Highlights

- Improve business agility and accelerate innovation with cross-domain automation
- Automate infrastructure provisioning, validation, troubleshooting, and remediation workflows
- Improve operations with pervasive traffic visibility for real-time network analytics, monitoring, and troubleshooting
- Scale the data center cost-effectively with high-performance, flexible platforms at the leaf, spine, super-spine, and WAN edge
- Full featured SLX operating system with advanced features supporting switching, Data Center Fabrics, BGPEVPN and VXLANw

Extreme Networks SLX Agile Data Center Portfolio

SLX switching and routing platforms deliver the data center visibility, automation, and agility that organizations need for today's digital era.

Agile Data Center Networking Demands Pervasive Visibility and Automation

Business leaders recognize that they must digitize to accelerate innovation and maintain competitive advantage, or risk being displaced by more nimble competitors. The fast innovation needed to drive this transformation can only happen with an agile IT foundation, and with seamless automation and network visibility connecting all IT domains and functions.

Agility at All Layers of the Data Center Stack

SLX switching and routing platforms provide unparalleled network visibility with the SLX Insight Architecture and SLX Visibility Services. These embedded capabilities allow organizations to achieve pervasive insight throughout the network to quickly identify problems, accelerate mean-time-to-remediation, and improve overall service levels. With Extreme Fabric Automation in SLX platforms you can set up plug and play fabrics in just seconds.

The embedded visibility enables organizations to act on network intelligence with the agility that modern data centers demand. With Extreme Management Center™, users gain centralized management, automation, analytics, visibility, and control from the wireless edge to the data center.

The SLX family includes a breadth of platforms, each purpose-built for its place in the network, ranging from the leaf and spine to the super-spine and WAN edge. These comprehensive solutions – with automation, visibility, analytics, and platforms optimized for the digital era – deliver agility at all layers of the data center network stack, across your entire network.

SLX Portfolio Breadth

The breadth of the SLX routing and switching portfolio (*Figure 1*) makes them suitable for many places in the network and data center designs – spanning leaf, spine, super-spine, core, border, and data center interconnect (DCI). The 25 GbE SLX 9140 and the SLX 9150 with 1/10/25/40/100 GbE, are ideal for leaf deployments, while the high-density 100

GbE SLX 9240 and the SLX 9250 with 100/40 GbE, are well suited to serve at the spine level. The versatile SLX 9540 and SLX 9640 deliver advanced border routing and MPLS features in border leaf and WAN edge deployments. The highly scalable SLX 9850 router supports multiple use cases, spanning spine to super-spine, border leaf, core, WAN edge, or data center interconnect. The respective data sheets for these platforms provide more detail.
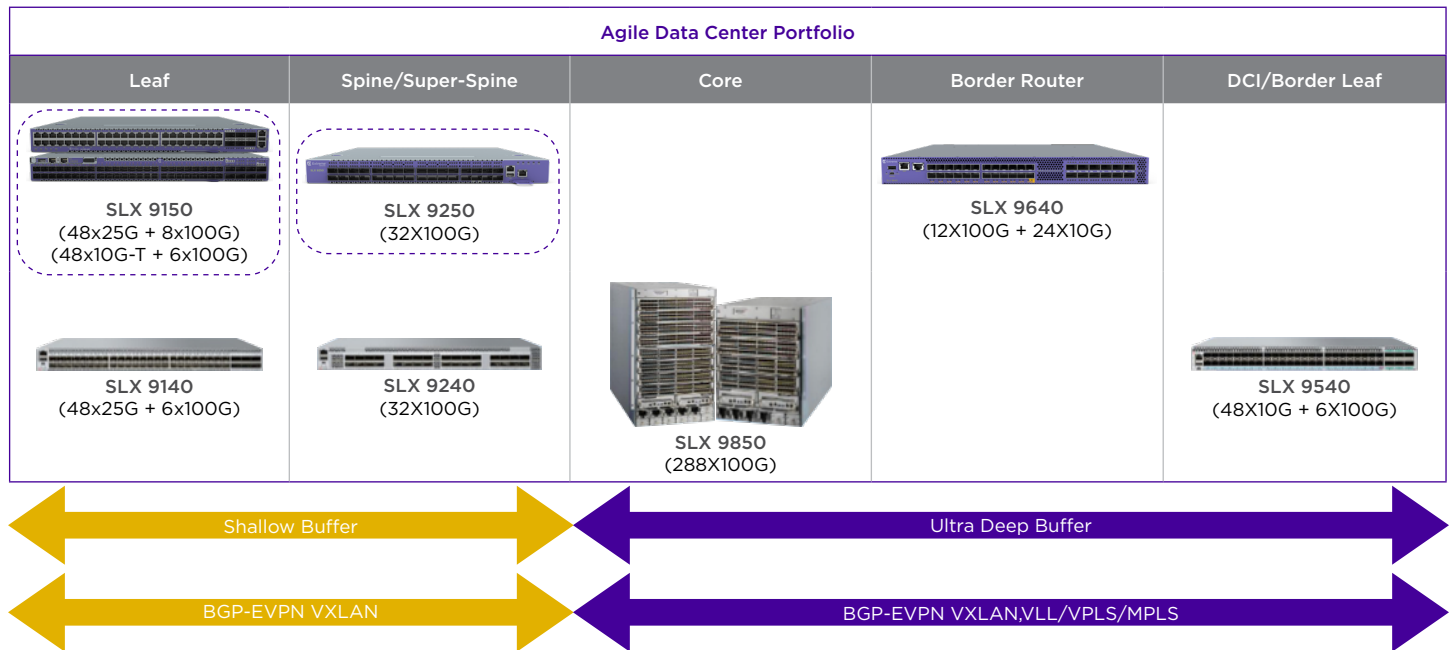

