



Support Information for Tellabs Devices

This chapter contains support information for Virtual Network Elements (VNEs) that manage Tellabs devices in Prime Network Version 4.0.



Note

For more information about the objects and attributes described in this chapter, see *Cisco Prime Network 4.0 Supported Cisco VNEs*, *Cisco Prime Network 4.0 Supported Service Alarms*, *Cisco Prime Network 4.0 Supported System and Security Events*, and *Cisco Prime Network 4.0 Supported Technologies and Topologies* in the [Cisco Prime Network 4.0 Documentation Guide](#).

This chapter contains the following topics:

- [Tellabs 8840 Multiservice Router](#), page 11-1
- [Supported Technologies on Tellabs Devices](#), page 11-4

Tellabs 8840 Multiservice Router

This section includes the following information about Tellabs 8840 Multiservice Router devices (for information on the NE types supported in Prime Network Version 4.0, see [Tellabs 8840 Multiservice Router](#)):

- [Tellabs 8840 Multiservice Router—Supported Software Versions](#), page 11-1
- [Tellabs 8840 Multiservice Router—Supported Topologies](#), page 11-2
- [Tellabs 8840 Multiservice Router—Supported Modules](#), page 11-2
- [Tellabs 8840 Multiservice Router—Supported Technologies](#), page 11-3
- [Tellabs 8840 Multiservice Router—Supported Service Events](#), page 11-4

Tellabs 8840 Multiservice Router—Supported Software Versions

Table 11-1 **Supported Software Versions for Tellabs 8840 Multiservice Router—Prime Network Version 4.0**

Software Version	Product Version	DP Version
TMOS 7.0.0.3	3.7.2	6.0

Table 11-1 *Supported Software Versions for Tellabs 8840 Multiservice Router—Prime Network Version 4.0 (Continued)*

Software Version	Product Version	DP Version
TMOS 8.1.0.1	3.7.2	6.0
TMOS 8.1.0.1a	3.7.2	6.0
TMOS 8.1.0.1b	3.8.x-To-3.9.x	DP1206

Tellabs 8840 Multiservice Router—Supported Topologies

Table 11-2 *Supported Topologies for Tellabs 8840 Multiservice Router—Prime Network Version 4.0*

Topology Type	Link Type	Product Version	DP Version
Ethernet	Ethernet	3.7.2	6.0
MPLS	MPLS	3.7.2	6.0
Physical Layer	Physical Layer	3.7.2	6.0
BGP	BGP	3.7.2	6.0

Tellabs 8840 Multiservice Router—Supported Modules

Table 11-3 *Supported Modules for Tellabs 8840 Multiservice Router—Prime Network Version 4.0*

Module Name	Product Version	Module Description	DP Version
Tellabs 8840 Multi-Service Router Base Unit	3.7.2	Tellabs Multi-Service Router 8840	6.0
81.88X0-ULC-2	3.7.2	Tellabs 88X0 9M Universal Line Card (ULC)	6.0
Switch Control Card	3.7.2	Switch Control Card	6.0
81.8800-PLM 003C-30	3.7.2	4 PORT Oc-3c(155Mbps) concatenated long reach 40kms	6.0
81.8800-PLM 012C-20	3.7.2	4 PORT 622Mbps OC-12c MS SMF IR concatenated intermediate 15 kms	6.0
81.8800-PLM048C-10	3.7.2	1 PORT 2.5Gbps OC-48c MS SMF IR concatenated intermediate 2 kms	6.0
81.8800-PLMGE-20	3.7.2	4port Gigabit Ethernet PLM - 1000BaseLX (Includes 4 LC/SFP optics) 550 meters	6.0
81.8800-PLM10GE-40	3.7.2	1port 10Gigabit Ethernet PLM SMF LR(LAN PHY) 40Kms	6.0

Table 11-3 Supported Modules for Tellabs 8840 Multiservice Router—Prime Network Version 4.0

