Chapter 1

Overview

The M120 router is a new generation, quarter-rack router intended for Multiservice Edge (MSE) applications and small core applications. The M120 router supports six FPCs; of these six FPCs, two are compact FPCs:

- OC192 compact FPC (supported only on the D4 chip-based compact FPC)
- 10-Gigabit Ethernet compact FPC

The M120 router supports Type 1, Type 2, and Type 3 PICs. Specific FPCs are needed to support each PIC type.

The M120 router uses a new distributed Packet Forwarding Engine (PFE) based on the I2.0 chip. The I2.0 chip supports up to 10 Gbps (10 Gigabit Ethernet line rate or OC192 line rate for certain packet sizes).

For more M120 router hardware information, see the *M120 Internet Router Hardware Guide*.

M120 routing software can support 10,000 logical interfaces.

The M120 router software also supports the following configurable features:

- 10-Gigabit Ethernet compact FPC operating in LAN PHY or WAN PHY mode
- Internal or external clocking
- Connection mapping between any Flexible PIC Concentrator (FPC) and any Forwarding Engine Board (FEB)
- SONET options available in WAN PHY mode
- Single-rate tricolor marking (TCM) for class of service (CoS)

The M120 routing software supports the following nonconfigurable features:

- Per drop precedence (DP), per-queue counters
- Static memory allocated to the queue is based on transmit rate, not on buffer size
- Eight queues per WAN stream