AX3640S/AX3630S Software Manual

MIB Reference

For Version 11.10

AX36S-S009X-H0

AlaxalA

■ Relevant products

This manual applies to the models in the AX3640S and AX3630S series of switches. It also describes the functionality of version 11.10 of the software. The described functionality is that supported by the software OS-L3A-A/OS-L3A and OS-L3L-A/OS-L3L, and by optional licenses.

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After reading the manual, keep it in a convenient place for easy reference.

■ Notes

Information in this document is subject to change without notice.

■ Editions history

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History of Amendments

[For version 11.9]

Summary of amendments

Item	Changes
axsStats group (Statistics MIB)	• axsToCpuQoS group was added.

[For version 11.7]

Summary of amendments

Item	Changes
axsStats group (Statistics MIB)	• axsEtherCpuQoS group was added.
axsTrackObjectMIB group (Track information MIB)	• This section was added.
axsPolicyBase group (Policy-based information MIB)	• This section was added.

[For version 11.6]

Descriptions of AX3650S series switches were moved to the manual AX3800S/AX3650S Software Manual.

[For version 11.5]

Summary of amendments

Item	Changes
axsVrfMIB group (VRF information MIB)	• This section was added.
axsStatic group (Static route information MIB)	• This section was added.
axsPconMIB group (Power consumption information MIB)	• This section was added.
ax3650sSwitch group (System device model information MIB)	• This section was added.
ax3650sDevice group (System device chassis information MIB)	• This section was added.
ax3650sManagementMIB group (Change device state and information)	• This section was added.
Supported Trap-PDU parameters	• This section was added.

[For version 11.4]

Summary of amendments

Item	Changes
axsUlr group (Uplink redundancy MIB)	• This section was added.
axsAxrpGroupTable group	• axsAxrpGroupMultiFaultDetectionState was added.

Item	Changes
Supported MIB Traps	• Traps for multi-fault monitoring of Ring Protocols were added. - ax3640sAxrpMultiFaultDetectionStartTrap - ax3630sAxrpMultiFaultDetectionStartTrap - ax3640sAxrpMultiFaultDetectionStateTransitionTrap - ax3630sAxrpMultiFaultDetectionStateTransitionTrap • Traps for uplink redundancy were added. - ax3640sUlrChangeSecondary - ax3630sUlrChangeSecondary - ax3640sUlrChangePrimary - ax3630sUlrChangePrimary - ax3640sUlrActivePortDown - ax3630sUlrActivePortDown

[For version 11.2]

Summary of amendments

Item	Changes
axsAxrpGroupTable group	• The axsAxrpGroupMonitoringState implementation specifications were changed.
Installation specifications of ax3640sPhysLine (Interface information)	• A description of 100BASE-FX SFP was added.

[For version 11.0]

Summary of amendments

Item	Changes
Supported MIB Traps	• Model names were added in front of trap names. Example: axs- --> ax3640s- axs- --> ax3630s- Previous trap names were as follows: -axsAxrpStateTransitionTrap -axsGsrpStateTransitionTrap -axsL2ldLinkDown -axsL2ldLinkUp -axsL2ldLoopDetection -axsBroadcastStormDetectTrap -axsMulticastStormDetectTrap -axsUnicastStormDetectTrap -axsBroadcastStormPortInactivateTrap -axsMulticastStormPortInactivateTrap -axsUnicastStormPortInactivateTrap -axsBroadcastStormRecoverTrap -axsMulticastStormRecoverTrap -axsUnicastStormRecoverTrap -axsEfmoamUdldPortInactivateTrap -axsEfmoamLoopDetectPortInactivateTrap

[For version 10.7]

Summary of amendments

Item	Changes
axsL2ldMIB group (L2 loop detection information MIB)	• This section was added.

Item	Changes
Installation specifications of ax3630sPhysLine (Interface information)	• A description of 1000BASE-LHB was added.
Installation specifications of ax3640sPhysLine (Interface information)	• A description of 1000BASE-LHB was added.
Supported traps and timing of issuance	• Trap-related descriptions were added with the support of the L2 loop detection functionality.
Supported Trap-PDU parameters	• Trap-related descriptions were added with the support of the L2 loop detection functionality.
Supported Trap-PDU parameters	• Trap-related descriptions were added with the support of the L2 loop detection functionality.

[For version 10.6]

Summary of amendments

Item	Changes
qBridgeMIB group	• The following objects were implemented: dot1qTpFdbTable dot1qTpFdbEntry dot1qTpFdbAddress dot1qTpFdbPort dot1qTpFdbStatus
axsAccessFilterStats group	• The following object IDs were added: axsAccessFilterStatsOutTable axsAccessFilterStatsOutEntry axsAccessFilterStatsOutifIndex axsAccessFilterStatsOutifIndexType axsAccessFilterStatsOutListIndex axsAccessFilterStatsOutSequenceNumber axsAccessFilterStatsOutListName axsAccessFilterStatsOutMatchedPackets
Installation specifications of ax3630sPhysLine (Interface information)	• Descriptions of 10BASE-T/100BASE-TX/1000BASE-T SFP and 10GBASE-ZR were added.
ax3640sSwitch group (Model information MIB of system device)	• This section was added.
ax3640sDevice group (Chassis information MIB of system device)	• This section was added.
Supported Trap-PDU parameters	• This section was added.

[For version 10.5]

Summary of amendments

Item	Changes
Installation specifications of ax3630sPhysLine (Interface information)	• A description of the 1000BASE-SX2 interface was added.

[For version 10.4]

Summary of amendments

Item	Changes
axsAxrpMIB group (Ring Protocol information)	• This section was added.
Installation specifications of ax3630sPhysLine (Interface information)	• A description of the 1000BASE-BX interface was added.
sFlow group (InMon private MIB)	• This section was added.

[For version 10.3]

Summary of amendments

Item	Changes
MIB system diagram	• pimMIB (61) was added.
MIB list	• pimMIB group was added.
pimMIB group (IPv4 PIM MIB)	• This section was added.
Supported traps and timing of issuance	• axsEfmoamUdldPortInactivateTrap and axsEfmoamLoopDetectPortInactivateTrap were added.
Supported Trap-PDU parameters	• axsEfmoamUdldPortInactivateTrap and axsEfmoamLoopDetectPortInactivateTrap were added.

[For version 10.2]

Summary of amendments

Item	Changes
MIB system diagram	• snmpModules (3) was added.
MIB list	• The snmpModules group was added.
interfaces group (Ethernet interfaces)	• The ACCESS of ifAdminStatus was changed from R/NW to R/W.
snmp group (MIB-II)	• snmpSilentDrops was added to the installation specifications of the snmp group.
vrrpOperations group	• vrrpOperationsTable and vrrpAssociatedIpAddrTable were added to the installation specifications of the vrrpOperations group.
vrrpStatistics group	• vrrpRouterStatisticsTable was added to the installation specifications of the vrrpStatistics group.
snmpModules group	• The snmpModules group was added.
axsGsrpMIB group (GSRP group information)	• The installation specifications of axsGsrpVlanGroupId and axsGsrpNeighborVlanGroupId were changed to 1 to 64.
ax3630sSwitch group (Model information MIB of system device)	• AX3630S-48TW, AX3630S-48T2XW, and AX3630S-24S2XW were added to the installation specifications of ax3630sModelType.
ax3630sDevice group (Chassis information MIB of system device)	• AX3630S-48TW, AX3630S-48T2XW, and AX3630S-24S2XW were added to the installation specifications of ax3630sChassisType. • ax3630sModuleSlotTable was added. • ax3630sModuleSlotNumber was added.
ax3630sPhysLine group implementation specifications	• type10GBASE-SR and type10GBASE-ER were added to the installation specifications of ax3630sPhysLineConnectorType.

Item	Changes
Supported traps and timing of issuance	• The following were added to support trap and issuing timing: axsBroadcastStormDetectTrap axsMulticastStormDetectTrap axsUnicastStormDetectTrap axsBroadcastStormPortInactivateTrap axsMulticastStormPortInactivateTrap axsUnicastStormPortInactivateTrap axsBroadcastStormRecoverTrap axsMulticastStormRecoverTrap axsUnicastStormRecoverTrap
Supported Trap-PDU parameters	• The following were added to the supported Trap-PDU parameters: axsBroadcastStormDetectTrap axsMulticastStormDetectTrap axsUnicastStormDetectTrap axsBroadcastStormPortInactivateTrap axsMulticastStormPortInactivateTrap axsUnicastStormPortInactivateTrap axsBroadcastStormRecoverTrap axsMulticastStormRecoverTrap axsUnicastStormRecoverTrap

Preface

Applicable products and software versions

This manual applies to the models in the AX3640S and AX3630S series of switches. It also describes the functionality of version 11.10 of the software. The described functionality is that supported by the software OS-L3A-A/OS-L3A and OS-L3L-A/OS-L3L, and by optional licenses.

