

Juniper Networks SCB-MX960-S

Juniper MX240 MX480 MX960 Switch Control Board SCB-MX960-S User Manual

Comprehensive guide for installation, operation, and maintenance.

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the Juniper SCB-MX960-S Switch Control Board with Routing Engine. This board is designed for use within Juniper MX240, MX480, and MX960 series routers, providing essential control plane and routing engine functionalities for high-performance network environments.



Figure 1: Juniper SCB-MX960-S Switch Control Board with Routing Engine.

SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your SCB-MX960-S. Ensure the router chassis is powered off and grounded before proceeding.

1. Safety Precautions

- Always wear an electrostatic discharge (ESD) wrist strap connected to a grounded surface when handling the control board.
- Ensure the router chassis is powered off and unplugged from the power source.
- Do not force the board into the slot; align it carefully.

2. Installing the SCB-MX960-S

1. Locate an available SCB slot in your Juniper MX240, MX480, or MX960 chassis. Refer to your router's chassis documentation for specific slot locations.
2. Carefully align the SCB-MX960-S with the guides in the chosen slot.
3. Slide the board into the slot until it is fully seated. The ejector levers should begin to move inward.
4. Push the ejector levers firmly inward until they click into place, securing the board.
5. Connect necessary cables (e.g., console, management Ethernet) to the front panel ports of the SCB-MX960-S.

3. Initial Power-Up and Configuration

- After installation, connect the router to a power source and power it on.
- Monitor the system boot process via the console port.
- Access the Junos OS CLI to perform initial configuration, including network interfaces, routing protocols, and system settings. Refer to the Junos OS documentation for detailed configuration guides.

OPERATING INSTRUCTIONS

The SCB-MX960-S operates as the central control and routing engine for the Juniper MX series router. Its primary function is to manage the router's control plane, including routing protocols, system management, and network services.

1. Status Indicators

The front panel of the SCB-MX960-S features various LEDs to indicate its operational status:

- **STATUS LED:** Indicates the overall operational status of the board. Green for normal operation, amber for minor alarms, red for major alarms.
- **LINK/ACTIVITY LEDs:** For Ethernet management ports, indicate link status and data activity.
- **ALARM LED:** A dedicated LED for system alarms.

2. Management Access

Access the SCB-MX960-S for management and configuration via:

- **Console Port:** For direct serial access, especially during initial setup or troubleshooting.
- **Management Ethernet Ports:** For remote access via SSH, Telnet, or web interface (J-Web) once configured.

MAINTENANCE

Regular maintenance ensures the reliability and performance of your SCB-MX960-S.

1. Routine Checks

- Periodically check the status LEDs on the front panel for any alarm indications.
- Monitor system logs for errors or warnings.
- Ensure proper airflow around the router chassis to prevent overheating.

2. Firmware and Software Updates

Keep the Junos OS software updated to the latest stable version to benefit from new features, bug fixes, and security enhancements. Refer to Juniper Networks documentation for upgrade procedures.

3. Cleaning

If necessary, gently clean the front panel of the board with a soft, dry, lint-free cloth. Do not use liquid cleaners directly on the board.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter with the SCB-MX960-S.

Problem	Possible Cause	Solution
SCB STATUS LED is Amber or Red	Minor or Major alarm detected; board not fully seated; power issue.	Check system logs for specific alarm details. Reseat the board firmly. Verify power supply status.
Cannot access CLI via Console	Incorrect console cable; incorrect serial port settings; board not powered on.	Ensure correct console cable (RJ-45 to DB-9 adapter). Verify serial settings (9600 baud, 8 data bits, no parity, 1 stop bit, no flow control). Check board power.
Management Ethernet port no link	Cable issue; port disabled; network configuration error.	Check Ethernet cable. Ensure port is enabled and configured correctly in Junos OS. Verify connectivity to the connected device.

SPECIFICATIONS

Key technical specifications for the Juniper SCB-MX960-S Switch Control Board:

- **Model:** SCB-MX960-S
- **Brand:** Juniper Networks
- **Compatible Chassis:** Juniper MX240, MX480, MX960 Series Routers
- **Item Weight:** 10 Pounds (approximate)
- **Manufacturer:** JUNIPER NETWORKING
- **International Protection Rating:** IP54 (Protection against dust and splashing water)
- **ASIN:** B07R2DSZ2D
- **First Available Date:** January 31, 2020

WARRANTY AND SUPPORT

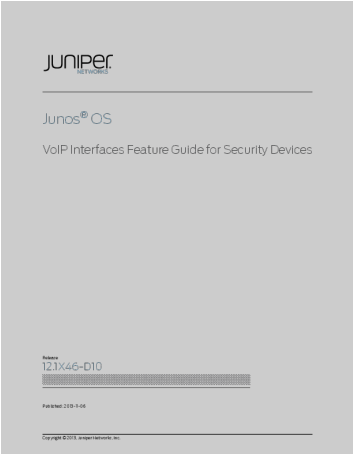
For detailed warranty information and technical support, please refer to the official Juniper Networks website or contact your authorized Juniper Networks reseller. Warranty terms and support options may vary based on region and purchase agreement.

