

# Chapter 26

## Interpret the Enterprise-Specific VPN MIB

The enterprise-specific VPN MIB, whose object identifier is {jnxMibs 26}, provides monitoring for Layer 3 VPNs, Layer 2 VPNs, and VPLS (read access only). For a downloadable version of this MIB, see [www.juniper.net/techpubs/software/junos/junos60/swconfig60-net-mgmt/html/mib-jnx-vpn.txt](http://www.juniper.net/techpubs/software/junos/junos60/swconfig60-net-mgmt/html/mib-jnx-vpn.txt).

This chapter discusses the following topics:

jnxVpnInfo on page 249

jnxVpnTable on page 250

jnxVpnIfTable on page 251

jnxVpnPwTable on page 253

jnxVpnRTTable on page 254

### jnxVpnInfo

jnxVpnInfo contains information about the number of configured VPNs and active VPNs.



**Note**

For jnxVpnInfo, the JUNOS software supports only jnxVpnConfiguredVpns and jnxVpnActiveVpns.

Table 60: jnxVpnInfo

Object	Object Identifier	Description
jnxVpnConfiguredVpns	jnxVpnInfo 1	Number of configured VPNs.
jnxVpnActiveVpns	jnxVpnInfo 2	Number of active VPNs.

## jnxVpnTable

jnxVpnTable lists configured VPNs.



**Note**

For jnxVpnTable, the JUNOS software does not support vpnConfiguredSites, vpnLocalAddresses, vpnTotalAddresses, and vpnActiveSites objects.

## **jnxVpnEntry**

JnxVpnEntry contains information about a configured VPN. It has the following objects, listed in Table 61:

**Table 61: jnxVpnTable**

Object	Object Identifier	Description
jnxVpnType	jnxVpnEntry 1	VPN type.
jnxVpnName	jnxVpnEntry 2	VPN name. The VPN name must be unique for each provider edge router.
jnxVpnRowStatus	jnxVpnEntry 3	Creates, modifies, or deletes a row in this table.
jnxVpnStorageType	jnxVpnEntry 4	Identifies the storage type.
jnxVpnDescription	jnxVpnEntry 5	VPN description.
jnxVpnIdentifierType	jnxVpnEntry 6	Type of jnxVpnIdentifier.
jnxVpnIdentifier	jnxVpnEntry 7	For BGP VPNs, the route distinguisher for the VPN. For LDP VPNs, the VC ID for the circuit. A value of all zeros indicates that a route distinguisher and a VC ID are not configured for the VPN.
jnxVpnVpnAge	jnxVpnEntry 12	How old the VPN is in hundredths of a second.

## jnxVpnIfTable

The jnxVpnIfTable lists VPN interfaces.



**Note**

For jnxVpnIfprotocol, the JUNOS software supports only L2VPN and VPLS. The JUNOS software does not support vpnIfInBandwidth (jnxVpnIfEntry 8) and vpnIfOutBandwidth (jnxVpnIfEntry 9).

## ***jnxVpnIfEntry***

jnxVpnIfEntry contains information about VPN interfaces and has the following objects, listed in Table 62:

**Table 62: jnxVpnIfEntry**

Object	Object Identifier	Description
jnxVpnIfVpnType	jnxVpnIfEntry 1	The VPN type associated with an interface.
jnxVpnIfVpnName	jnxVpnIfEntry 2	The VPN name associated with an interface.
jnxVpnIfIndex	jnxVpnIfEntry 3	The interface index in the VPN. Each interface in the VPN is assigned a unique index. The index cannot be 0.
jnxVpnIfRowStatus	jnxVpnIfEntry 4	Creates, modifies, or deletes a row in this table.
jnxVpnIfStorageType	jnxVpnIfEntry 5	The storage type for this object.
jnxVpnIfAssociationPw	jnxVpnIfEntry 6	The index of associated pseudo-wire. If there is no index associated with a pseudo-wire, the index is 0. A pseudo-wire is a mechanism that carries essential elements of an emulated circuit from one PE to one or more other PEs over a PSN.

Object	Object Identifier	Description
jnxVpnIfProtocol	jnxVpnIfEntry 7	<p>Indicates the protocol running over a VPN interface.</p> <p>This object contains the following values:</p> <ul style="list-style-type: none"> <li>other (0)</li> <li>frameRelay(1),</li> <li>atmAal5(2),</li> <li>atmCell(3),</li> <li>ethernetVlan(4),</li> <li>ethernet(5),</li> <li>ciscoHdlc(6),</li> <li>ppp(7),</li> <li>cem(8),</li> <li>atmVcc(9),</li> <li>atmVpc(10),</li> <li>vpls(11),</li> <li>ipInterworking(12),</li> <li>snapInterworking(13),</li> <li>static(20),</li> <li>rip(21),</li> <li>ospf(22),</li> <li>bgp(23)</li> </ul>
jnxVpnIfStatus	jnxVpnIfEntry 10	<p>Displays the status of a monitored VPN interface.</p> <p>This object contains the following values:</p> <ul style="list-style-type: none"> <li>unknown(0),</li> <li>noLocalInterface(1),</li> <li>disabled(2),</li> <li>encapsulationMismatch(3),</li> <li>down(4),</li> <li>up(5),</li> </ul>

## jnxVpnPwTable

jnxVpnPwTable lists pseudo-wire connections.



