



REVOLUTIONIZING DATA CENTER INFRASTRUCTURE

A Case Study on Scott Data's Strategic Transition to Open Networking Solutions

OVERVIEW

Based in Omaha, Nebraska, **Scott Data** is a nationally recognized data center facility and one of only fourteen multi-tenant data center facilities in the nation to receive Tier III Certification in both design and facility from the Uptime Institute. **Tier III Certification** is awarded to facilities designed, tested, and validated to be concurrently maintainable. Scott Data caters to a broad spectrum of use cases, encompassing colocation, cloud computing, and disaster recovery services. Colocation services enable businesses to house their IT equipment within Scott Data's data centers, leveraging infrastructure, power, cooling, network connectivity, and security expertise. Cloud computing services, offered as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software

as a Service (SaaS), provide businesses with on-demand access to IT resources, eliminating the need for in-house IT infrastructure investments and maintenance. Disaster recovery services safeguard businesses' data and IT systems against natural disasters and unforeseen disruptions by providing a backup site for rapid failover.

Through a network consultancy engagement with **IP ArchiTechs**, Scott Data identified that open networking solutions offer a pragmatic, innovative, and cost-efficient enhancement for their current data center infrastructure. Scott Data, in collaboration with their distribution partner **EPS Global**, selected equipment from reputable manufacturers such as **Edgecore Networks**, **UfiSpace**, **Celestica**, and **IP Infusion**.

HIGHLIGHTS

The design developed with **IP ArchiTechs** harnessed the capabilities of **IP Infusion**, **Edgecore Networks**, **UfiSpace**, and **Celestica** to deliver a solution characterized by the following key features:

OcNOS vs. Proprietary Solutions

- **Reduced lead times** from 60+ weeks to 4 weeks
- **1/6 the total cost of ownership** comparing to proprietary solutions
- Customer **reinvested savings** into new services and new streams of revenue
- Savings also allowed customer to set up their own OcNOS test lab and warm spare inventory
- **Multi-platform** support with UfiSpace, Edgecore and Celestica enabled customer to select the best cost-performance optimized solution
- **Single NOS** across the entire new network simplifies management and IT skillset

OcNOS vs. SONIC

- OcNOS was delivered as a **platform ready for deployment**, as a binary image with one-touch installation on qualified ODM platforms from UfiSpace, Edgecore, and Celestica
- OcNOS came with **maintenance, support, and training**
- OcNOS-DC had **multiple global references** in Service Provider and Data Center networks

Why IP Infusion?

“OcNOS and an open networking strategy hits all the right notes in terms of cost, support, and features. Service providers and OEMs have been using IP Infusion for years. Our successful operating history along with our entrepreneurial culture positions Scott Data to choose technology tools that not only make a solid business case but also reaffirm our longer-term core values of being a technical innovator and leader in our market space. We see open networking as a logical evolution as we move away from mainframe computing towards future cloud computing.”

– Ken Moreano, Co-Founder, President, and CEO of Scott Data

The Deployment

The implementation of **IP Infusion's OcNOS** software products on open networking hardware solutions provided by UfiSpace, Edgecore, and Celestica resulted in the replacement of their existing data center network infrastructure. The network is comprised of UfiSpace for border leaves and edge routers, Edgecore platforms deployed for spine and leaf switches, and Celestica platforms employed as out-of-band management switches.

SOFTWARE PRODUCTS

- IP Infusion OcNOS DC IP Base
- IP Infusion OcNOS DC Management
- IP Infusion OcNOS SP MPLS

HARDWARE PRODUCTS

- Edgecore AS7726-32X – 1U 32x 100G Port Open Switch | Spine
- Edgecore AS7326-56X – 1U 48x 25G, 8x 100G Port Open Switch | Leaf
- UfiSpace S9510-28DC – 1U 24x 10/25G, 2x 40/100G, 2x 100/400G Open Switch | Open Gateway
- Celestica DS1000-AC – 1U 48x 1G Base-T, 8x 10G | Open Switch

