1.1 Features and Capabilities

1.1.1 Scalability:
The MX480 router offers exceptional scalability, supporting a wide range of interfaces, including Ethernet, SONET/SDH, and MPLS, to accommodate diverse network requirements and growth.

1.1.2 Performance:
With high-density line cards and a powerful forwarding engine, the MX480 delivers industry-leading performance, capable of handling high volumes of traffic and demanding workloads.

1.1.3 Redundancy and Resiliency:
Built-in redundancy features, such as hot-swappable components, redundant power supplies, and graceful restart mechanisms, ensure high availability and minimize downtime in mission-critical environments.

1.2 Specifications

1.2.1 Chassis Dimensions:
- Height: 30.13 in (76.52 cm)
- Width: 17.38 in (44.15 cm)
- Depth: 24.3 in (61.72 cm)
- Weight: 104 lbs (47.17 kg) (fully configured)

1.2.2 Interface Slots:
- Up to 8 line-card slots
- 2 Routing Engine slots
- 2 Switch Fabric slots
- 1 craft interface

1.2.3 Performance Metrics:
- Throughput: Up to 5 Tbps
- Forwarding Capacity: Up to 2.4 Bpps (billion packets per second)
- Maximum Interfaces: 960 10GbE, 240 40GbE, or 60 100GbE interfaces

1.3 Supported Protocols

1.3.1 Routing Protocols:
- BGP (Border Gateway Protocol)
- OSPF (Open Shortest Path First)
- IS-IS (Intermediate System to Intermediate System)
- RIP (Routing Information Protocol)
- MPLS (Multiprotocol Label Switching)
- RSVP (Resource Reservation Protocol)

1.3.2 Security Protocols:
- IPsec (Internet Protocol Security)
- SSL/TLS (Secure Sockets Layer/Transport Layer Security)
- MACsec (Media Access Control Security)

1.3.3 Multicast Protocols:
- PIM (Protocol Independent Multicast)
- IGMP (Internet Group Management Protocol)
- MSDP (Multicast Source Discovery Protocol)

1.4 Configuring and Managing MX480 Router

1.4.1 Junos OS:
The MX480 router runs Junos OS, Juniper's industry-leading network operating system. Junos provides a rich set of features for configuring and managing router operations, including a modular architecture, commit model, and rollback capabilities.

1.4.2 Junos Space:
Junos Space is a comprehensive network management platform that enables centralized management, monitoring, and automation of Juniper devices, including the MX480 router. It provides a user-friendly interface for configuration, provisioning, and troubleshooting tasks.

1.4.3 ports
MX480 has only four ports, 2 Giga ethernet ports and 2 Fast ethernet Ports.