Module Name	Product Version	Module Description	DP Version
4 port Gigabit Ethernet PLM LX	3.7.2	4 port Gigabit Ethernet PLM LX	6.0
2 port OC-3STM-1 SMF IR	3.7.2	2 port OC-3STM-1 SMF IR	6.0
4port OC-3/STM-1 TDM MSPLM SMFIR	3.7.2	4port OC-3/STM-1 TDM MSPLM SMFIR	6.0
1port OC-48C/STM-16c TDM MSPLM SMF IR	3.7.2	1port OC-48C/STM-16c TDM MSPLM SMF IR	6.0
1 port 9M 10GiG ENET SMF LR	3.7.2	1 port 9M 10GiG ENET SMF LR	6.0
82.88X0-ULC-3-R5	3.8.x-To-3.9.x	ULC_with_36M_CAM	DP1206
81.8800-PLM003C-30	3.8.x-To-3.9.x	4Port_OC-3C/STM-1_MSPLM_LR	DP1206
81.8800-PLMTE3A-10	3.8.x-To-3.9.x	6port-DS3E3_Clear_Channel_W/ATM	DP1206
81.88X0ELCA-R5	3.8.x-To-3.9.x	12_PORT_GE_ELC_88X0_NO_OPTICS	DP1206
81.88X0ELCB-R5	3.8.x-To-3.9.x	1_PORT_10GE_ELC_LAN/WAN_88X0_NO_OPTICS	DP1206
81.88X0LCA-R5	3.8.x-To-3.9.x	Line_Card_Adapter_for_ELC	DP1206
82.88X0PLML-R5	3.8.x-To-3.9.x	10GIGE_LAN_ULC-3_-_XFP_NO_OPTIC_PLUG	DP1206
81.8800-XFP-SR1	3.8.x-To-3.9.x	1P 10GE, SR-1, LC/XFP, SMF Optics Plug, 1310 nm, 12 km	DP1206
81.8800-XFP-IR2	3.8.x-To-3.9.x	1P 10GE, IR-2, LC/XFP, SMF Optics Plug, 1550 nm, 40 km	DP1206
81.8800-XFP-LR2	3.8.x-To-3.9.x	1P 10GE, LR-2, LC/XFP, SMF Optics Plug, 1550 nm, 80 km	DP1206

Tellabs 8840 Multiservice Router—Supported Technologies

The following technologies are supported by the Tellabs 8840 Multiservice Router in Prime Network Version 4.0:

- [IP, page 11-5](#)
- [Routing Protocols, page 11-6](#)
- [Ethernet, page 11-7](#)
- [MPLS, page 11-8](#)
- [MPLS-TE, page 11-8](#)
- [Hardware, page 11-10](#)
- [Serial, page 11-11](#)

- [ATM, page 11-12](#)
- [SONET/SDH, page 11-12](#)
- [BFD, page 11-13](#)

Tellabs 8840 Multiservice Router—Supported Service Events

Table 11-4 *Supported Service Events for Tellabs 8840 Multiservice Router—Prime Network Version 4.0*

Event Name	Product Version	Expedited	DP Version
All IP Interfaces Down / Active IP Interfaces Found	3.7.2		6.0
Interface Status Down/Up	3.7.2		6.0
Card In/Out	3.7.2		6.0
Link Down/Up	3.7.2		6.0
Device Unreachable	3.7.2		6.0
CPU Over Utilized	3.7.2		6.0
Memory Over Utilized	3.7.2		6.0
Device Unsupported	3.7.2		6.0
Discard Packets	3.7.2		6.0
Dropped Packets	3.7.2		6.0
Module Unsupported	3.7.2		6.0
Port Flapping	3.7.2		6.0
Port Down	3.7.2		6.0
Rx Over Utilized	3.7.2		6.0
Tx Over Utilized	3.7.2		6.0
Card Up/Down	3.7.2		6.0
BGP Neighbor Down	3.7.2		6.0

