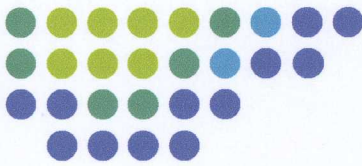# Ridgeline Network and Service Management Software

IT and network management are challenged more than ever to serve end users with a diverse set of applications and service requirements. This is being driven by prolific communications, departmental expansion, and the needs of a mobile workforce. To compound the problem, today's networks are also subject to:

- Proliferation of new converged and mission-critical applications
- Constantly changing service offerings
- Unpredictable and rapidly growing network traffic
- Security issues that threaten network integrity
- Pressing requirements for simplicity and expediency in network deployment

The demands placed on network management systems are tremendous. An effective system must enhance overall availability by monitoring and dynamically responding to network failures and security threats. It has become equally important for a network management system to increase the extensibility of a network by adapting to the changing demands of new services and applications in this age of convergence.

Ridgeline Network and Service Management is a key component to achieving network management simplicity. Ridgeline is a powerful yet easy-to-use application that facilitates management of a network of Extreme Networks® products and solutions with the flexibility to manage select third-party devices. Ridgeline provides a comprehensive set of features to provision, monitor, troubleshoot and manage a rapidly changing network infrastructure and its elements.
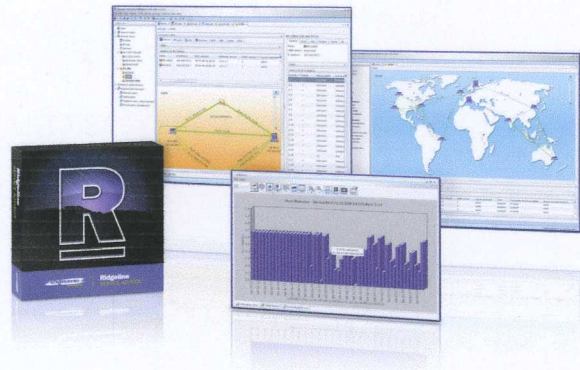
*Ridgeline™ offers an intuitive user interface that reduces the complexity of managing converged networking environments.*

## Operational Simplicity

- Flexible and intuitive user interface
- Topology view with alarm integration
- Firmware and configuration management

## Carrier-Class Availability

- Intelligent alarm systems and real-time statistics
- Ethernet Automatic Protection Switching (EAPS) provisioning, monitoring and network configuration validation
- End-to-end network service provisioning, visualization and monitoring

## Secure Management and Communications

- Operator and administration control based on roles
- SNMPv3, SSH-2 and HTTPS protocol support
- Audit log

## Service Extensibility

- Universal Port Manager for easier deployment of ExtremeXOS® Universal Port profiles
- Link Layer Discovery Protocol (LLDP)—protocol support

## Network Automation

- Job/task management and scheduling
- Flexible scripts and macros to automate provisioning and monitoring

## Extensible Network and Service Management

- Ridgeline InSite Software Development Kit (SDK)
- Secured North Bound Interface (NBI)

extreme

## Operational Simplicity

Ridgeline provides a flexible and intuitive user interface that makes navigation and performing network operations easier. Its dockable Windows interface lets the user view critical status and configuration of different devices simultaneously. The topology view in Ridgeline displays every element of the network and how they are connected in Layer 2 and Layer 3. Configuration management further simplifies operations. Configuration management archives and reloads device configuration and performs configuration diffs or baselining for auditing purposes. Firmware management obtains firmware version and availability information, and performs multi-step upgrades at once or scheduled for single or multiple devices.

The flexible scripts and macros in Ridgeline help network managers to configure multiple devices concurrently with minimal administrator intervention. Users can create automatic standard configurations with scripts for repetitive execution as needed. In addition, Ridgeline manages and allows customization of ExtremeXOS CLI scripts—a very efficient way to roll out your network using configuration templates that can be applied to a switch via CLI scripts. This allows users to select CLI script templates that, for example, configure EAPS and ELSM resiliency, link monitoring protocols, Network Login and other best practices network security settings on a switch on all edge ports, thereby reducing switch configuration time.