Juniper Networks Official Website: www.juniper.net



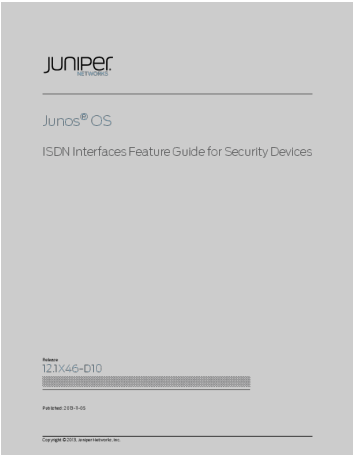
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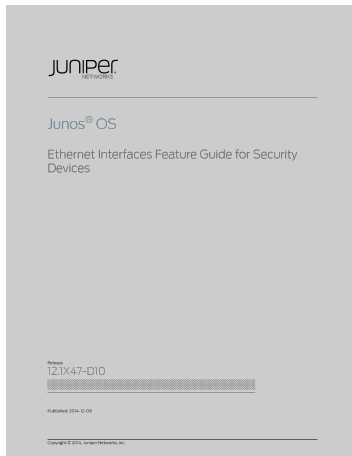
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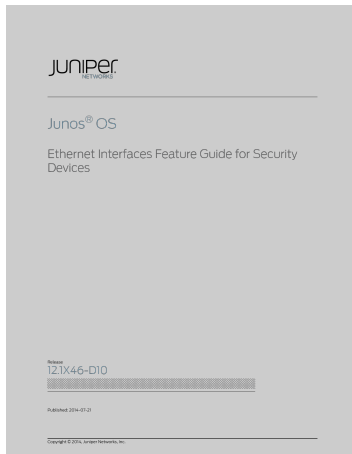


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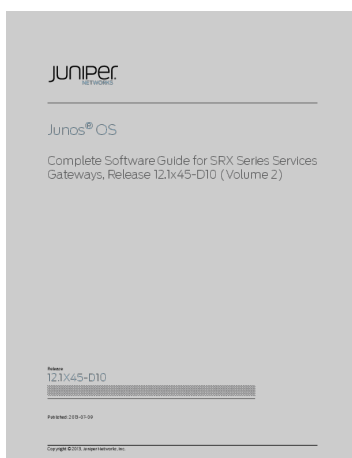


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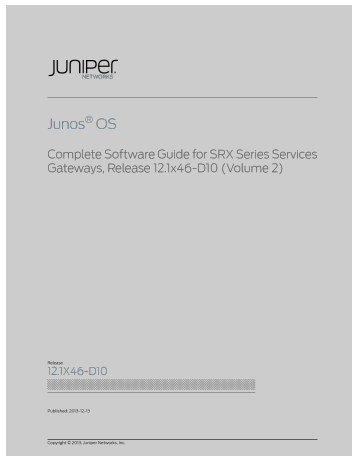


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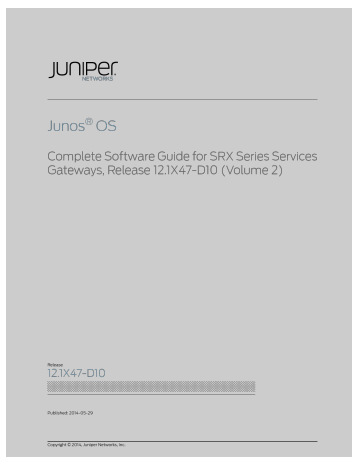


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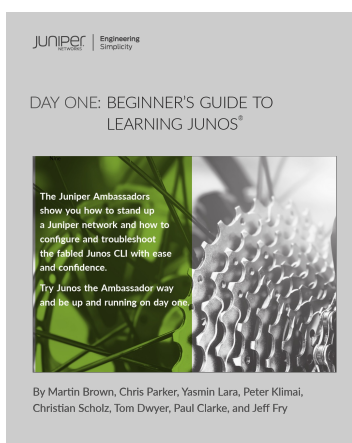


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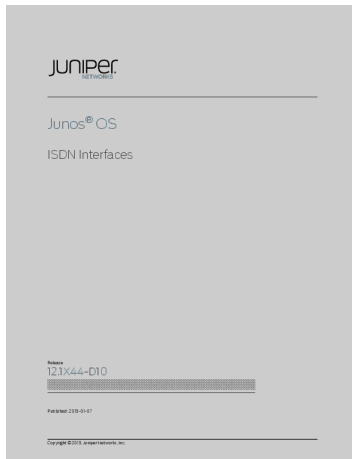


