



HP AllianceONE Extended Services zl Module with Riverbed Steelhead RiOS Application

Data sheet

Product overview

Accelerate business growth while reducing infrastructure costs with the HP networking integrated approach to delivering highly reliable network connectivity plus wide area data network enhancement. Designed for HP networking zl chassis series switches, the HP AllianceONE Extended Services zl Module with integrated Riverbed® Steelhead RiOS® Application enables businesses to drive down operational costs by getting more out of the infrastructure they already have and avoiding costly WAN upgrades. This all-in-one network solution delivers additional savings by reducing space allocation and cutting power consumption in the branch office of a distributed enterprise organization.

Key features

- WAN enhancement
- Application acceleration over WAN connections
- Two 10-GbE connections to the switch backplane
- Industry-leading warranty



Features and benefits

Application highlights

- **Reduced network traffic with WAN enhancement:** the Riverbed® Steelhead RiOS® application removes repetitive traffic from your WAN by securely storing data that can be reused by any application; whether a client requests a file that has been renamed, emails an attachment, or uses another application like FTP or a Web-based application, traffic that has been across the network before will not be retransmitted; this approach frees up bandwidth and can reduce overall bandwidth costs
- **Accelerated enterprise applications:** the Riverbed solution layers TCP and application protocol enhancements on top of its data-reduction technique to deliver application performance increases of 5 times, 10 times, and in some cases up to 100 times faster across the broad range of applications that enterprise businesses care about the most
- **Accelerated IT consolidation:** whether an organization is focused on consolidating file servers, email servers, SAN or NAS devices, or remote tape backup libraries, WAN enhancement performance improvements help ensure that remote users can successfully access consolidated data and applications, while the resulting WAN bandwidth improvements permit IT managers to reduce or altogether avoid costly WAN upgrades
- **Rapid return on investment:**
 - **Reduced capital expenditures on IT:** WAN enhancement improves application responsiveness, enabling IT consolidation to occur without impacting application performance
 - **Increased productivity and collaboration:** improved real-time collaboration results from faster LAN-like application responsiveness
 - **Faster WAN/network backup:** occurs between data centers for data mirroring as well as for data backup of users' laptops and desktops in a secured centralized data store

- **Multilayer end-to-end security:**

- **Improved SSL traffic:** remains encrypted between client and server, eliminating the need for certificates or private key distribution between WAN endpoints
- **Appliance-to-appliance encryption:** the Riverbed RiOS application offers SSL encryption to help ensure that data between two sites is encrypted
- **Data store encryption:** the RiOS application provides encryption capability for the data stored on disk

Management

- **Front-panel RJ-45 management port:** provides direct access to application user interface and configuration
- **Remote configuration and management:** is available through a secure Web browser or a command-line interface (CLI)

Connectivity

- **Two 10-GbE connections to the switch:** two internal wire-speed 10 GbE ports to the switch backplane
- **USB port:** one external USB 2.0 port is available for application use; for example, external hard drives or other forms of mass storage

Performance

- **High-performance processor system:** Intel® Core™ 2 Duo T9400 Processor at 2.53 GHz, 6 MB cache provides a high-performance compute environment designed for a dual switch slot
- **Memory subsystems:** 4 GB of DDR2-1066 MHz dual-channel memory provides quick application performance
- **Disk drive:** 500 GB SATA II 7200 rpm hard disk drive allows quick data read/writes to enhance application performance
- **High-performance network bandwidth:** includes two internal wire-speed 10 GbE ports to the switch backplane

Resiliency and high availability

- **Redundant power supplies:** services module has the same level of power supply redundancy as the switch in which it is installed

Ease of use

- **Locator LED (module):** allows users to set the locator LED on a specific module to either turn on, blink, or turn off; simplifies troubleshooting by making it easy to locate a specific module among other identical or similar modules

Additional information

- **Riverbed RiOS application:**
 - **Application performance:** the HP AllianceONE Extended Services zl Module with Riverbed Steelhead RiOS Application provides approximate performance to the Riverbed Steelhead Optimization System (RiOS) version 6.1.1 on Riverbed Steelhead 1050M series
 - **For more information:** please see www.riverbed.com for more information on Riverbed RiOS application capabilities, features, and benefits

Warranty and support

- **Included support services:** HP networking offers support services for the hardware platform that hosts the Riverbed Steelhead RiOS Application. These services are described below.
- **HP networking product warranty summary:** Lifetime warranty with the exception of the hard disk which has a 5-year warranty: for as long as you own the product, with next-business-day advance replacement (available in most countries).
- **HP support Included with purchase price:** Technical assistance via email and telephone, as well as electronic case submission, are available during HP local business hours for product-specific questions on product features, specifications, product installation, general hardware configuration, basic troubleshooting, and usage.
- **Riverbed support included with purchase price:** 24 x 7 access to the following: Riverbed Support Web Site; Phone and Email Support; Software Support, including maintenance releases and major upgrades, for one (1) year. Support beyond the first year is available for purchase from Riverbed.

HP AllianceONE Extended Services zl Module with Riverbed Steelhead RiOS Application

Specifications



HP AllianceONE Extended Services zl Module with Riverbed Steelhead RiOS Application (J9517A)

Physical characteristics

Dimensions	9.75(d) x 8.13(w) x 3.5(h) in. (24.77 x 20.65 x 8.89 cm)
Weight	4.5 lb. (2.04 kg)

Environment

Operating temperature	32°F to 122°F (0°C to 50°C); Important: See note for 50C temperature spec rules
Operating relative humidity	15% to 90% @ 104°F (40°C), non-condensing
Non-operating/Storage temperature	14°F to 149°F (-10°C to 65°C)
Non-operating/Storage relative humidity	15% to 90% @ 149°F (65°C), non-condensing
Altitude	up to 10,000 ft. (3 km)

Notes

E5400 series switches operating temperature specifications apply to when the services module is installed; 40°C when any services module is installed in the right side of the chassis, and 50°C when all services modules are installed in the left side.

Up to four services modules can be installed in a 5412zl/8212zl chassis simultaneously.

When the services module is installed, the maximum relative humidity for the switch drops from 95% to 90%.

This product does not support Riverbed Services Platform (RSP) functionality.

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

To learn more, visit www.hp.com/networking

© Copyright 2010 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel and Core are trademarks of Intel Corporation in the U.S. and other countries.

4AA3-1054ENN, Created September 2010