Before you operate the equipment, carefully read the manual and make sure that you understand all instructions and cautionary notes. After reading the manual, keep it in a convenient place for easy reference.

Unless otherwise noted, this manual describes the functions applicable to both the AX3640S and AX3630S series of switches, and functionalities common to each software package. For functionalities that are not common to both AX3640S and AX3630S series switches, and functionalities not common to OS-L3A-A/OS-L3A and OS-L3L-A/OS-L3L are indicated as follows:

[AX3640S]:

The description applies to AX3640S series switches.

[AX3630S]:

The description applies to AX3630S series switches.

[OS-L3A]:

The description applies to OS-L3A-A/OS-L3A for AX3640S and AX3630S series switches.

The functions supported by optional licenses are indicated as follows:

[OP-DH6R]:

The description applies to the OP-DH6R optional license.

[OP-OTP]:

The description applies to the OP-OTP optional license.

[OP-VAA]:

The description applies to the OP-VAA optional license.

Corrections to the manual

Corrections to this manual might be contained in the *Release Notes* and *Manual Corrections* that come with the software.

Intended readers

This manual is intended for system administrators who wish to configure and operate a network system that uses the Switch.

Readers must have an understanding of the following:

- The basics of network system management

Manual URL

You can view this manual on our website at:

http://www.alaxala.com/en/

Reading sequence of the manuals

The following shows the manuals you need to consult according to your requirements determined from the following workflow for installing, setting up, and starting regular operation of the Switch.

- **Unpacking the switch and the basic settings for initial installation**

  Quick Start Guide (AX36S-Q001X)

- **Determining the hardware facility conditions and how to handle the hardware**

  Hardware Instruction Manual (AX36S-H001X)

- **Understanding the software functions, configuration settings, and use of the operation commands**

  Configuration Guide Vol.1 (AX36S-S001X)
  Vol.2 (AX36S-S002X)
  Vol.3 (AX36S-S003X)

- **Learning the syntax of configuration commands and the details of command parameters**

  Configuration Command Reference Vol. 1 (AX36S-S004X)
  Vol. 2 (AX36S-S005X)

- **Learning the syntax of operation commands and the details of command parameters**

  Operation Command Reference Vol. 1 (AX36S-S006X)
  Vol. 2 (AX36S-S007X)

- **Understanding messages and logs**

  Message and Log Reference (AX36S-S008X)

- **Understanding the MIB**

  MIB Reference (AX36S-S009X)

- **How to troubleshoot when a problem occurs**

  Troubleshooting Guide (AX36S-T001X)

Conventions: The terms "Switch" and "switch"

The term Switch (upper-case "S") is an abbreviation for any or all of the following models:

AX3640S series switch

AX3630S series switch

The term switch (lower-case "s") might refer to a Switch, another type of switch from the current vendor, or a switch from another vendor. The context decides the meaning.

Abbreviations used in the manual

AC	Alternating Current
ACK	ACKnowledge
ADSL	Asymmetric Digital Subscriber Line
ALG	Application Level Gateway
ANSI	American National Standards Institute
ARP	Address Resolution Protocol
AS	Autonomous System
AUX	Auxiliary
BGP	Border Gateway Protocol
BGP4	Border Gateway Protocol - version 4
BGP4+	Multiprotocol Extensions for Border Gateway Protocol - version 4
bit/s	bits per second (can also appear as bps)
BPDU	Bridge Protocol Data Unit
BRI	Basic Rate Interface
CC	Continuity Check
CDP	Cisco Discovery Protocol
CFM	Connectivity Fault Management
CIDR	Classless Inter-Domain Routing
CIR	Committed Information Rate
CIST	Common and Internal Spanning Tree
CLNP	ConnectionLess Network Protocol
CLNS	ConnectionLess Network System
CONS	Connection Oriented Network System
CRC	Cyclic Redundancy Check
CSMA/CD	Carrier Sense Multiple Access with Collision Detection
CSNP	Complete Sequence Numbers PDU
CST	Common Spanning Tree
DA	Destination Address
DC	Direct Current
DCE	Data Circuit terminating Equipment
DHCP	Dynamic Host Configuration Protocol
DIS	Draft International Standard/Designated Intermediate System
DNS	Domain Name System
DR	Designated Router
DSAP	Destination Service Access Point
DSCP	Differentiated Services Code Point
DTE	Data Terminal Equipment
DVMRP	Distance Vector Multicast Routing Protocol
E-Mail	Electronic Mail
EAP	Extensible Authentication Protocol
EAPOL	EAP Over LAN
EFM	Ethernet in the First Mile
ES	End System
FAN	Fan Unit
FCS	Frame Check Sequence
FDB	Filtering DataBase
FQDN	Fully Qualified Domain Name
FTTH	Fiber To The Home
GBIC	GigaBit Interface Converter
GSRP	Gigabit Switch Redundancy Protocol
HMAC	Keyed-Hashing for Message Authentication
IANA	Internet Assigned Numbers Authority
ICMP	Internet Control Message Protocol
ICMPv6	Internet Control Message Protocol version 6
ID	Identifier
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers, Inc.
IETF	the Internet Engineering Task Force
IGMP	Internet Group Management Protocol
IP	Internet Protocol
IPCP	IP Control Protocol
IPv4	Internet Protocol version 4

IPv6	Internet Protocol version 6
IPV6CP	IP Version 6 Control Protocol
IPX	Internetwork Packet Exchange
ISO	International Organization for Standardization
ISP	Internet Service Provider
IST	Internal Spanning Tree
L2LD	Layer 2 Loop Detection
LAN	Local Area Network
LCP	Link Control Protocol
LED	Light Emitting Diode
LLC	Logical Link Control
LLDP	Link Layer Discovery Protocol
LLQ+3WFQ	Low Latency Queueing + 3 Weighted Fair Queueing
LSP	Label Switched Path
LSP	Link State PDU
LSR	Label Switched Router
MA	Maintenance Association
MAC	Media Access Control
MC	Memory Card
MD5	Message Digest 5
MDI	Medium Dependent Interface
MDI-X	Medium Dependent Interface crossover
MEP	Maintenance association End Point
MIB	Management Information Base
MIP	Maintenance domain Intermediate Point
MRU	Maximum Receive Unit
MSTI	Multiple Spanning Tree Instance
MSTP	Multiple Spanning Tree Protocol
MTU	Maximum Transfer Unit
NAK	Not AcKnowledge
NAS	Network Access Server
NAT	Network Address Translation
NCP	Network Control Protocol
NDP	Neighbor Discovery Protocol
NET	Network Entity Title
NLA ID	Next-Level Aggregation Identifier
NPDU	Network Protocol Data Unit
NSAP	Network Service Access Point
NSSA	Not So Stubby Area
NTP	Network Time Protocol
OADP	Octpower Auto Discovery Protocol
OAM	Operations, Administration, and Maintenance
OSPF	Open Shortest Path First
OUI	Organizationally Unique Identifier
packet/s	packets per second (can also appear as pps)
PAD	PADding
PAE	Port Access Entity
PC	Personal Computer
PCI	Protocol Control Information
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PID	Protocol IDentifier
PIM	Protocol Independent Multicast
PIM-DM	Protocol Independent Multicast-Dense Mode
PIM-SM	Protocol Independent Multicast-Sparse Mode
PIM-SSM	Protocol Independent Multicast-Source Specific Multicast
PoE	Power over Ethernet
PRI	Primary Rate Interface
PS	Power Supply
PSNP	Partial Sequence Numbers PDU
QoS	Quality of Service
QSFP+	Quad Small Form-factor Pluggable Plus
RA	Router Advertisement
RADIUS	Remote Authentication Dial In User Service
RDI	Remote Defect Indication
REJ	REJect
RFC	Request For Comments