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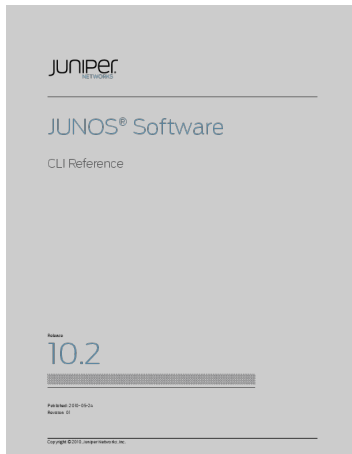
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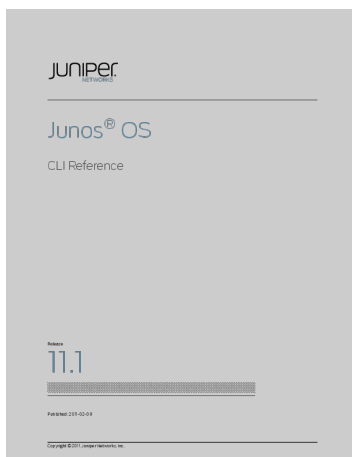
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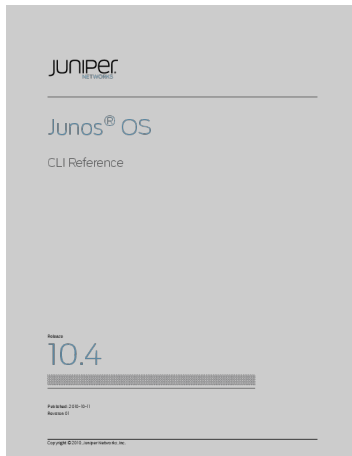


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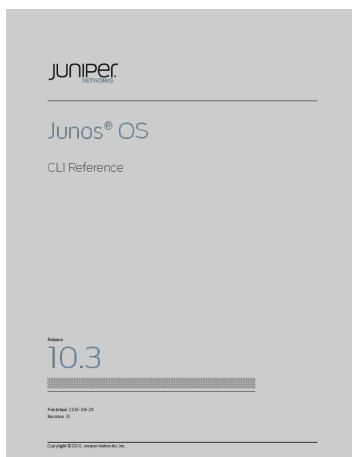


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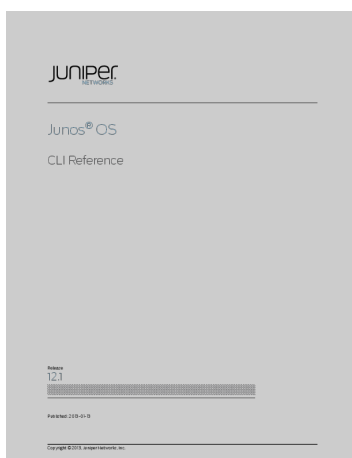


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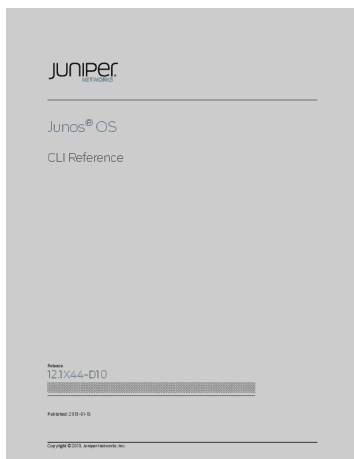


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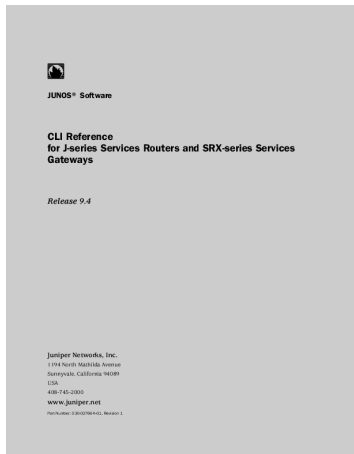


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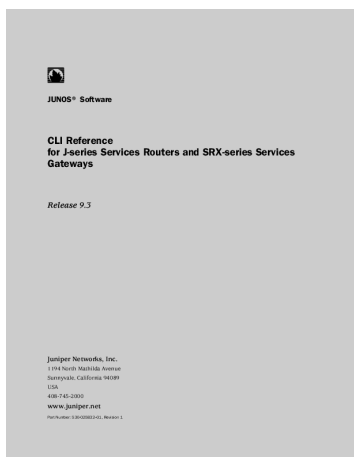


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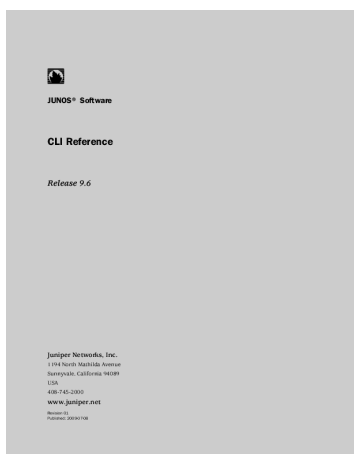


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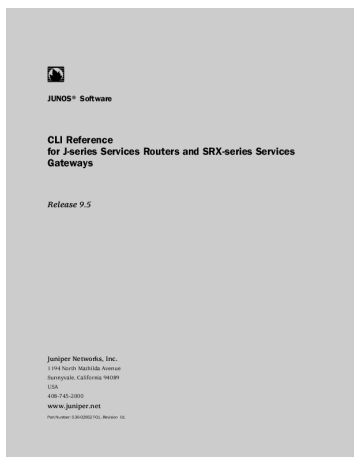


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