



# MANAGING JUNOS OS WITH JUNIPER NETWORKS J-WEB

## Product Overview

J-Web is a Web-based GUI that provides users with simple to use tools to administer and manage routers using Juniper Networks Junos operating system. Since J-Web is built into Junos OS, IT administrators and network operators can quickly and easily monitor, configure, troubleshoot and manage any Juniper Networks J Series Services Routers, M Series Multiservice Edge Routers, MX Series 3D Universal Edge Routers, EX Series Ethernet Switches, or T Series Core Routers using this simple and intuitive embedded Web-based interface

## Product Description

Juniper Networks® J-Web is the embedded GUI for Juniper Networks Junos® operating system. It is a device management application that complements the existing suite of element and service management products from Juniper.

## Architecture and Key Components

J-Web's functions have been divided into four key areas: monitor, configuration, diagnose and manage. Each of these areas has specific functions associated with it. These functions are further detailed below.

### Monitor

The monitor function allows the user to view the status of different components of a router via the GUI. The monitor function is similar to the Junos OS “show” command, except that data is presented in tabular formats, with easy to identify color coded status indicators.

Users can monitor a number of system wide functions, including:

- System
  - System identification data including serial number, Junos OS version, IP address
  - Users
  - Uptime
  - Memory usage
  - CPU usage
- Chassis
  - Views of the power supply, component temperature and fan status
- Interfaces
  - Summary of all interfaces on the routing platform with up/down status indicators
  - Detailed view of each interface can be viewed by clicking on the interface name

- Hardware inventory
  - Detailed table containing information about all of the hardware modules including serial numbers and part numbers of PICs.
- Routing
  - Views of the route summaries
- MPLS
  - Details of the MPLS configuration, Label Switched Path statistics and RSVP sessions
- Stateful firewall flows
- IPsec
  - Summary of IPsec tunnels and IKE security information
- Network Address Translation (NAT) and Dynamic Host Configuration Protocol (DHCP) settings
- Real Time Performance Monitoring (RPM) tests and results

## Configuration

One of the key advantages of the J-Web is the incorporation of quick configuration wizards to help simplify configuration tasks. Wizards help reduce the time required to do staging and installation and in this way, J-Web helps to minimize operational expenses for the enterprise or service provider. J-Web includes quick configuration wizards for:

- Basic router setup
- User configuration – Specify users, login class and authentication methods
- SNMP
- Routing – Configuration for Static routing, RIP, OSPF and BGP
- Firewall/NAT – Users can enable stateful firewall by specifying untrusted interfaces to which a firewall will be applied
- IPsec – Users can set up encrypted, secure tunnels using IPsec by providing the source and destination IP addresses of the tunnel
- RPM – Configuring tests to measure both one way and two way delay, from the router to a remote IP destination

Users can also use the J-Web configuration editor to change any Junos OS configuration statement on the router, and are presented with an intuitive Web-based interface in place of a standard command line interface.

## Diagnose

The diagnose function allows the user to initiate ping and traceroute tests by specifying a remote host address along with a number of other more advanced options. J-Web displays the output from these tests in real time, allowing users to troubleshoot connectivity problems remotely from their Web browser.

## Manage

The manage function provides the user with the ability to perform routine router administration tasks easily via the Web user interface.

- Configuration file management
  - Displays of the commit history along with information about the current version of configuration file. Users can also initiate a comparison between two different versions of a configuration file to view the differences. These differences are displayed visually with color coding so that the user can easily do a comparison.
- Software upgrade
  - Software upgrades can be performed on Juniper Networks J Series Services Routers by specifying a location such as a server from which to retrieve an updated software version or software patch.
- License management
  - The J Series introduces a new licensing mechanism on a per feature basis.
  - License summary
  - J-Web displays a summary of all of the current licenses that the user has purchased.
  - Addition of new licenses: New licenses can be selected and then installed with the purchase of a license key for the specific feature required.
- Reboot
  - The user can initiate a reboot via J-Web.

Other additional features of J-Web include:

- Integrated, powerful “mouse over” help menu activated by pointing the mouse to a specific object on the screen.
  - Security authentication: J-Web uses user name and password to authenticate users.
  - HTTPS can be used to provide secure access to J-Web.

## Features and Benefits

- J-Web is designed to allow non-technical users in branch office/ small office environments to commission and bring a router online quickly and easily.
- J-Web offers seamless GUI access to all of the features and functions of Junos OS. In mixed vendor environments, users who use J-Web do not have to be experts in Junos OS to deploy the Juniper equipment. This can reduce timelines for new service deployment.
- J-Web is easy to use because it can be invoked from both NetScape and Microsoft Internet Explorer browsers, leveraging web technology that users are already familiar with.
- J-Web can be quickly integrated into existing network management or OSS (Operational Support System) applications thereby minimizing complexity for the service provider or enterprise customer. J-Web facilitates integration to third party applications like Micromuse Netcool Omnibus, Dorado RedCell Manager, IBM Tivoli and HP Openview.
- Fast service changes and upgrades can be made with J-Web quick configuration wizards. These wizards consist of simplified data entry forms for configuration changes that help to minimize operator error and simplify router management.
- New services can be rapidly created and deployed with the use of configuration and QoS wizards that allow for real-time changes to service parameters.
- J-Web is bundled with Junos OS on all J Series Services Routers and is an optional package for Juniper Networks M Series Multiservice Edge Routers and Juniper Networks T Series Core Routers.

## Juniper Networks Services and Support

Juniper Networks is the leader in performance-enabling services and support, which are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to bring revenue-generating capabilities online faster so you can realize bigger productivity gains and faster rollouts of new business models and ventures. At the same time, Juniper Networks ensures operational excellence by optimizing your network to maintain required levels of performance, reliability, and availability. For more details, please visit [www.juniper.net/us/en/products-services/](http://www.juniper.net/us/en/products-services/).

## Ordering Information

J-Web comes free of charge for the Juniper Networks J Series Services Routers, MX Series 3D Universal Edge Routers, EX Series Ethernet Switches, and the M7i, M10i, and M120 Multiservice Edge Routers. A license is required for the other Multiservice Edge Routers and T Series Core Routers. Licenses are available individually or in multi-packs at a reduced cost. Annual maintenance is additional for all platforms.

## About Juniper Networks

Juniper Networks, Inc. is the leader in high-performance networking. Juniper offers a high-performance network infrastructure that creates a responsive and trusted environment for accelerating the deployment of services and applications over a single network. This fuels high-performance businesses. Additional information can be found at [www.juniper.net](http://www.juniper.net).

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