

## Chapter 17

# Interpreting the Structure of the Management Information MIB

The structure of the management information MIB defines the top-level structure of the Juniper Networks enterprise-specific MIB space. For a downloadable version of this MIB, see [www.juniper.net/techpubs/software/junos/junos71/swconfig71-net-mgmt/html/mib-jnx-smi.txt](http://www.juniper.net/techpubs/software/junos/junos71/swconfig71-net-mgmt/html/mib-jnx-smi.txt).

The structure of management information MIB space has five root branches:

jnxProducts on page 207

jnxServices on page 207

jnxMibs on page 208

jnxTraps on page 209

jnxExperiment on page 209

## jnxProducts

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The object identifier for the jnxProducts root branch of the structure of management information MIB is {juniperMIB 1}. This branch of the MIB describes the Juniper Networks routers and their components, such as product line, product name, model, number of slots, and media space for holding Physical Interface Cards (PICs). It also provides information on the system's power supply state, board voltages, fans, temperatures, and air flow. In general, this branch of the structure of management information MIB is rarely polled for information because it is descriptive. However, you can poll this branch of the structure of management information MIB to determine the sysObjectId of a router as defined by MIB-II.

## jnxServices

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The object identifier for the jnxServices root branch is {juniperMIB 2}. The jnxServices root branch of the structure of management information MIB is a placeholder for future information.

## jnxMibs

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The object identifier for the jnxMIBs root branch is {juniperMIB 3} and includes one main subbranch, jnxBoxAnatomy, whose object identifier is {jnxMibs 1}. The other Juniper Networks enterprise-specific MIBs are also branches of jnxMibs. These Juniper Networks enterprise-specific MIBs include:

MPLS MIB—Whose object identifier is {jnxMibs 2}.

Juniper Networks enterprise-specific extensions to the interface MIB—Whose object identifier is {jnxMIBs 3}.

Alarm MIB—Whose object identifier is {jnxMibs 4}.

Firewalls MIB—Whose object identifier is {jnxMibs 5}.

Destination class usage MIB—Whose object identifier is {jnxMibs 6}.

Juniper Networks enterprise-specific extensions to the ping MIB—Whose object identifier is {jnxMibs 7}.

Juniper Networks enterprise-specific extensions to the traceroute MIB—Whose object identifier is {jnxMibs 8}.

ATM MIB—Whose object identifier is {jnxMibs 10}.

IPv6 and ICMPv6 MIB—Whose object identifier is {jnxMibs 11}.

IPv4 MIB—Whose object identifier is {jnxMibs 12}.

Juniper Networks enterprise-specific extensions to the RMON MIB—Whose object identifier is {jnxMIBs 13}.

Juniper Networks enterprise-specific extensions to the LDP traps MIB—Whose object identifier is {jnxMibs 14}.

Class-of-service MIB—Whose object identifier is {jnxMibs 15}.

Source class usage MIB—Whose object identifier is {jnxMibs 16}.

Reverse-path-forwarding MIB—Whose object identifier is {jnxMibs 17}.

Configuration management MIB—Whose object identifier is {jnxMibs 18}.

Passive monitoring MIB—Whose object identifier is {jnxMibs 19}.

SONET MIB—Whose object identifier is {jnxMibs 20}.

ATM class-of-service MIB—Whose object identifier is {jnxMibs 21}.

Ethernet MAC MIB—Whose object identifier is {jnxMibs 23}.

SONET APS MIB—Whose object identifier is {jnxMibs 24}.

Chassis defines MIB—Whose object identifier is {jnxMibs 25}.

VPN MIB—Whose object identifier is {jnxMibs 26}.

Monitoring services MIB—Whose object identifier is {jnxMibs 28}.

RSVP Traffic Engineering (TE) MIB—Whose object identifier is {jnxMibs 30}.

Host Resources MIB—Whose object identifier is {jnxMibs 31}.

For more information on these MIBs, see “Juniper Networks Enterprise-Specific MIBs” on page 101.

## jnxTraps

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The object identifier for the jnxTraps branch of the structure of management information MIB is {juniperMIB 4}. The jnxTraps branch contains the enterprise-specific SNMP traps supported by the JUNOS software. These Juniper Networks enterprise-specific SNMP traps include:

jnxChassisTraps—Whose object identifier is {jnxTraps 1}.

jnxChassisOKTraps—Whose object identifier is {jnxTraps 2}.

jnxRmonTraps—Whose object identifier is {jnxTraps 3}.

jnxLdpTraps—Whose object identifier is {jnxTraps 4}.

jnxCmNotifications—Whose object identifier is {jnxTraps 5}.

jnxSonetNotifications—Whose object identifier is {jnxTraps 6}.

jnxPMonNotifications— Whose object identifier is {jnxTraps 7}

jnxCollectorNotifications—Whose object identifier is {jnxTraps 8}.

jnxPingNotificationPrefix—Whose object identifier is {jnxTraps 9}.

## jnxExperiment

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The object identifier for the jnxExperiment branch of the structure of management information MIB is {juniperMIB 5}. The jnxExperiment branch contains experimental Juniper Networks enterprise-specific MIBs. This is the top-level object identifier registry used by Juniper products for SNMP modules containing experimental MIB definitions.

jnxExperiment MIBs are defined as the following:

IETF work-in-process MIBs that have not been assigned a permanent object identifier by the IANA.

Juniper Networks work-in-process MIBs that have not achieved final production quality or field experience.

The following draft supports the jnxExperiment MIB space: Internet draft draft-ietf-idr-bgp4-mibv2-03.txt, *Definitions of Managed Objects for the Fourth Version of Border Gateway Protocol (BGP-4), Second Version* (only jnxBgpM2PrefixInPrefixes, jnxBgpM2PrefixInPrefixesAccepted, and jnxBgpM2PrefixInPrefixesRejected objects).