Supported Technologies on Tellabs Devices

The following sections list the objects and attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

- [IP, page 11-5](#)
- [Routing Protocols, page 11-6](#)
- [Ethernet, page 11-7](#)

- [MPLS, page 11-8](#)
- [MPLS-TE, page 11-8](#)
- [Hardware, page 11-10](#)
- [Serial, page 11-11](#)
- [ATM, page 11-12](#)
- [SONET/SDH, page 11-12](#)
- [BFD, page 11-13](#)

IP

The following table ([Table 11-5](#)) lists the ip protocols attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-5 *IP Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0*

		MSE8840
Attributes		
IMO Name—IIPInterface		
IP Address		Y
Subnetwork Mask		Y
IP Interface Addresses Array		Y
Interface Name		Y
IP Interface State		Y
Interface Description		Y
IMO Name—IRoutingEntity		
Routing Table		Y
ARP Entity		Y
Name		Y
Logical Sons		Y
IMO Name—IRoutingEntry		
Destination IP Subnet		Y
Next Hop IP Address		Y
Type		Y
Routing Protocol Type		Y
Outgoing Interface Name		Y
IMO Name—IARPEntity		
ARP Table		Y
IMO Name—IARPEntity		
IP Address		Y

Table 11-5 *IP Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0 (Continued)*

Attributes	MSE8840
MAC Address	Y
Port	Y
Entry Type	Y

Routing Protocols

The following table (Table 11-6) lists the routing protocols attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-6 *Routing Protocols Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0*

Attributes	MSE8840
IMO Name—IOSpfProcess	
Process Id	Y
OSPF Version	Y
Router Id	Y
IMO Name—IOSpfNeighbor	
Neighbor Id	Y
Outgoing Interface	Y
State	Y
Neighbor Interface Address	Y
Area Id	Y
IMO Name—IOSpfEntry	
Area Identifier	Y
IP Address	Y
Type	Y
Administrative Status	Y
Ospf Entry State	Y
IMO Name—IOSpfInterface	
Area Id	Y
Network Type	Y
Cost	Y
State	Y

Table 11-6 Routing Protocols Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0 (Continued)

	MSE8840
Attributes	
Interface Address	Y
Interface Name	Y
IF Priority	Y
DR Id	Y
BDR Id	Y
IMO Name—ISpfTimers	
Schedule Delay	Y
Min Hold Time	Y
IMO Name—IBgpNeighborEntry	
Remote Identifier	Y
Remote Address	Y
Remote Autonomous System	Y
Peer State	Y
Hold Time	Y
Keep Alive Time	Y

Ethernet

The following table (Table 11-7) lists the ethernet attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-7 Ethernet Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0

	MSE8840
Attribute	
IMO Name—IEthernet	
MAC Address	Y
Duplex Mode	Y
isElmiEnabled	Y
AutoNegotiate	Y

MPLS

The following table (Table 11-8) lists the mpls attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-8 MPLS Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0

	MSE8840
Attributes	
IMO Name—ILdpPeer	
Peer Identification	Y
Transport Address	Y
Distribution Method	Y
Protocol Type	Y
Path Vector Limi	Y
Session Status	Y
Protocol Version	Y
Hold Time	Y
Keep Alive Time	Y
Peer Discovery Sources	Y
IMO Name—IMpls	
Distribution Protocol	Y
IMO Name—ILse	
Logical Sons	Y
IMO Name—ILdpService	
LDP Peers	Y
IMO Name—IMplsEntry	
Incoming Label	Y
Outgoing Interface and Label	Y
Switching Action	Y
Next Hop IP Address	Y
Destination Mask	Y
Destination address	Y

MPLS-TE

The following table (Table 11-9) lists the mpls-te attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-9 MPLS-TE Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0

