

JUNOS 8.0 J-Series Features

Overview

JUNOS 8.0 offers a number of software feature enhancements to Juniper J-series routers. These features include:

- Support for new Juniper J4350 and J6350 J-series routers
- J-Web support for multilink interfaces
- J-Web packet capture and diagnosis
- DLSw peer load-balancing
- RMON-based monitoring of key health metrics
- XML interface for ping and trace route commands
- MLPPP and LFI support for serial interfaces

New J-Series Features in JUNOS 8.0

J-series Feature	Description
Support for new Juniper J4350 and J6350 J-series routers	<p>Juniper J4350 and J6350 routers provide up to Gigabit Ethernet performance for enterprise remote, branch and regional offices. They run modular JUNOS software, which offers many advanced services (MPLS, IPv6, QoS, multicast, etc) and security (stateful firewall and IPSec VPN) at no additional charge. J-series routers are forward-looking platforms with modular flexibility, performance headroom and extensible memory to meet future demands, providing unmatched reliability, investment protection, and value for the enterprise.</p> <p>The new J4350 and J6350 offer the following advantages over the existing J4300 and J6300 routers:</p> <ul style="list-style-type: none"> • ~ 400% improvement in forwarding performance • ~ 400% improvement in FW+NAT performance • Hardware encryption is supported • EPIM support for high speed connectivity (copper GE, SFP GE, & 4xFE) • Four onboard GE ports • FIPS capable platform (Certified post FRS) • NEBS versions available
J-Web support for multilink interfaces	<p>This interface allows users to assign a number of multilink interfaces together into a single logical link. The following multilink interfaces are configurable through J-Web:</p> <ul style="list-style-type: none"> • Multilink Point-to-Point Protocol (MLPPP): Enables users to bundle multiple PPP links into a single logical link. • Multilink Frame Relay (MLFR) (FRF.15 End-to-End Multi-link Frame Relay): Enables users to bundle multiple Frame Relay data-link connection identifiers (DLCIs) into a single logical link. <p>This feature can be useful to those who prefer to configure multilink via a Web-based GUI, rather than the JUNOS command line interface (CLI)</p>
J-Web packet capture and diagnosis	<p>This feature provides users with an intuitive Web interface to capture packets to a file while showing partial packet decodes in near real-time. Users are able to filter the captured packets using the same expressions used by topdump (and by the monitor traffic CLI command). A web interface for constructing simple filters is provided.</p>
DLSw peer load-balancing	<p>DLSw load-balancing provides users the ability to control which peer router a DLSw prefers. If a preferred peer router has been assigned, the DLSw router will wait for a specified time to get a response from that peer. If the preferred peer does not respond with ICANREACH_ex in the specified time, another peer's response is accepted in its place.</p> <p>If circuit load balancing is required between remote peers based on circuit weights, a load-balance algorithm ensures that the number of circuits going through each peer is balanced according to the user-configured circuit weight on each peer.</p>
RMON-based monitoring of key health metrics	<p>This feature supports predefined and configurable threshold limits for key operating parameters, such as CPU and memory utilization. An alert mechanism indicates when threshold limits are violated, and RMON logs the event while generating an SNMP trap.</p>
XML interface for ping and traceroute commands	<p>The Juniper XML interface has been extended to support these two common operational commands. This feature also enhances the usability of XSL diagnose scripts which are now able to initiate both ping and traceroute operations and parse the results.</p> <p>This feature adds a JUNOScript interface to the following CLI commands:</p> <ul style="list-style-type: none"> • ping (IPv4) • ping6 (IPv6) • traceroute (IPv4) • traceroute6 (IPv6)
MLPPP and LFI support for serial interfaces	<p>This feature provides support for Multilink Point-to-Point Protocol (MLPPP) and Link Fragment Interleaving (LFI) on J-series serial interfaces. MLPPP allows for the splitting, recombining and sequencing of datagrams across multiple logical data links. This is defined in RFC 1990. The MLPPP protocol supports breaking up of larger data packets into multiple fragments and re-assembly on the receiving end. LFI can reduce delay and jitter on links by breaking up large datagrams and interleaving delay-sensitive packets (voice) with the resulting smaller fragments.</p>

Availability

The aforementioned features are available worldwide on all Juniper J-series routers in JUNOS 8.0

If you have any questions on this topic, please contact Sanjay Kalra (skalra@juniper.net)