Scott Data Deployment Topology

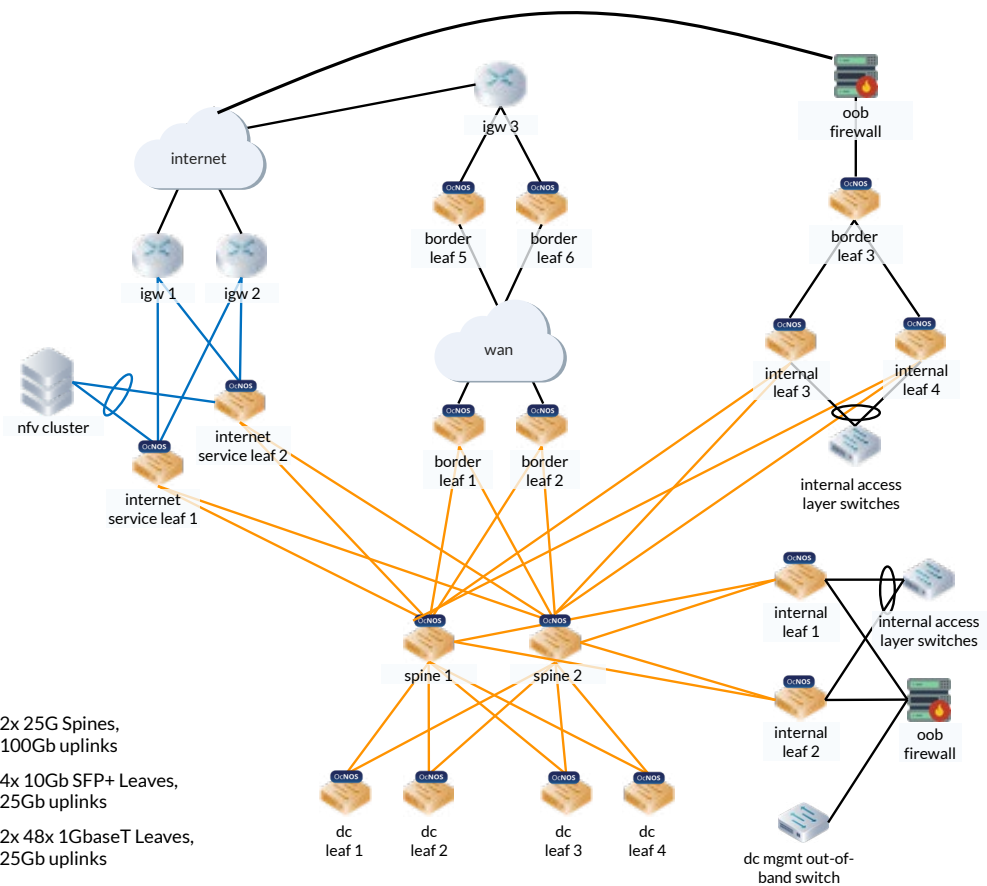
OcNOS Spine and Leaf EVPN VxLAN fabric

- vm agg router 1
- vm agg router 2
- client vm routers
- client vm firewalls
- client vm load balancer

- 100Gb
- 25Gb
- 10Gb

Device Counts

- 3x 10/25G IGW Routers
- 2x 25G Spines, 100Gb uplinks
- 2x 100Gb Spines
- 4x 10Gb SFP+ Leaves, 25Gb uplinks
- 6x 25Gb Service Leaves, 100Gb uplinks
- 2x 48x 1GbaseT Leaves, 25Gb uplinks
- 6x 10Gb SFP+ Leaves, 100Gb uplinks



NOS Provider



Solution Distributor



System Integrator



Hardware Platforms



Summary

Our team strongly believes in the future of open networks and open standards. Now is an opportune moment for organizations to embrace white-box networking. These open hardware solutions offered us unparalleled flexibility and agility in our network when deployed with OcNOS software. Digital transformation is accelerating, and our customers don't have time to worry about decisions they need to make now that may limit compatibility and scalability in the future. They need their network to adapt swiftly and without disruption to changing requirements. White-box networking allows us to meet these needs and optimize cost and performance. We appreciated the maturity of OcNOS software and support, enabling us to deploy open standards like VXLAN, EVPN, and Active-Active Multi-Homing in our network.

– Dominic Romeo, Director of Technology Services of Scott Data

Scott Data, recognized as a pioneer and innovator in the data center and infrastructure market, understands the importance of adopting leading edge technologies to solve persistent business problems and maintain leadership in a rapidly changing industry. In order to maintain this leadership position, Scott Data needs to align with vendors that not only solve their network problems of today, but also provide a clear path for the future. IP Infusion, with its history and founding as a pure software provider in open networking, stood apart from the competition.

Despite not being a household name, IP Infusion has been the choice for many top tier networking vendors. Our market maturity and longevity affirms the need for an independent software vendor and the value of open networking. White-box networking isn't just a solution; it's a strategic advantage that aligns with a forward-thinking approach to technology.

Contact for More Information:

For more information on the OcNOS software, please contact sales@ipinfusion.com.

ABOUT IP INFUSION

IP Infusion is a leading provider of open network software and solutions for carriers, service providers and data center operators. Our solutions enable network operators to disaggregate their networks to accelerate innovation, streamline operations, and reduce Total Cost of Ownership (TCO). Network OEMs may also disaggregate network devices to expedite time to market, offer comprehensive services, and achieve carrier grade robustness. IP Infusion network software platforms have a proven track record in carrier-grade open networking with over 500 customers and over 10,000 deployments. IP Infusion is headquartered in Santa Clara, Calif., and is a wholly owned and independently operated subsidiary of ACCESS CO., LTD. Additional information can be found at <http://www.ipinfusion.com>

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