The client/server architecture of Ridgeline provides ease of use and flexibility. The Ridgeline client is automatically updated when there is a new version available on the server. For deployments with multiple Ridgeline servers, the user can designate one of the servers to be the primary, which will collect status from other servers and present them in a consolidated view.

## Carrier-Class Availability

One of the key requirements of availability is to provide notifications of the health and status of the network. Alarm Manager provides detailed notification for all events in the network. Real-time statistics for multiple ports and devices help you manage your network effectively and increase continuous availability of the network.

Ridgeline manages any EAPS rings in the network. The EAPS configuration verification and validation tools of Ridgeline can be used to avoid misconfiguration.

## Secure Management and Communications

Ridgeline provides the tools and features to effectively manage operator access control and administration management rights. Operator profile-based access control helps define levels of access to Ridgeline features and functions. Operator roles allow the administrator to differentiate access levels for each group of users. Ridgeline provides multiple features that control and monitor the security features on Extreme Networks products.

To protect sensitive data from being intercepted or altered by unauthorized access, Secure Shell 2 (SSHv2) protocol and HTTPS protocols are provided.* Operations performed using the scripts feature are recorded for audit trail purposes.

## Service Extensibility

Ridgeline provides a third-party integration framework to help you integrate information from all the management frameworks to be managed and monitored. Ridgeline scripts allow execution on multiple devices in one operation, and scripts can be executed repeatedly. Any device running a MIB-II compatible SNMP agent can be discovered by Ridgeline inventory management. Third-Party Integration Framework allows basic management of third-party appliances. For managing more advanced features of a device, Ridgeline provides a mechanism to launch proprietary management tools from within Ridgeline. Ridgeline supports LLDP for discovery of third-party devices.

## Network Automation Scripting

The Ridgeline Script feature is a powerful scripting capability that allows the user to automate provisioning of network devices and services. It provides a comprehensive set of programming control structures that allows the user to create complex provisioning workflows. The Ridgeline administrator can assign access levels to control who is allowed to run and modify a script. To use a script, the user simply selects the desired script from the menu, enters the required parameters, and selects the list of devices to which the script applies Configuration changes are recorded in an audit log.

## Job Scheduler

The Job/Task Scheduler can execute Ridgeline functions on specified devices at specified times. Ridgeline scripts can now be configured as script tasks which can run automatically at designated times.

![Extreme Networks logo]
**Make Your Network Mobile**
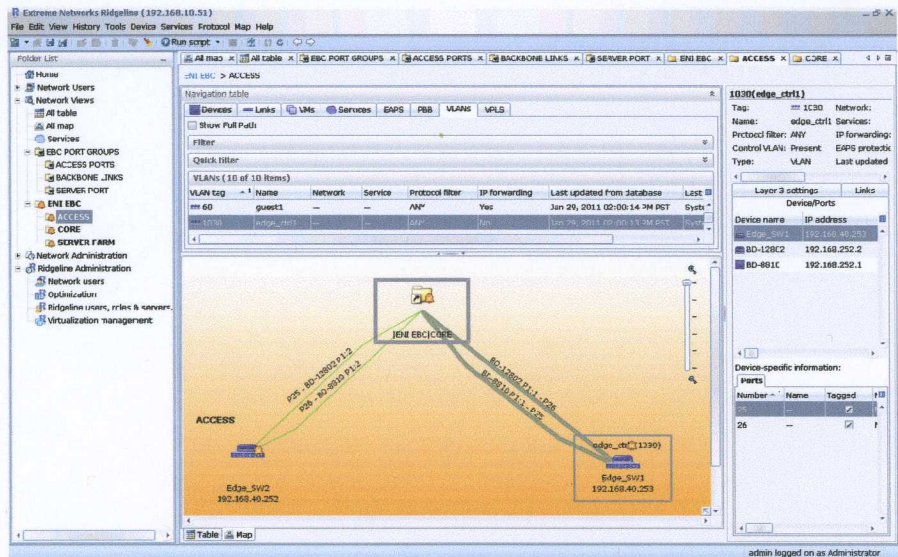
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