RIP	Routing Information Protocol
RIPng	Routing Information Protocol next generation
RMON	Remote Network Monitoring MIB
RPF	Reverse Path Forwarding
RQ	ReQuest
RSTP	Rapid Spanning Tree Protocol
SA	Source Address
SD	Secure Digital
SDH	Synchronous Digital Hierarchy
SDU	Service Data Unit
SEL	NSAP SELector
SFD	Start Frame Delimiter
SFP	Small Form factor Pluggable
SFP+	Enhanced Small Form factor Pluggable
SMTP	Simple Mail Transfer Protocol
SNAP	Sub-Network Access Protocol
SNMP	Simple Network Management Protocol
SNP	Sequence Numbers PDU
SNPA	Subnetwork Point of Attachment
SPF	Shortest Path First
SSAP	Source Service Access Point
STP	Spanning Tree Protocol
TA	Terminal Adapter
TACACS+	Terminal Access Controller Access Control System Plus
TCP/IP	Transmission Control Protocol/Internet Protocol
TLA ID	Top-Level Aggregation Identifier
TLV	Type, Length, and Value
TOS	Type Of Service
TPID	Tag Protocol Identifier
TTL	Time To Live
UDLD	Uni-Directional Link Detection
UDP	User Datagram Protocol
UPC	Usage Parameter Control
UPC-RED	Usage Parameter Control - Random Early Detection
VAA	VLAN Access Agent
VLAN	Virtual LAN
VPN	Virtual Private Network
VRF	Virtual Routing and Forwarding/Virtual Routing and Forwarding Instance
VRRP	Virtual Router Redundancy Protocol
WAN	Wide Area Network
WDM	Wavelength Division Multiplexing
WFQ	Weighted Fair Queueing
WRED	Weighted Random Early Detection
WS	Work Station
WWW	World-Wide Web
XFP	10 gigabit small Form factor Pluggable

Conventions: KB, MB, GB, and TB

This manual uses the following conventions: 1 KB (kilobyte) is 1024 bytes. 1 MB (megabyte) is 1024^2 bytes. 1 GB (gigabyte) is 1024^3 bytes. 1 TB (terabyte) is 1024^4 bytes.

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Chapter

1. Overview of Supported MIBs

1.1 MIB system diagram
1.2 MIB list
1.3 Acquiring private MIB-defined files
1.4 Format of MIB descriptions

1.1 MIB system diagram

Diagrams of the MIB system supported by the Switch are shown in *Figure 1-1 MIB system diagram (1/2)* and *Figure 1-2 MIB system diagram (2/2)*.

Figure 1-1: MIB system diagram (1/2)

Continued in (2/2)

Figure 1-2: MIB system diagram (2/2)

1.2 MIB list

The following table shows the supported MIBs.

Table 1-1: MIB groups

MIB group			Functionality	Support?
Standard MIB	system group		MIB of information on a switch	Y
	interfaces group		MIB of information on an interface	Y
	at group		MIB of information on an ARP table	Y
	ip group	ip	MIB of IP information	Y
		ipAddrTable	MIB of address table information on an IP address	Y
		ipRouteTable	MIB of information on an IP routing table	Y
		ipNetToMediaTable	MIB of information on an IP address conversion table	Y
		ipForward	MIB of information on an IP forwarding table	Y
	icmp group		ICMP information MIB	Y
	tcp group	tcp	TCP information MIB	Y
		ipv6TcpConnTable	MIB of TCP information on IPv6	Y
	udp group	udp	MIB of UDP information	Y
		ipv6UdpTable	MIB of UDP information on IPv6	Y
	dot3 group		MIB of information on an Ethernet-like interface	Y
	snmp group		MIB of SNMP information	Y
	ospf group **[OS-L3A]**	ospfGeneralGroup	OSPF information MIB	Y
		ospfAreaTable	MIB of a table that stores information on each area that a router connects	Y
		ospfStubAreaTable	MIB that contains a table of information which is advertised inside the stub area by the area border router.	Y
		ospfLsdbTable	MIB of a table that stores the information on the link state database (LSDB) of an OSPF process	Y
		ospfAreaRangeTable	MIB of a table that stores address range information existing in an area that a router connects	Y
		ospfHostTable	MIB information of the host and metric that a router advertises as a host route	N
		ospfIfTable	MIB of a table that stores information on each interface that a router connects	Y

MIB group			Functionality	Support?
		ospfIfMetricTable	MIB of a table that stores the service type metric information of each interface	Y
		ospfVirtIfTable	MIB of a table that stores the information of a virtual interface that a router connects	Y
		ospfNbrTable	MIB of a table that stores the information of a non-virtual neighboring station	Y
		ospfVirtNbrTable	MIB of a table that stores the information of a virtual neighboring router	Y
		ospfExtLsdbTable	MIB of the link state database (LSDB) table for OSPF processing	Y
		ospfAreaAggregateTable	MIB of the IP address table specified with IP address - IP subnet mask pairs	Y
		ospfTrap	MIB of a trap or inform.	Y
	bgp group **[OS-L3A]**	bgp	MIB of BGP information	Y
		bgpPeerTable	MIB of a BGP peer table	Y
		bgpPathAttrTable	MIB of the path information received from BGP4	Y
	rmon group	Ethernet Statistics Group	MIB of the table on the statistics of an Ethernet interface	Y
		History Control Group	MIB of the history control table of Ethernet statistics	Y
		Ethernet History Group	MIB of the history table of Ethernet statistics	Y
		Alarm Group	MIB of information on an alarm table	Y
		Host Group	MIB of information on a host group	N
		Host Top"N"	MIB of information on a HostTopN group	N
		Matrix	MIB of information on a matrix group	N
		Filter	MIB of information on a filter group	N
		Packet Capture	MIB of information on a PacketCapture group	N
		Event Group	MIB of the table of an event generated using an RMON agent	Y
	dot1dBridge group	dot1dBase group	Bridge information	Y
		dot1dStp group	Information on a Spanning Tree Protocol	Y
		dot1dTp group	Forwarding information of a bridge	Y
		dot1dStatic group	Filtering information	N
		pBridgeMIB group	Priority control and multicast filtering information	Y
		qBridgeMIB group	Virtual bridge information	Y
	ifMIB group		MIB of interface extended information	Y

MIB group			Functionality	Support?
	ipv6MIB group	ipv6MIB ipv6 general group	MIB on an IPv6 interface	Y
		ipv6IfTable	MIB of the table of a network layer interface (V6)	Y
		ipv6IfStatsTable	MIB of the statistics table of IPv6 interface traffic	Y
		ipv6AddrPrefixTable	MIB of the address prefix table of an IPv6 interface	Y
		ipv6AddrTable	MIB of an interface address table	Y
		ipv6RouteTable	MIB of an IPv6 routing table	Y
		ipv6NetToMediaTable	MIB of an IPv6 address conversion table	Y
	ipv6IcmpMIB group		IPv6 ICMP MIB	Y
	vrrpMIB group	vrrpOperations group	MIB on the configuration and control information of a VRRP router	Y
		vrrpStatistics group	MIB of statistics on a VRRP packet	Y
		vrrpNotifications group	MIB information on the VRRP trap sent from a VRRP router	N
	powerEthernetMIB group **[AX3630S]**	pethObjects group	MIB concerning the port feeding characteristics in a feeder system	Y
		pethMainPseObjects group	MIB concerning the main power supply attributes of a feeder system	Y
		pethNotificationControl group	MIB concerning the notification information of a feeder system	Y
	pimMIB group	pimJoinPruneInterval	MIB of the sending interval of a PIM-SM Join/Prune message	Y
		pimInterfaceTable	MIB of PIM interface table information	Y
		pimNeighborTable	MIB of PIM neighboring table information	Y
		pimIpMRouteTable	MIB of PIM routing table information	N
		pimRPTable	MIB of the RP information table for PIM version 1	N
		pimRPSetTable	MIB of an RP candidate information table	N
		pimIpMRouteNextHopTable	MIB of PIM routing Next Hop table information	N
		pimCandidateRPTable	MIB of the group information to be advertised for an RP candidate	N
		pimComponentTable	MIB of the table information of a component for determining a PIM domain	N
	ospfv3MIB group **[OS-L3A]**	ospfv3GeneralGroup	MIB of OSPFv3 information	Y
		ospfv3AreaTable	MIB of a table that stores information on each area that a router connects	Y