Figure 1: The SLX switching and routing portfolio.

SLX 9140 Leaf and 9240 Spine Switches

The SLX 9140 leaf switch provides native 48 25GbE server-facing ports and 6 100GbE ports in a 1U fixed form factor. It also features flexible 1/10/25/40/100GbE configuration options. The SLX 9240 spine switch delivers high-density 32 100GbE ports in a 1U fixed form factor. Both the SLX 9140 and 9240 Switches feature the first programmable ASIC in their class, enabling rapid delivery of new capabilities through software. This eliminates expensive forklift upgrades when new technologies and protocols are introduced into the environment. For more information, see the SLX 9140 Data Sheet and the SLX 9240 Data Sheet.

SLX 9150 Leaf and 9250 Spine Switches

The SLX 9150 are purpose-built 1U high density and cost effective leaf switches that provide 1/10/25/40/100GbE connectivity. The SLX 9250 is designed for high-performance servers and distributed applications and deliver 100/40 GbE for leaf and spine configurations. By leveraging both high-density switches, data center networks can dramatically improve power, space and cooling efficiencies, even at scale. Both switches run Extreme Fabric Automation and leverage the onboard

Extreme Insight Architecture's Guest VM and enable plug-n-play fabrics for day 9 provisioning and day 1 configuration of all tenant services across the entire fabric at no additional cost. For more information, see the SLX 9150 Data Sheet and the SLX 9250 Data Sheet.

SLX 9540 Edge Switch

The SLX 9540 Switch delivers carrier-class features in a cost-effective 1U fixed form factor optimized for data center interconnect, WAN edge, and Internet exchange point deployments. It offers 48 10GbE ports and 6 100GbE ports. For more information, see the SLX 9540 Data Sheet.

SLX 9640 Fixed Router

The SLX 9640 is designed for diverse deployment options— such as Internet border, border routing, data center interconnect, all in a 1U fixed form factor. With its carrier-class Ethernet features, SLX 9640 offers flexible port configurations with 24 ports of dual mode 1/10GbE and 12 ports of dual mode 40/100GbE. In addition, each 100GbE port can support 4 ports of 25GbE via breakout, while each 40GbE port can support 4 ports of 10GbE via breakout. For more information, see the SLX 9640 Data Sheet.

SLX 9850 Core Router

With 28.8-terabit extensibility, real-time network visibility, and DevOps-style automation, the SLX 9850 Router waddresses the massive and growing scale, analytics, and agility needs of the digital business world. An open, flexible platform gives service providers and enterprises the power to deliver high-performance services on demand. The SLX 9850 is available in two different models – 4 interface-slot and 8 interface-slot systems. For more information, see the SLX 9850 Data Sheet.

Flexible Network Virtualization Options

Data center fabrics based on SLX platform support flexible network virtualization—including controller-based architectures such as VMware NSX and standards-based, controller-less architectures leveraging Border Gateway Protocol-Ethernet Virtual Private Network (BGP-EVPN)—to enable workload agility, security, and segmentation within and across data centers. Overlay performance is optimized with the SLX platform's ASIC-based VXLAN tunnel encapsulation to ensure speed without compromise. Paired with the scale and rich visibility capabilities of the SLX family, virtual and physical data center networks can operate seamlessly.

Pervasive Network Visibility and Programmable Interfaces

By embedding network visibility, organizations can improve network operations and reduce operational costs through pervasive, granular, real-time network monitoring and troubleshooting with dynamic flow identification, intelligent preprocessing, and flexible data streaming. The SLX Insight Architecture and SLX Visibility Services provide an innovative approach to network monitoring and troubleshooting that makes it faster, easier, and more cost-effective to get the comprehensive, real-time visibility needed for network operations and automation.

