Juniper to protect the local government's citizens and government apps and services. Juniper Connected Security takes a 360-degree approach, safeguarding users, applications, and infrastructure by extending security to all connection points across the network. It combines policy, detection, and enforcement that centralizes and automates security, while creating a smaller attack surface.

Working with the Council's networking technology partner Agile, the Juniper Mist wireless LAN platform was identified as the most performant and compatible technology for delivering business value that supports the organisation's strategic and corporate objectives. Juniper Mist Cloud Architecture offers an AI-driven platform that delivers exceptional network user services by simplifying and automating network operations and troubleshooting. The council also added Juniper Connected Security solutions to build defenses into the network that automatically protect data and workloads across the organization.

Having a single-vendor network for wired, wireless, and security means fewer administrative headaches. What the team likes most about Juniper is its simplicity and the integrated nature of all the supplied solution's components. The infrastructure team is a small, four-person group with big responsibilities. Juniper provides the tools and resources they need to roll out new services in South Dublin County.

Public Safety Starts with a Threat-Aware Network

As a public-service entity, South Dublin County's websites and services can be more at risk than corporate sites. The ICT team constantly balances availability and ease of use for the public, with strict security protocols that protect the network, servers, apps, and data. Now that GDPR compliance is required, they must keep data security and privacy at the forefront of projects, as noncompliance can lead to hefty penalties.

Beyond GDPR, rogues and hackers like to test their luck with phishing, malware, and other attacks. Other threats pop up when an internal user unknowingly clicks on unsafe links with a dangerous IP address. Juniper Connected Security helps South Dublin County Council avoid these threats.

The central platform, Junos Space® Security Director, is a security management application that supports security policy administration. Policy Enforcer, built into the Security Director software, ensures that policies for multivendor network elements and firewalls are enforced closest to where a threat is detected.

Juniper Advanced Threat Prevention, the third solution in the trio, provides cloud-based malware detection to identify known and unknown threats through threat feed information and sandboxing, machine learning, and threat deception techniques. Juniper ATP blocks or quarantines threats to prevent north-south or east-west threat propagation in the South Dublin County network. The combination of the three connected security solutions creates a highly automated, threat-aware network that protects the agency and its residents.

Finding Predictable, AI-Driven Wi-Fi

With Juniper Mist Cloud Architecture, South Dublin County Council is on the path to the AI-driven enterprise where experience is the new uptime. Mist delivers amazing user experiences to council staff, from the mayor to the finance teams to voter registration and maintenance teams by bringing insight into user experiences and proactively turning these insights into automated actions to identify and resolve issues. Juniper Mist Cloud leverages a cohesive approach to managing wired and wireless networks that boosts overall network performance by up to 40 percent for users and simplifies operations for the IT team.

The Juniper Mist Cloud Architecture, built on a modern, microservices cloud environment to boost reliability and agility, provides unique client-level insight, rapid network troubleshooting, trending analysis, anomaly detection, and proactive problem remediation with its AI engine. The ICT team can set, monitor, and enforce service-level expectations for key wired and wireless performance metrics such as throughput, capacity, roaming, and uptime. The Marvis Virtual Network Assistant provides predictive recommendations to avoid problems or fix them quickly and automatically. And with a cloud-based architecture, network upgrades and patches are on demand, taking minutes unlike legacy controller-based solutions.

Building an Economically Healthy Future

As Covid-19 upends the lives of South Dublin County's residents and businesses, the council is reassessing plans and policies for health protocols. Websites are on the front line for conveying critical information about openings and shutdowns for businesses, schools, and more. Maintaining connectivity and communications is even more critical during the pandemic, and Marvis will be critical to bringing visibility into the user experience and enabling the IT team to troubleshoot issues remotely, keeping the council connected to its residents.

The council also is considering smart city initiatives that could include digital signage with wayfinding information, connected streetlights, contactless entry in public buildings, and more.

Next Steps

With the advanced technologies available, South Dublin County Council can leverage these types of innovations and more to both spur economic prosperity and protect its citizens' health. Every improvement moves the council closer to fulfilling its commitment to creating the best possible place to live, work, and do business.

For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

Corporate and Sales Headquarters

Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or +1.408.745.2000
Fax: +1.408.745.2100
www.juniper.net

APAC and EMEA Headquarters

Juniper Networks International B.V.
Boeing Avenue 240
1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands
Phone: +31.0.207.125.700
Fax: +31.0.207.125.701



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