MIB group			Functionality	Support?
		ospfv3AsLsdbTable	MIB of a table that stores information on the AS Scope link state database of OSPFv3	Y
		ospfv3AreaLsdbTable	MIB of a table that stores information on the AreaScope link state database of OSPFv3	Y
		ospfv3LinkLsdbTable	MIB of a table that stores information on the LinkScope link state database of OSPFv3	Y
		ospfv3IfTable	MIB of a table that stores the information of each interface that a router connects	Y
		ospfv3VirtIfTable	MIB of a table that stores the interface information of a virtual link that a router connects	Y
		ospfv3NbrTable	MIB of a table that stores the information of a non-virtual neighboring station	Y
		ospfv3VirtNbrTable	MIB of a table that stores the information of a virtual neighboring router	Y
		ospfv3AreaAggregateTable	MIB of the IPv6Prefix table specified with prefix - prefix length pairs	Y
	IEEE 8023-LAG-MIB group	dot3adAgg group	Information on an aggregator	Y
		dot3adAggPort group	Link Aggregation Control information on all AggregationPorts	Y
	IEEE 802.1X MIB group		MIB on IEEE 802.1X	Y
	snmpModules group	snmpFrameworkMIB group	MIB on an SNMP framework	Y
		snmpMPDMIB group	MIB of an SNMP message and dispatcher	Y
		snmpTargetMIB group	MIB of SNMP destination information	Y
		snmpNotificationMIB group	MIB of SNMP notification information	Y
		snmpProxyMIB group	MIB of an SNMP proxy	N
		snmpUsmMIB group	MIB of an SNMP user-based security model	Y
		snmpVacmMIB group	MIB of an SNMP view-based access control model	Y
		snmpCommunityMIB group	MIB of the coexistence of SNMPv1, SNMPv2C, and SNMPv3	N
	ieee8021CfmMib group	dot1agCfmStackTable group	MIB used to search CFM information	Y
		dot1agCfmDefaultMd group	MIB concerning the default value to be set for CFM	N
		dot1agCfmVlanTable group	MIB that associates CFM with VLAN	Y

MIB group			Functionality	Support?
		dot1agCfmConfigErrorListTable group	MIB of error information in configurations related to CFM	N
		dot1agCfmMd group	MIB concerning the domain of CFM	Y
		dot1agCfmMaNetTable group	MIB concerning MA of CFM	Y
		dot1agCfmMaCompTable group	MIB concerning the MA configuration information of CFM	Y
		dot1agCfmMaMepListTable group	MIB concerning the MEP list of CFM	Y
		dot1agCfmMepTable group	MIB concerning MEP of CFM	Y
		dot1agCfmLtrTable group	MIB concerning received linktrace-response messages of CFM	Y
		dot1agCfmMepDbTable group	MIB concerning a remote MEP of CFM	Y
Private MIBs	axsStats group	axsIfStats group	MIB of mega unit interface statistics	Y
		axsQoS group	MIB of QoS statistics	Y
		axsDHCP group	MIB of statistics on a DHCP server	Y
	axsGsrpMIB group	axsGsrpGroupTable group	MIB of a table that stores GSRP group information	Y
		axsGsrpVlanGroupTable group	MIB of a table that stores GSRP VLAN group information	Y
		axsGsrpNeighborGroupTable group	MIB of a table that stores the GSRP group information of an opposing switch	Y
		axsGsrpNeighborVlanGroupTable group	MIB of a table that stores the GSRP VLAN group information of an opposing switch	Y
	axsFdb group	axsFdbCounterTable	MIB of an information table on the MAC address table learning count	Y
	axsVlan group	axsVlanBridge group	MIB of the Bridge-MIB for each VLAN	Y
		axsVlanTagTranslation group	MIB of an information table for tag conversion	Y
	axsOadp group	axsOadpGlobalInfo group	MIB of the active state of an OADP function	Y
		axsOadpPortInfo group	MIB of OADP port information	Y
		axsOadpNeighborInfo group	MIB of an OADP neighboring node	Y
	axsFlow group	axsAccessFilterStats group	MIB of the table information corresponding to the number of packets that coincide with the flow detection conditions and operation information set in an access list	Y

MIB group			Functionality	Support?
		axsQosFlowStats group	MIB of the table information corresponding to the number of packets that coincide with the flow detection conditions and operation information set in a QoS flow list	Y
	axsL2ld group	axsL2ldGlobalInfo group	MIB of L2 loop detection information	Y
		axsL2ldPortTable group	MIB of a table that stores L2 loop detecting port information	Y
	axsOspfMIB group **[OS-L3A]**	axsOspfGeneralTable	MIB of a table that stores OSPF information	Y
		axsOspfDomainAreaTable	MIB of a table that stores information on each area that a router connects	Y
		axsOspfStubAreaTable	MIB of the table of information advertised in a stub area using an area border router	Y
		axsOspfLsdbTable	MIB of a table that stores the information on the link state database (LSDB) of an OSPF process	Y
		axsOspfAreaRangeTable	MIB of a table that stores address range information existing in an area that a router connects	Y
		axsOspfIfTable	MIB of a table that stores information on each interface that a router connects	Y
		axsOspfIfMetricTable	MIB of a table that stores the service type metric information of each interface	Y
		axsOspfVirtIfTable	MIB of a table that stores the information of a virtual interface that a router connects	Y
		axsOspfNbrTable	MIB of a table that stores the information of a non-virtual neighboring station	Y
		axsOspfVirtNbrTable	MIB of a table that stores the information of a virtual neighboring router	Y
		axsOspfExtLsdbTable	MIB of the link state database (LSDB) table for OSPF processing	Y
		axsOspfAreaAggregateTable	MIB of the IP address table specified with IP address - IP subnet mask pairs	Y
		axsOspfTrap	MIB of a trap or inform.	Y
	axsOspfv3 group **[OS-L3A]**	axsOspfv3GeneralTable	MIB of OSPFv3 information	Y
		axsOspfv3AreaTable	MIB of a table that stores information on each area that a router connects	Y
		axsOspfv3AsLsdbTable	MIB of a table that stores information on the AS Scope link state database of OSPFv3	Y
		axsOspfv3AreaLsdbTable	MIB of a table that stores information on the AreaScope link state database of OSPFv3	Y

MIB group			Functionality	Support?
		axsOspfv3LinkLsdbTable	MIB of a table that stores information on the LinkScope link state database of OSPFv3	Y
		axsOspfv3IfTable	MIB of a list that stores the information of each interface that a router connects	Y
		axsOspfv3VirtIfTable	MIB of a table that stores the information of a virtual interface that a router connects	Y
		axsOspfv3NbrTable	MIB of a table that stores the information of a non-virtual neighboring station	Y
		axsOspfv3VirtNbrTable	MIB of a table that stores the information of a virtual neighboring router	Y
		axsOspfv3AreaAggregateTable	MIB of the IPv6 Prefix table specified with prefix - prefix length pairs	Y
	axsUlr group	axsUlrGlobalInfo group	MIB of uplink redundancy settings	Y
		axsUlrPortTable group	MIB of a table that stores uplink redundancy port information	Y
	axsStatic group	axsStaticTable group	MIB of a table that stores static information	Y
		axsStaticIpv6Table group	MIB of a table that stores IPv6 static information	Y
	axsTrackObjectMIB group **[AX3640S] [OS-L3A]**	axsTrackObjectGeneralGroup	MIB of the last update time in track object information	Y
		axsTrackObjectTable	MIB of a table containing track object information	Y
	axsPolicyBase group **[AX3640S] [OS-L3A]**	axsPolicyBaseRouting group	MIB used by a trap for status changes of routing information about a trap policy-based routing	Y
	axsBootManagement group		MIB on system start	Y
	axsLogin group		MIB of logins	Y
	axslldp group	axslldpConfiguration group	MIB of LLDP configuration	Y
		axslldpStats group	MIB of LLDP statistics	Y
		axslldpLocalSystemData group	MIB of information on the Switch for LLDP	Y
		axslldpRemoteSystemData group	MIB of information on the neighboring switch connected with the Switch for LLDP	Y
		axslldpRemoteOriginInfoData group	MIB of ALAXALA TLV information for LLDP	Y
	axsAxrpMIB group	axsAxrpGroupTable group	MIB of Ring Protocol group information	Y
		axsAxrpVlanGroupTable group	MIB of Ring Protocol VLAN group information	Y
	ax3640sSwitch group		MIB of switch model information	Y
	ax3640sDevice	ax3640sChassis group	MIB of switch chassis information	Y

MIB group			Functionality	Support?
		ax3640sPhysLine group	MIB of switch interface information	Y
	ax3640sManagement	ax3640sFdbClearMIB group	MIB for clearing MAC address table information	Y
	ax3630sSwitch group		MIB of switch model information	Y
	ax3630sDevice	ax3630sChassis group	MIB of switch chassis information	Y
		ax3630sPhysLine group	MIB of switch interface information	Y
	ax3630sManagement	ax3630sFdbClearMIB group	MIB for clearing MAC address table information	Y
	icmp group (HP private MIB)		Private MIB for HP	Y
	sFlow group (InMon private MIB)		Private MIB for InMon Corp.	Y

Legend: Y: Supported in the Switch; N: Not supported in the Switch

1.3 Acquiring private MIB-defined files

Private MIB-defined files (ASN.1) are supplied together with the software.