Attributes		MSE8840
IMO Name—IMplsTETunnel		
Destination Address	Y	
Outgoing Interface and Label	Y	
LSP Identification	Y	
Requested Bandwidth	Y	
Measured Average Burst and Peak Bandwidth	Y	
Setup and Hold Priority	Y	
Affinity Bits and Mask	Y	
Automatic Route Announcement Status	Y	
Optimization Lock Down Status	Y	
Path Option	Y	
Name	Y	
Description	Y	
Administrative Status	Y	
Operational Status	Y	
IANA Type	Y	
IMO Name—IMplsTEProperties		
Administrative Weight	Y	
Attributes Identifier	Y	
Signaling Protocol	Y	
Available Physical and Reservable Bandwidth	Y	
Reserved Bandwidth	Y	
IMO Name—IMplsTEPropertiesAllocationEntry		
Priority Level	Y	
Allocated and Cumulative Bandwidth	Y	
IMO Name—IMplsTESegment		
Segment Type	Y	
Measured Average Burst and Peak Bandwidth	Y	
LSP Identification	Y	
Name	Y	

Table 11-9 *MPLS-TE Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0 (Continued)*

Attributes	MSE8840
AverageBandwidth	Y
In Interface	Y
Out interface	Y
In Label	Y
Out Label	Y
Source address	Y
Destination address	Y

Hardware

The following table (Table 11-10) lists the hardware attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-10 *Physical Equipment Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0*

Attributes	MSE8840
IMO Name—IChassis	
Description	Y
Equipment Holder Type	Y
Serial Number	Y
IMO Name—IModule	
Module Name	Y
Module Description	Y
Software Version	Y
Operational Status	Y
Hardware Type & Version	Y
Serial Number (soft property)	Y
Slots Number	Y
IMO Name—IManagedElement	
IP Address	Y
Communication State	Y

Table 11-10 Physical Equipment Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0 (Continued)

Attributes	MSE8840
Investigation State	Y
Element Category	Y
Element Type and Key	Y
Device Name	Y
Device Series	Y
System Name	Y
System Description	Y
Up Time	Y
Software Version	Y
Vendor Identity	Y
Memory and CPU Usage	Y
Sys Contact	Y
Sys Location	Y

Serial

The following table ([Table 11-11](#)) lists the serial attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-11 Serial Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0

Attributes	MSE8840
IMO Name—IPhysicalLayer	
Media Type	Y
Clocking Source	Y
Maximum Speed	Y
Is Internal Port	Y
Discarded and Received Input Data Counters	Y
Dropped and Forward Output Data Counters	Y
Administrative Status	Y

Table 11-11 **Serial Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0 (Continued)**

Attributes	MSE8840
Operational Status	Y
Last Changed	Y
Port Alias	Y
Location	Y
Sending Alarms	Y
Connector Description	Y
Status	Y
Managed	Y

ATM

The following table ([Table 11-12](#)) lists the atm attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-12 **ATM Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0**

Attributes	MSE8840
IMO Name—IAtmTrafficDescriptor	
Traffic Descriptor Type	Y
Service Category	Y
Cell Loss Priority	Y
Cell Delay Variation	Y
Cell Delay Variation Tolerance	Y
Index	Y

SONET/SDH

The following table ([Table 11-13](#)) lists the sonet/sdh attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-13 *SONET/SDH Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0*

		MSE8840
Attributes		
IMO Name—I SonetSdh		
Clocking	Y	
Loopback Type	Y	
Scrambling Mode	Y	

BFD

The following table (Table 11-14) lists the sonet/sdh attributes that are supported on Tellabs devices in Prime Network Version 4.0 per technology:

Table 11-14 *BFD Attribute Support on Tellabs 8840 Multiservice Router Devices—Prime Network Version 4.0*

		MSE8840
Attributes		
IMO Name—IBfdSession		
SourceIp	Y	
DestinationIp	Y	
Interval	Y	
Multiplier	Y	
Protocol	Y	
State	Y	
Interface	Y	
Process	Y	