SLX Insight Architecture

Organizations can improve operational efficiency and troubleshooting with the SLX Insight Architecture. Rich filtering capabilities ensure that just the traffic required for visibility processing is captured. An open guest VM environment provides the capability to run third-party monitoring and analytics applications directly on the switch or router, coupled with a dedicated, internal analytics path and high-performance data streaming options for easy integration with numerous network analytics tools.

Plug-n-Play Data Center Fabrics with Extreme Fabric Automation

Extreme Fabric Automation simplifies and accelerates the deployment of the data center IP Fabric. The on-box application runs as a service on the Extreme Insight Architecture Guest VM and uses industry-standard open API based programmable interfaces to provide the easiest way to deploy, provision and automate single or multiple data center IP Fabric networks in the fastest and most efficient way. Extreme Fabric Automation is the point of integration for VMware, Microsoft and OpenStack. Simply cable the devices, configure a management IP and run the application from a single SLX switch. The IP Fabric underlay, overlay and tenants will be fully configured within seconds.

SLX Visibility Services

Visibility into highly distributed multitier applications is made possible with SLX Visibility Services and its support for rich classification and workload matching with network-wide scale. Physical and virtual network traffic data collected from multiple network layers delivers overlay and workload visibility across the network. Rule-based actions can be automatically applied to incoming network traffic, and context-rich data can be delivered to the SLX Insight Architecture, Extreme Workflow Composer, or third-party analytics and monitoring applications.

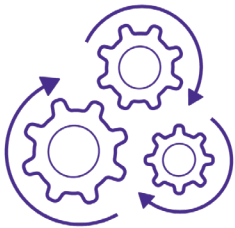## Extreme Management Center for Unified Insight, Visibility and Control

High levels of virtualization, containerization and cloud environments, combined with the enormous traffic, limit visibility in the modern data center. To address that dynamic challenge, SLX switches and routers, can be managed by Extreme Management Center. Extreme Management Center includes a suite of applications, empowering administrators to deliver a superior quality experience to users through a single consolidated view and a common set of tools to provision, manage and troubleshoot the network. It works across wired and wireless networks, from the edge to the data center and private cloud. It gives you the granular visibility and real-time analytics, to make data-based business decisions.

Extreme Management Center provides a consolidated view of users, devices and applications for wired and wireless networks – from data center to edge. Zero-touch provisioning allows a user to quickly bring a new infrastructure online. A granular view of users, devices, and applications with an easy-to-understand

dashboard, enables efficient inventory and network topology management. Get more information on [Extreme Management Center](#).

Open Architecture for Orchestration

Solutions work across the orchestration ecosystem to ensure smooth interoperability regardless of an organization's preferred system. Integrations with VMware, Microsoft, and OpenStack allow information from the physical network to be shared with the orchestration layers. Due to the open and flexible architecture of the SLX switching and routing platforms, orchestration actions can be easily executed on both physical and virtual networks.

A Foundation of Intelligent Automation, Visibility, and Agility for the Digital Era

The SLX data center portfolio, along with Extreme Management Center provide agility across all layers of the data center - from programmable hardware through orchestration.

The portfolio enables organizations to leverage various network visibility and analytics technologies and assure intelligent automation that spans the entire network lifecycle. Open at all layers, componentized, next-generation data center technologies can be deployed as an integrated solution or used with popular industry automation or analytics tools, providing organizations with flexibility as they digitally transform.
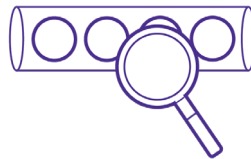
Automation

Extreme Fabric Automation in SLX 9150 and SLX 9250 platforms enable plug and play fabrics in seconds. Throughout the automation journey, Extreme continues delivering on the ability to automate at your pace. Extreme Fabric Automation provides unprecedented innovation for data center networks of all sizes by simplifying and accelerating the provisioning of fabric infrastructure and tenant services without the need for additional complex server hardware.

Pervasive Visibility

Extreme's SLX Insight Architecture and SLX Visibility Services enable network visibility from wire to workload for pervasive real-time monitoring and automated actions. And with Extreme Management Center, administrators now have a single consolidated view and a common set of tools to provision, manage and troubleshoot the networks from edge to data center and private cloud.
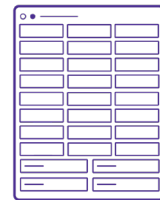
Adaptive Platform Flexibility

The SLX portfolio enables agility at all layers of the data center stack with programmable ASICs, open APIs, and designs that adapt to emerging speeds, standards, and protocols.

Extreme™
Customer-Driven Networking

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