1.4 Format of MIB descriptions

The format of the descriptions for supported MIBs described in this manual is given below. For each MIB, identifiers and implementation specifications are described for each group.

- ID

  This is the certified format for descriptions of object IDs.

  (Example) The format and object ID value of the identifier for the private MIB axsStats group are described below.

```
Identifier          axsStats OBJECT IDENTIFIER ::= {axsMib 1}
Object ID value     1.3.6.1.4.1.21839.2.2.1.1
```

  For details about the object ID value of a private MIB, see *A. Private MIB names and object ID values*.

- Implementation specifications

  The implementation specifications of each MIB are described in the following table, using the axsStats group as an example. The following table shows the implementation specifications for the axsStats group.

  Table 1-2: axsStats group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support ?
1	axsIfStatsTable {axsIfStats 1}	NOT-ACCESSIBLE	NA	Extended statistics table of the interface	Y
2	axsIfStatsEntry {axsIfStatsTable 1}	NOT-ACCESSIBLE	NA	Extended statistics table entry of the interface. INDEX {axsIfStatsIndex}	Y
3	axsIfStatsIndex {axsIfStatsEntry 1}	NOT-ACCESSIBLE	NA	Interface index of the Switch. Same as for ifIndex.	Y
. . .	. . .	. . .	. . .	. . .	. . .

Object identifier

This indicates the object identifier name of the MIB.

SYNTAX

The meaning of SYNTAX used in a private MIB is described in the table below. SYNTAX is described only in the implementation specifications of a private MIB.

Table 1-3: Meaning of SYNTAX elements used in a private MIB

#	SYNTAX	Description of SYNTAX
1	Counter	Integer value that increases from 0 to 4294967295 (2^{32}-1) and returns to 0
2	Counter32	Integer value that increases from 0 to 4294967295 (2^{32}-1) and returns to 0

#	SYNTAX	Description of SYNTAX
3	Counter64	Integer value that increases from 0 to 18446744073709551615 (2^{64}-1) and returns to 0
4	DisplayString	String of 0 or more and 255 or fewer characters (each byte is an NVT ASCII value)
5	Gauge	Integer of 0 or greater, whose value can be increased and decreased (in the range from 0 to 4294967295)
6	INTEGER	Indicates integer information in the range from -2147483648 to 2147483647 (from -2^{31} to 2^{31}-1).
7	Integer32	Indicates integer information in the range from -2147483648 to 2147483647 (from -2^{31} to 2^{31}-1).
8	OCTET STRING	String of 0 or more characters (in 8-bit units). Each byte is from 0 to 255.
9	IpAddress	Four-byte octet string (in which a 32-bit IP address is stored)
10	Ipv6Address	16-byte octet string (in which a 128-bit IPv6 address is stored)
11	OBJECT IDENTIFIER	Stores the sequence-fixed list of a sub-ID.
12	MacAddress	802 MAC address, indicated in regular order, as defined by IEEE 802.1a. `OCTET STRING` type.
13	RowStatus	SYNTAX type for controlling the generation or deletion of a conceptual line entry
14	TimeStamp	Time stamp for measuring the time from a certain event in units of 1/100 seconds.
15	TimeTicks	Positive integer. The time from a certain event is indicated in units of 1/100 seconds.
16	BITS	Named bit string."1" is assigned to the corresponding bit. The bit string is indicated by a string of 0 or more characters (in 8-bit units). Named bit 0 corresponds to the most significant bit, and the logical sum of each named bit is returned by GetResponse. (Example) The value returned by GetResponse becomes 0x82 when named bits 0 and 6 are valid.
17	NOT-ACCESSIBLE	Cannot be accessed.
18	PortList	Bitmap of a port."1" is assigned to the bit corresponding to a valid port. In the Switch, "1" is assigned to the bit corresponding to the ifIndex number of a port.
19	VlanIndex	Indicates the index number (from 1 to 4094) of a VLAN.
20	AddressFamilyNumbers	Address number to which IANA is assigned
21	VlanIdOrZero	Indicates the index number (from 1 to 4094) of a VLAN.
22	SnmpAdminString	Character string including management information. `DisplayString` type.
23	InetAddressType	Internet address type
24	InetAddress	Internet address. `OCTET STRING` type.
25	OwnerString	String containing from 0 to 127 characters. Indicates the owner name of the resource assigned in management. `DisplayString` type.
26	BridgeId	Bridge ID used in a Spanning Tree Protocol. `OCTET STRING` type.

#	SYNTAX	Description of SYNTAX
27	Timeout	STP timer with units of 1/100 seconds
28	TruthValue	True or false value
29	InterfaceIndex	ifIndex number managed by a system. Integer value in the range from 1 to 2147483647 (2^{31}-1)
30	Unsigned32	Integer information in the range from 0 to 4294967295 (2^{32}-1)
31	TimeFilter	Positive integer. Index number for indicating the time from a certain event in units of 1/100 seconds.

Access

- `R/O`: Indicates that the MIB access in a standard document is `Read_Only`.
- `R/W`: Indicates that the MIB access in a standard document is `Read_Write`.
- `R/NW`: Indicates that the MIB access in a standard document is `Read_Write`, but in the Switch it is `Read_Only`.
- `R/C`: Indicates that the MIB access in a standard document is `Read_Create`.
- `R/NC`: Indicates that the MIB access in a standard document is `Read_Create`, but in the Switch it is `Read_Only`.
- `AN`: Indicates that the MIB access in a standard document is `accessible-for-notify`. An object cannot be acquired and set, but `AN` can be read as the variable of a trap or inform.
- `NA`: Indicates that the MIB access in a standard document is `not-accessible`.

Implementation specifications

[Standard]: Describes the standard overview of a standard document.

[Implementation]: Describes the implementation specifications in the Switch.

Support?

- Y: Indicates a MIB that is supported in (responds to) the Switch. However, the MIB does not respond if the Access column is `NA`. Note that a response varies depending on the function used.
- M: Indicates a MIB that is supported in (responds to) the Switch, but that responds with a fixed value because the Switch cannot be counted using a statistical counter.
- N: Indicates a MIB that is not supported in (does not respond to) the Switch.

Chapter

2. Standard MIBs (RFC-Compliant and IETF Draft MIBs)

This chapter describes the implementation specifications for the standard MIBs used by the Switch.

2.1 system group (MIB-II)
2.2 interfaces group (MIB-II)
2.3 at group (MIB-II)
2.4 ip group (MIB-II and IP Forward Table MIB)
2.5 icmp group (MIB-II)
2.6 tcp group (MIB-II and TCP MIB for IPv6)
2.7 udp group (MIB-II and UDP MIB for IPv6)
2.8 dot3 group (Ethernet-like MIBs)
2.9 snmp group (MIB-II)
2.10 ospf group (OSPFv2 MIB) [OS-L3A]
2.11 bgp group (BGP4 MIB) [OS-L3A]
2.12 rmon group (Remote Network Monitoring MIB)
2.13 dot1dBridge group
2.14 ifMIB group (Interfaces Group MIB)
2.15 ipv6MIB group (IPv6 MIB)
2.16 ipv6IcmpMIB group (ICMPv6 MIB)
2.17 vrrpMIB group
2.18 powerEthernetMIB group (Power Ethernet MIB) [AX3630S]
2.19 pimMIB group (IPv4 PIM MIB)
2.20 ospfv3MIB group (OSPFv3 MIB) [OS-L3A]
2.21 IEEE 8023-LAG-MIB group
2.22 IEEE 802.1X MIB group
2.23 snmpModules group
2.24 ieee8021CfmMib group

2.1 system group (MIB-II)

Relevant standards for the system group are described in the following document:

- RFC 3418 (December 2002)