**Note**

For the jnxVpnPwTable, the JUNOS software supports only L2VPN and VPLS. The JUNOS software supports only the objects listed in Table 63, “jnxVpnPwEntry” on page 253.

## ***jnxVpnPwEntry***

jnxVpnPwEntry contains pseudo-wire information about a VPN that is being monitored.

**Table 63: jnxVpnPwEntry**

Object	Object Identifier	Description
jnxVpnPwVpnType	jnxVpnPwEntry 1	The type of VPN type associated with a pseudo-wire
jnxVpnPwVpnName	jnxVpnPwEntry 2	The VPN name associated with a pseudo-wire.
jnxVpnPwIndex	jnxVpnPwEntry 3	The pseudo-wire index in the VPN. Each pseudo-wire is assigned a unique index. The index is not 0. The RowStatus notes whether a given pseudo-wire; for example, a row in this table is valid.
jnxVpnPwRowStatus	jnxVpnPwEntry 4	Creates, modifies, and deletes a row in this table.
jnxVpnPwStorageType	jnxVpnPwEntry 5	The storage type for this object.
jnxVpnPwAssociatedInterface	jnxVpnPwEntry 6	The VPN index of the interface associated with a pseudo-wire. If there is no interface associated with a pseudo-wire, 0 is returned.
jnxVpnPwLocalSiteId	jnxVpnPwEntry 7	The local site identifier for a pseudo-wire. When there is no local site identifier, 0 is returned.
jnxVpnPwRemoteSiteId	jnxVpnPwEntry 8	The remote site identifier. For example, the site at the end of the pseudo-wire. When there is no remote site identifier, 0 is returned.
jnxVpnPwRemotetPeldAddrType	jnxVpnPwEntry 9	The remote PE's address. For example, the router the end of the pseudo-wire.
jnxVpnPwRemotePeldAddress	jnxVpnPwEntry 10	The type of the tunnel over which the pseudo-wire is carried. If several pseudo-wires can be carried in one tunnel, each pseudo-wire is identified by the multiplexer or demultiplexer within a tunnel.  The object can contain the following values: static(1), gre(2), l2tpv3(3), ipSec(4), ldp(5), rsvpTe(6), crLdp(7)
jnxVpnPwReceiveDemux	jnxVpnPwEntry 13	The demultiplexer value that identifies received packets associated with this pseudo-wire.

Object	Object Identifier	Description
jnxVpnPwTransmitDemux	jnxVpnPwEntry 14	The demultiplexer value that identifies transmitted packets associated with this pseudo-wire.
jnxVpnPwStatus	jnxVpnPwEntry 15	The status of the pseudo-wire. The object can have the following values: unknown(0), down(1), up(2)
jnxVpnPwRemoteSiteStatus	jnxVpnPwEntry 17	The interface status at the remote end of the pseudo-wire. The object can have the following values: unknown(0), outOfRange (1), down (2), up(3)
jnxVpnPwTimeUp	jnxVpnPwEntry 18	The time in hundredths of a second that a pseudo-wire has been operational.
jnxVpnPwTransitions	jnxVpnPwEntry 19	The number of state transitions (up to down and down to up) that a tunnel has undergone.
jnxVpnPwLastTransition	jnxVpnPwEntry 20	The time in hundredths of a second since a the last transition occurred in a tunnel.

## jnxVpnRTTable

The jnxVpnRTTable contains route targets for a VPN.

## **jnxVpnRTEntry**

jnxVpnRTEntry lists route targets for a given VPN.

**Table 64: jnxVpnRTEntry**

Object	Object Identifier	Description
jnxVpnRTVpnType	jnxVpnRTEntry 1	The VPN type for which this list of route targets is defined.
jnxVpnRTVName	jnxVpnRTEntry 2	The VPN name for which this list of route targets is defined.
jnxVpnRTVIndex	jnxVpnRTEntry 3	The index within the list of route targets that specifies individual route targets that define the VPN. This index is not 0.
jnxVpnRTVRowStatus	jnxVpnRTEntry 4	Creates, modifies, or deletes a row in this table.
jnxVpnRTVStorageType	jnxVpnRTEntry 5	The storage type for this object
jnxVpnRTType	jnxVpnRTEntry 6	Type of the following route target. The type can be routeTarget[012] or none
jnxVpnRT	jnxVpnRTEntry 7	VPN route target. If jnxVpnRtype is none, the value must be all zeros.
jnxVpnRTVFunction	jnxVpnRTEntry 8	The route target export distribution type.