Cloud Services Business Builds a Secure New Platform for Enterprise and Government Customers

Summary

Company:
Outsourcery

Industry:
Cloud Services Provider

Business Challenge:
Outsourcery needed a new secure network platform that could:

- Support many multitenant customers in the public and private sector and deliver high availability
- Satisfy the security and resiliency requirements of the UK government
- Scale to high throughputs of encrypted traffic without compromising security

Technology Solution:
The new platform was built using:

- SRX5600 Services Gateway
- MX104 3D Universal Edge Router
- Junos operating system

Business Results:

- A resilient security platform accredited to government security standards
- Scale and agility for future growth and service innovation
- A more efficient solution with lower cost
- A path to full service automation using SDN technology

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Outsourcery is a UK-based cloud services provider offering IT and business communications solutions. It has been delivering cloud services to its partners and customers since 2007. Outsourcery employs around 120 people, is based in three offices across the UK, and has customers around the world. It operates primary data centres in Farnborough, Gloucester, and London, with secondary sites in Corsham and Leicester. Outsourcery was floated on the UK's Alternative Investment Market (AIM) in 2014.

Outsourcery is particularly proud of its cloud-centric approach, and with no legacy operations, it likes to describe itself as "born in the cloud." Its primary service focus is on the Microsoft suite of applications, including dedicated and multitenant CRM, hosted Exchange and hosted Lync (soon to become Skype for business), alongside Infrastructure-as-a-Service (IaaS) and O365 integration.

Outsourcery provides its services through a number of large partners, including Vodafone and Virgin Media Business, as well as having key relationships with leading technology vendors such as Microsoft and Juniper Networks. The organisation supports midsized companies up to FTSE 100 organisations with tens of thousands of users.

Business Challenge

Data sovereignty is becoming increasingly important to a number of sectors, but has always been a mandated requirement for most central and local government organisations. As Outsourcery continues to increase the number of cloud services to the public sector, data sovereignty is an essential part of its data security requirements. Private sector organisations are also cautious about data sovereignty, and validating where their data will reside is a common request within their tender for cloud services. Overall, retaining customer data in the UK contributes to Outsourcery's overarching competence to deliver secure cloud services to its customers.

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Darryl Turner, Senior Network Engineer, Outsourcery

Outsourcery realised it needed an entirely new platform to meet the security and resiliency requirements of local and central government. Its O-Cloud platform would need Pan Government Accreditation (PGA) certification, formally Impact Level 3 (IL3), so that Outsourcery could provide cloud services with increased levels of security and encryption. To create a government accredited platform for cloud services, Outsourcery needed to find and deploy a highly secure networking solution.

Technology Solution

Outsourcery engaged with Hardware Group after successfully introducing Juniper Networks into its network on a previous project. This involved upgrading two of its data centres and three of its points-of-presence with Juniper solutions and the Juniper Networks® Junos® operating system.

For this new project, Outsourcery sought a security and network service platform that could provide dense multitenancy capability, which meant having very large routing table support. It was also important that the new platform would support SDN models, as this is a key element of Outsourcery's future plans.

To meet these requirements, Hardware Group recommended Juniper Networks SRX5600 Services Gateway to create the new platform. Outsourcery chose Juniper Networks technologies for several reasons. As Darryl Turner, senior network engineer at Outsourcery, explains, "The performance, features, and usability speak for themselves—and the engineering team really enjoys the simplicity of the Junos operating system. It provides a topology that we can seek to automate at each level, and one which will scale both within and between data centres."

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"As a business we liked the SRX5600 because of the amount of virtual routers it could support, and the high throughput on the cryptography," Turner adds. "We needed something that could give us multiple gigabits of IPsec capability."

Accredited with Juniper Networks Elite Partner status and Partner Professional Services (PPS) specialization, Hardware Group offered Outsourcery access to Juniper certified technical services, support, and expertise, and it provided a continuity of resources through the life cycle of the project from pre- to post-sales. To enable the project to be delivered on time and within budget, Hardware Group also modeled a bespoke flexible finance solution.

"Hardware Group helped us define the specifications of the firewall," Turner says. "It had quite a few complex options and we needed someone who could guide us through that process. They also helped us pre-stage the equipment, which was really key for accelerating our time-to-market, so everything was ready for service the minute it was installed."