(1) ID

```
system OBJECT IDENTIFIER ::= {mib-2 1}
Object ID value  1.3.6.1.2.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the system group.

Table 2-1: system group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	sysDescr {system 1}	R/O	[Standard] The name or version number of a hardware device, operating system, or network operating system. [Implementation] A character string made up of a company name, product name, switch type, switch model, software name, software version, and software abbreviation. Example: For AX3630S series switches: `ALAXALA AX3630S AX-`*xxxx*`-`*xx* `[AX36`*xx*`S-`*xx*`] Switching Software Ver. 10.4 [OS-`*xx*`]` `ALAXALA`: Company name `AX3630S`: Product name `AX-`*xxxx*`-`*xx*: Switch type `AX36`*xx*`S-`*xx*: Switch model `Switching Software`: Software name `Ver. 10.4`: Software version `OS-`*xx*: Software abbreviation	Y
2	sysObjectID {system 2}	R/O	[Standard] The authentication ID of a network management subsystem vendor. [Implementation] A fixed value. For AX3640S series switches 1.3.6.1.4.1.21839.1.2.11 For AX3630S series switches 1.3.6.1.4.1.21839.1.2.7	Y
3	sysUpTime {system 3}	R/O	[Standard] The time elapsed since the system was started (10 millisecond counter). [Implementation] The time elapsed since the switch was started.	Y
4	sysContact {system 4}	R/W	[Standard] A contact for a management node. [Implementation] A character string of no more than 60 characters specified by using a configuration command. The default is empty (`NULL`).	Y
5	sysName {system 5}	R/W	[Standard] The name or domain name of the management node. [Implementation] A character string of no more than 60 characters specified by using a configuration command. The default is empty (`NULL`).	Y

#	Object identifier	Access	Implementation specifications	Support?
6	sysLocation {system 6}	R/W	[Standard] The location on which the management node is installed. [Implementation] A character string of no more than 60 characters specified by using a configuration command. The default is empty (`NULL`).	Y
7	sysServices {system 7}	R/O	[Standard] A value indicating the service. [Implementation] Fixed value of `78`.	Y

2.2 interfaces group (MIB-II)

Relevant standards for the interfaces group (MIB-II) are described in the following document:

- RFC 1213 (March 1991)

2.2.1 interfaces group (When using Ethernet)

The following interface types are described:

- 10BASE-T/100BASE-TX/1000BASE-T
- 100BASE-FX
- 1000BASE-X
- 10GBASE-R

(1) ID

```
interfaces OBJECT IDENTIFIER ::= {mib-2 2}
Object ID value  1.3.6.1.2.1.2
```

(2) Implementation specifications

The following table lists the implementation specifications of the interfaces group when Ethernet is used.

Table 2-2: interfaces group implementation specifications (when using Ethernet)

#	Object identifier	Access	Implementation specifications	Support?
1	ifNumber {interfaces 1}	R/O	[Standard] The number of network interfaces provided by this system. [Implementation] Same as the standard. Changing the interface configuration causes the value of this object to change.	Y
2	ifTable {interfaces 2}	NA	[Standard] A table of interface entities. [Implementation] Same as the standard.	Y
3	ifEntry {ifTable 1}	NA	[Standard] A list of interfaces that belong to the sub-network layer. INDEX { ifIndex } [Implementation] Same as the standard.	Y
4	ifIndex {ifEntry 1}	R/O	[Standard] The number that identifies the interface. The value ranges from 1 to ifNumber. [Implementation] The number that identifies the interface. Changing the interface configuration causes the value of this object to change. The method for assigning an ifIndex is as follows: • Port: 10 + port number -1 • Link aggregation: 60 + channel group number • VLAN: 3 in the case of the default VLAN, 200 + VLAN ID for all others	Y
5	ifDescr {ifEntry 2}	R/O	[Standard] Interface information. [Implementation] A fixed character string determined by the interface type.	Y
6	ifType {ifEntry 3}	R/O	[Standard] The interface type. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Ethernet-csmacd (6) • When the ifIndex indicates a VLAN: l2vlan (135) • When the ifIndex indicates a link aggregation: ieee8023adLag (161)	Y

#	Object identifier	Access	Implementation specifications	Support?
7	ifMtu {ifEntry 4}	R/O	[Standard] The maximum size of datagrams that can be sent and received by this interface (octets). [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: The MTU (for an Ethernet interface belonging to the VLAN), system MTU information, or IP MTU information (only during setup), whichever is the smallest • When the ifIndex indicates a link aggregation: Same as for the VLAN	Y
8	ifSpeed {ifEntry 5}	R/O	[Standard] The current line speed (bit/s) of this interface. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: If no bandwidth is set by using a configuration command, the line speed of the interface is shown. If a bandwidth has been set, the set bandwidth is shown. • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: The sum of the ifSpeed values of the ports that belong to the channel group	Y
9	ifPhysAddress {ifEntry 6}	R/O	[Standard] The physical address directly below the network layer of the interface. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Returns a response (in a canonical form) of the value that represents the MAC address • When the ifIndex indicates a VLAN: Returns a response (in a canonical form) of the value that represents the MAC address assigned to the VLAN • When the ifIndex indicates a link aggregation: Returns a response (in a canonical form) of the value that represents the MAC address of the channel group	Y
10	ifAdminStatus {ifEntry 7}	R/W	[Standard] The desired status of this interface: • up (1) • down (2) • testing (3) [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: If shutdown is specified in the configuration, the status is specified as down (2). • When the ifIndex indicates a VLAN: If VLAN suspend is specified in the configuration, the status is specified as down (2). • When the ifIndex indicates a link aggregation: If shutdown is specified for the channel group in the configuration, the status is specified as down (2).	Y
11	ifOperStatus {ifEntry 8}	R/O	[Standard] The current status of this interface: • up (1) • down (2) • testing (3) [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Same as the standard • When the ifIndex indicates a link aggregation: Same as the standard	Y

#	Object identifier	Access	Implementation specifications	Support?
12	ifLastChange {ifEntry 9}	R/O	[Standard] sysUpTime when the ifOperStatus of this interface last changed (in units of 1/100 seconds). [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Same as the standard • When the ifIndex indicates a link aggregation: Same as the standard	Y
13	ifInOctets {ifEntry 10}	R/O	[Standard] The number of octets, including bad packets, received by this interface. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The number of octets received, including bad packets, in the frame length from the DA field of a MAC header to the FCS field • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: The number of octets received, including bad packets, in the frame length from the DA field of a MAC header to the FCS field	Y
14	ifInUcastPkts {ifEntry 11}	R/O	[Standard] The number of unicast packets sent to the higher-level protocol. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
15	ifInNUcastPkts {ifEntry 12}	R/O	[Standard] The number of non-unicast packets (broadcast and multicast packets) sent to the upper layer protocol. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
16	ifInDiscards {ifEntry 13}	R/O	[Standard] The number of packets that contained no errors but failed to be sent to the upper layer protocol (or the number of packets that were received but discarded, for example, because there was no buffer). [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The number of events discarded due to a receive FIFO overflow • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: The number of events discarded due to a receive FIFO overflow	Y
17	ifInErrors {ifEntry 14}	R/O	[Standard] The number of packets discarded because they contained errors. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The number of packets discarded because they contained errors such as an FCS error, short packet, maximum packet length error, collided packets, invalid packet format, or odd bit error • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: The number of packets discarded because they contained errors such as an FCS error, short packet, maximum packet length error, collided packets, invalid packet format, or odd bit error	Y

#	Object identifier	Access	Implementation specifications	Support?
18	ifInUnknownProtos {ifEntry 15}	R/O	[Standard] The number of packets received but discarded because the protocol is unsupported. [Implementation] Fixed value of `0`.	Y
19	ifOutOctets {ifEntry 16}	R/O	[Standard] The number of packet octets sent by this interface. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The number of sent octets in the frame length from the DA field of a MAC header to the FCS field • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: The number of sent octets in the frame length from the DA field of a MAC header to the FCS field	Y
20	ifOutUcastPkts {ifEntry 17}	R/O	[Standard] The number of unicast packets sent by the higher-level layer. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The number of unicast packets including bad packets (the number of packets with a MAC DA that contains an I/G bit of `0`). **[AX3640S]** • When the ifIndex indicates a port: Fixed value of `0` **[AX3630S]** • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: Fixed value of `0`	Y **[AX3640S]** M **[AX3630S]**
21	ifOutNUcastPkts {ifEntry 18}	R/O	[Standard] The number of non-unicast packets sent by the upper layer. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The number of normal non-unicast packets sent by the upper layer (or the number of packets whose MAC DA contains an I/G bit of `1`. However, this does not include MAC packets, but includes SMT.) • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: The number of normal non-unicast packets sent by the upper layer (or the number of packets whose MAC DA contains an I/G bit of `1`. However, this does not include MAC packets, but includes SMT.)	Y
22	ifOutDiscards {ifEntry 19}	R/O	[Standard] The number of packets that contained no errors but were discarded before being sent (for example, due to insufficient send buffers). [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The number of events discarded due to a send FIFO overflow (underrun) • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: The number of events discarded due to a send FIFO overflow (underrun)	Y
23	ifOutErrors {ifEntry 20}	R/O	[Standard] The number of packets that failed to be sent due to an error. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: Same as the standard	Y
24	ifOutQLen {ifEntry 21}	R/O	[Standard] The size of the send packet queue. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: The sum of the sizes of the send packet queues that belong to the channel group	Y

#	Object identifier	Access	Implementation specifications	Support?
25	ifSpecific {ifEntry 22}	R/O	[Standard] The reference to the MIB that defines the medium features of the interface. This is the object ID of an ifType-dependent MIB. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Returns a response of `1.3.6.1.2.1.10.7` when normal. Otherwise `0.0`. • When the ifIndex indicates a VLAN: Fixed value of `0.0` • When the ifIndex indicates a link aggregation: Fixed value of `0.0`	Y

2.2.2 interfaces group (Other cases)

This section describes the interfaces group for when local loopback is used.

(1) ID