Outsourcery deployed the SRX5600 Services Gateway in each of its data centres, running the new Suite B level of IPsec encryption. Suite B is a recommended IPsec level of encryption that is used within packet-switched networks (PSNs), a standard that Outsourcery adopted as part of its secure cloud deployment. The SRX5600 Services Gateway is an intelligent network security platform based on a revolutionary architecture that aggregates security services, as well as providing advanced, integrated threat intelligence. Custom designed for flexible, scalable processing and services aggregation, with six-nines reliability to ensure continuous uptime, these platforms are capable of supporting interface speeds up to 100GbE, while delivering the highest levels of protection from Layer 3 to Layer 7.

The SRX5600 features a carrier-grade next-generation firewall with advanced services such as application security (AppSecure), Unified Threat Management (UTM), intrusion prevention system (IPS), and integrated threat intelligence services. What's more, the high throughput of the SRX5000 line is delivered without compromising security efficacy. The solution also includes Juniper Networks MX104 3D Universal Edge Router, a modular, highly redundant and full-featured router that offers 80 Gbps of capacity. The MX104 runs MPLS to form the inter-site network core, and it employs advanced virtual routing capabilities to provide strict separation between different tenants on a single physical platform.

Business Results

Outsourcery found the transition to the SRX5600 platform straightforward. "We were already familiar with Junos OS from our existing platforms, and because all of the Juniper systems use the same operating system, it made the transition to the SRX5600 very smooth," Darryl Turner says.

The higher levels of cryptography have helped get the platform accredited for use by the UK government, which Outsourcery put down in part to the confidence and familiarity the government already has in Juniper's technology (coupled with the formal accreditations in place on these platforms).

The MX104 virtualisation capabilities have also paid dividends in terms of simplicity and cost. As Turner explains, "As we can create virtual routers, we can offer hybrid cloud services far more easily than on our previous platform. We used to need more physical pieces of hardware than we do now, which was more expensive and less efficient. Now we can run many more tenants on each system."

Outsourcery has benefited from greater reliability and resilience.

It has been able to perform in-service software upgrades without interrupting customers or systems, and the inter-site network takes advantage of Juniper's MPLS features for ultra-fast failover in fault conditions to help maintain business continuity for Outsourcery and its customers.

The project implementation also went seamlessly. Jake Greenland, group head of systems architecture at Hardware Group, says, "A key element of our approach was to ensure a continuity of resources and expertise through the life cycle of the project, right through pre- to post-sales."

Hardware Group continues to provide ongoing support to the Outsourcery platform. Rohen Farmer, head of infrastructure at Outsourcery, says, "We have a personal relationship with Hardware Group. We're not just getting through to a call centre, they know and understand our solution, our business, and our team. The speed of response has been a genuine strength and makes doing business together a pleasure. Sometimes we need things resolved at the drop of a hat, whether its logistics or technology, and the team is always there for us."

Outsourcery's O-Cloud platform is now being used to deliver services to UK government customers, such as the Berkshire Healthcare NHS Foundation Trust, which has chosen Outsourcery to deliver its Microsoft Lync Software-as-a-Service (SaaS) solution.

"By choosing Juniper to form part of our Software Defined Data Centre, this has provided Outsourcery with a strong modular cloud infrastructure that can be implemented anywhere around the world, and at scale," Farmer says.

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Jake Greenland, Group Head of Systems Architecture, Hardware Group

Next Steps

Outsourcery now plans to take advantage of Juniper's SDN architecture and open philosophy, so it can offer its customers greater service automation functionality, which can deliver greater service agility and potential cost savings. As Darryl Turner explains, "We really like the API that is available on the Juniper platforms. It's an important enabler for our path to SDN. We can use it to integrate the network directly into our orchestration layer, which will allow us to expose deep levels of automation for our customers."

Most importantly, the new network platform has provided Outsourcery with scale for future expansion. Jake Greenland of Hardware Group says, "Along with Juniper Networks, we've been able to create a 'scale out' infrastructure for Outsourcery, and an architecture that can be replicated anywhere in the world."

Outsourcery also appreciates the scalability that the new network has provided, which allows the company to focus on adding new customers and services. As Farmer says, "Because of the scalability of the Juniper firewalls, we're now future-proofed for a long time to come. As we take on more and more new customers, we know we've got a network that can support our growth in storage and compute and services without any adverse impact on service quality for new or existing customers. As other networking equipment comes to the end of its life, Juniper is at the forefront of our plans to upgrade it."

For More Information

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

For more information on Outsourcery, visit www.outsourcery.co.uk.

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at www.juniper.net.

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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