```
interfaces OBJECT IDENTIFIER ::= {mib-2 2}
Object ID value  1.3.6.1.2.1.2
```

(2) Implementation specifications

The following table lists the implementation specifications for the interfaces group when local loopback is used.

Table 2-3: Interfaces group implementation specifications (other cases)

#	Object identifier	Access	Implementation specifications	Support?
1	ifNumber {interfaces 1}	R/O	[Standard] The number of network interfaces provided by this system. [Implementation] Same as the standard. Changing the interface configuration causes the value of this object to change.	Y
2	ifTable {interfaces 2}	NA	[Standard] A table of interface entities. [Implementation] Same as the standard.	Y
3	ifEntry {ifTable 1}	NA	[Standard] A list of interfaces that belong to the sub-network layer. INDEX { ifIndex } [Implementation] Same as the standard.	Y
4	ifIndex {ifEntry 1}	R/O	[Standard] The number that identifies the interface. The value ranges from `1` to ifNumber. [Implementation] The number that identifies the interface. Changing the interface configuration causes the value of this object to change. The method for assigning an ifIndex is as follows: • Local loopback: `1`	Y
5	ifDescr {ifEntry 2}	R/O	[Standard] Interface information. [Implementation] A fixed character string determined by the interface type.	Y
6	ifType {ifEntry 3}	R/O	[Standard] The interface type. [Implementation] Same as the standard. Local loopback: softwareLoopback (`24`)	Y
7	ifMtu {ifEntry 4}	R/O	[Standard] The maximum length of packets sent and received. [Implementation] Depends on the interface as follows: Local loopback: Fixed value of `33188`.	Y
8	ifSpeed {ifEntry 5}	R/O	[Standard] The estimated current line speed of this interface (bit/s). [Implementation] Depends on the interface as follows: Local loopback: Fixed value of `0`.	Y

#	Object identifier	Access	Implementation specifications	Support?
9	ifPhysAddress {ifEntry 6}	R/O	[Standard] The physical address directly below the network layer of the interface. [Implementation] Depends on the interface as follows: Local loopback: None.	Y
10	ifAdminStatus {ifEntry 7}	R/NW	[Standard] The desired status of this interface: • up (1) • down (2) • testing (3) [Implementation] Depends on the interface as follows: Local loopback: Fixed value of up (1).	Y
11	ifOperStatus {ifEntry 8}	R/O	[Standard] The current status of this interface: • up (1) • down (2) • testing (3) [Implementation] Depends on the interface as follows: Local loopback: Fixed value of up (1).	Y
12	ifLastChange {ifEntry 9}	R/O	[Standard] sysUpTime for when the ifOperStatus of this interface last changed (in units of 1/100 seconds). [Implementation] Depends on the interface as follows: Local loopback: Same as the standard.	Y
13	ifInOctets {ifEntry 10}	R/O	[Standard] The number of octets received by this interface. [Implementation] Depends on the interface as follows: Local loopback: The total number of octets received as IP packets.	Y
14	ifInUcastPkts {ifEntry 11}	R/O	[Standard] The number of unicast packets sent to the higher-level protocol. [Implementation] Depends on the interface as follows: Local loopback: The number of unicast packets sent as IP packets to the upper layer protocol.	Y
15	ifInNUcastPkts {ifEntry 12}	R/O	[Standard] The number of non-unicast packets (broadcast and multicast packets) sent to the upper layer protocol. [Implementation] Depends on the interface as follows: Local loopback: The number of broadcast or multicast packets sent as IP packets to the upper layer protocol.	Y
16	ifInDiscards {ifEntry 13}	R/O	[Standard] The number of packets that contained no errors but failed to be sent to the upper layer protocol (or the number of packets that were received but discarded, for example, because there was no buffer). [Implementation] Depends on the interface as follows: Local loopback: Counts the number of discarded packets.	Y
17	ifInErrors {ifEntry 14}	R/O	[Standard] The number of packets discarded because they contained errors. [Implementation] Depends on the interface as follows: Local loopback: Fixed value of 0.	Y
18	ifInUnknownProtos {ifEntry 15}	R/O	[Standard] The number of packets received but discarded because there was an unknown protocol. [Implementation] Depends on the interface as follows: Local loopback: The number of non-IP packets discarded.	Y
19	ifOutOctets {ifEntry 16}	R/O	[Standard] The number of packet octets sent by this interface. [Implementation] Depends on the interface as follows: Local loopback: The total number of octets sent as IP packets.	Y

#	Object identifier	Access	Implementation specifications	Support?
20	ifOutUcastPkts {ifEntry 17}	R/O	[Standard] The number of unicast packets sent by the higher-level layer. [Implementation] Depends on the interface as follows: Local loopback: The number of unicast packets sent as IP packets by the upper layer.	Y
21	ifOutNUcastPkts {ifEntry 18}	R/O	[Standard] The number of non-unicast packets sent by the upper layer. [Implementation] Depends on the interface as follows: Local loopback: The number of non-unicast packets sent as IP packets by the upper layer.	Y
22	ifOutDiscards {ifEntry 19}	R/O	[Standard] The number of packets that contained no errors but were discarded before being sent (for example, due to insufficient send buffers). [Implementation] Depends on the interface as follows: Local loopback: Counts the number of discarded packets.	Y
23	ifOutErrors {ifEntry 20}	R/O	[Standard] The number of packets that failed to be sent due to an error. [Implementation] Depends on the interface as follows: Local loopback: Fixed value of `0`.	Y
24	ifOutQLen {ifEntry 21}	R/O	[Standard] The size of the send packet queue. [Implementation] Depends on the interface as follows: Local loopback: The number of packets waiting in the send queue.	Y
25	ifSpecific {ifEntry 22}	R/O	[Standard] The reference to the MIB that defines the medium features of the interface. This is the object ID of an ifType-dependent MIB. [Implementation] Depends on the interface as follows: Local loopback: Fixed value of `0.0`.	Y

2.3 at group (MIB-II)

Relevant standards for the at group (MIB-II) are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
at OBJECT IDENTIFIER ::= {mib-2 3}
Object ID value  1.3.6.1.2.1.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the at group.

Table 2-4: at group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	atTable {at 1}	NA	[Standard] An address translation table that contains the mappings of the NetworkAddress to the equivalent physical addresses. Some interfaces do not use the translation table to determine the equivalent addresses. For these interfaces, the address translation table is empty and contains no entries. [Implementation] Same as the standard. Indicates the mappings of network addresses to physical addresses.	Y
2	atEntry {atTable 1}	NA	[Standard] Each entry represents the mapping of a single NetworkAddress to its equivalent physical address. INDEX { atIfIndex, atNetAddress } [Implementation] Same as the standard.	Y
3	atIfIndex {atEntry 1}	R/NW	[Standard] The ifIndex value of the corresponding interface. [Implementation] The ifIndex of the interface that has an atPhysAddress. `Read_Only`.	Y
4	atPhysAddress {atEntry 2}	R/O	[Standard] The physical address. [Implementation] The MAC address dependent on the ARP table, which is medium-dependent.	Y
5	atNetAddress {atEntry 3}	R/O	[Standard] The IP address corresponding to the medium-dependent atPhysAddress. [Implementation] Same as the standard.	Y

2.4 ip group (MIB-II and IP Forward Table MIB)

2.4.1 ip

Relevant standards for the ip group are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
ip OBJECT IDENTIFIER ::= {mib-2 4}
Object ID value  1.3.6.1.2.1.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the ip group.

Table 2-5: ip group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipForwarding {ip 1}	R/ NW	[Standard] Indicates whether IP forwarding is available (or indicates whether the object serves as a gateway). • gateway (`1`) • host (`2`) [Implementation] Fixed value of gateway (`1`). `Read_Only`.	Y
2	ipDefaultTTL {ip 2}	R/ NW	[Standard] A default value specified for the TTL of the IP header. [Implementation] Same as the standard. `Read_Only`.	Y
3	ipInReceives {ip 3}	R/O	[Standard] The total number of IP datagrams received across all the interfaces. [Implementation] Same as the standard. Fixed value of `0`.	M
4	ipInHdrErrors {ip 4}	R/O	[Standard] The number of datagrams received but discarded due to an IP header error. [Implementation] Includes the number of IP packets that contain an error, such as an IP header checksum error, version error, header length error (TTL over), or format error. Fixed value of `0`.	M
5	ipInAddrErrors {ip 5}	R/O	[Standard] The number of packets discarded because the IP header contained an invalid destination address. [Implementation] Runs a count when the class of the destination address is not A, B, C, or D. It also runs a count when the destination address is an invalid broadcast address (`255.255.255.255` or `0.0.0.0`).	Y
6	ipForwDatagrams {ip 6}	R/O	[Standard] The number of packets determined to be forwarded. [Implementation] Same as the standard. Fixed value of `0`.	M
7	ipInUnknownProtos {ip 7}	R/O	[Standard] The number of IP datagrams discarded because an unknown or unsupported protocol was detected in an incoming IP packet that was received. [Implementation] Same as the standard.	Y
8	ipInDiscards {ip 8}	R/O	[Standard] The total number of sent IP datagrams discarded due to a reason other than an error. [Implementation] The number of packets received when ifOperStatus is not up.	Y
9	ipInDelivers {ip 9}	R/O	[Standard] The number of IP datagrams sent to the upper layer. [Implementation] The number of incoming IP packets received.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	ipOutRequests {ip 10}	R/O	[Standard] The total number of IP datagrams requested to be sent as IP packets by the upper layer. [Implementation] The number of outgoing IP packets sent.	Y
11	ipOutDiscards {ip 11}	R/O	[Standard] The number of IP datagrams discarded due to a reason other than an error. [Implementation] The number of IP packets discarded prior to being sent due to congestion control or insufficient send buffers. Fixed value of 0.	M
12	ipOutNoRoutes {ip 12}	R/O	[Standard] The number of IP datagrams discarded because the transmission route was not specified. [Implementation] Runs a count before packet forwarding when the destination network is not found in the routing table.	Y
13	ipReasmTimeout {ip 13}	R/O	[Standard] The maximum number of seconds to hold a fragmented packet waiting to be reassembled. [Implementation] Same as the standard.	Y
14	ipReasmReqds {ip 14}	R/O	[Standard] The number of received IP datagrams to be reassembled. [Implementation] Same as the standard.	Y
15	ipReasmOKs {ip 15}	R/O	[Standard] The number of received IP datagrams that were successfully reassembled. [Implementation] Same as the standard.	Y
16	ipReasmFails {ip 16}	R/O	[Standard] The number of received IP datagrams that failed to be reassembled. [Implementation] Same as the standard.	Y
17	ipFragOKs {ip 17}	R/O	[Standard] The number of IP datagrams that successfully fragmented. [Implementation] Same as the standard.	Y
18	ipFragFails {ip 18}	R/O	[Standard] The number of IP datagrams that failed to fragment. [Implementation] Runs a count when the required fragmentation of a packet cannot be performed because the DF bit of the IP header is on. A count is also run when a buffer for fragmentation cannot be reserved.	Y
19	ipFragCreates {ip 19}	R/O	[Standard] The number of IP datagram fragments generated by fragmentation. [Implementation] Same as the standard.	Y

2.4.2 ipAddrTable

Relevant standards for the ipAddrTable group are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
ip OBJECT IDENTIFIER ::= {mib-2 4}

ipAddrTable OBJECT IDENTIFIER ::= {ip 20}
Object ID value  1.3.6.1.2.1.4.20
```

(2) Implementation specifications

The following table shows the implementation specifications for the ipAddrTable group.

Table 2-6: ipAddrTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipAddrTable {ip 20}	NA	[Standard] A table of addressing information related to the IP addresses for this entity (addressing information table that is IP address-specific). [Implementation] Same as the standard.	Y
2	ipAddrEntry {ipAddrTable 1}	NA	[Standard] A list of addressing information related to one of the IP addresses for this entity. [Implementation] Same as the standard.	Y
3	ipAdEntAddr {ipAddrEntry 1}	R/O	[Standard] An IP address. [Implementation] Port IP address.	Y
4	ipAdEntIfIndex {ipAddrEntry 2}	R/O	[Standard] The Interface index value applied by this entry. Same value as ifIndex. [Implementation] Same as the standard.	Y
5	ipAdEntNetMask {ipAddrEntry 3}	R/O	[Standard] The subnet mask for the IP address of this entry. [Implementation] Same as the standard.	Y
6	ipAdEntBcastAddr {ipAddrEntry 4}	R/O	[Standard] The lowest bit value of the address used when sending an IP broadcast. [Implementation] Same as the standard.	Y
7	ipAdEntReasmMaxSize {ipAddrEntry 5}	R/O	[Standard] The maximum size of the IP packets created by reassembling the IP datagrams received and fragmented by the interface. [Implementation] Same as the standard.	Y

2.4.3 ipRouteTable

Relevant standards for the ipRouteTable group are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
ip OBJECT IDENTIFIER ::= {mib-2 4}

ipRouteTable OBJECT IDENTIFIER ::= {ip 21}
Object ID value  1.3.6.1.2.1.4.21
```

(2) Implementation specifications

The following table shows the implementation specifications for the ipRouteTable group.

Table 2-7: ipRouteTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipRouteTable {ip 21}	NA	[Standard] The IP routing table for this entity. [Implementation] Same as the standard.	Y
2	ipRouteEntry {ipRouteTable 1}	NA	[Standard] Route information for a specific destination. [Implementation] Same as the standard.	Y
3	ipRouteDest {ipRouteEntry 1}	R/NW	[Standard] The destination IP address for this route. [Implementation] The destination network address in the routing table. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	ipRouteIfIndex {ipRouteEntry 2}	R/NW	[Standard] The index value of the interface that has the first hop on this route. [Implementation] Same as the standard. `Read_Only`. The routing table contains a non-forwarding route. The ipAdEntIfIndex of this route is assumed to be `0`.	Y
5	ipRouteMetric1 {ipRouteEntry 3}	R/NW	[Standard] The primary routing metric for this route. [Implementation] The number of hops in the routing table. `Read_Only`.	Y
6	ipRouteMetric2 {ipRouteEntry 4}	R/NW	[Standard] The alternate routing metric for the route. [Implementation] Same as the standard. `Read_Only`.	Y
7	ipRouteMetric3 {ipRouteEntry 5}	R/NW	[Standard] The alternate routing metric for the route. [Implementation] Fixed value of `-1` because the routing metric is unused. `Read_Only`.	Y
8	ipRouteMetric4 {ipRouteEntry 6}	R/NW	[Standard] The alternate routing metric for the route. [Implementation] Fixed value of `-1` because the routing metric is unused. `Read_Only`.	Y
9	ipRouteNextHop {ipRouteEntry 7}	R/NW	[Standard] The IP address of the next hop on this route.(For a route accessed via broadcast media, the address is the agent address on the interface.) [Implementation] The IP address of the first hop in the routing table. `Read_Only`. The routing table for this entity contains a non-forwarding route. The ipRouteNextHop of this route is assumed to be 0.0.0.0.	Y
10	ipRouteType {ipRouteEntry 8}	R/O	[Standard] The route type: • other (`1`) • invalid (`2`) • direct (`3`) • indirect (`4`) [Implementation] Same as the standard. `Read_Only`.	Y
11	ipRouteProto {ipRouteEntry 9}	R/O	[Standard] Routing structure that learned this route: • other (`1`) • local (`2`) • netmgmt (`3`) • icmp (`4`) • egp (`5`) • ggp (`6`) • hello (`7`) • rip (`8`) • is-is (`9`) • es-is (`10`) • ciscoIgrp (`11`) • bbnSpfIgp (`12`) • ospf (`13`) • bgp (`14`) [Implementation] Same as the standard.	Y
12	ipRouteAge {ipRouteEntry 10}	R/NW	[Standard] The time elapsed (in seconds) since this route was last updated. [Implementation] Same as the standard. `Read_Only`.	Y
13	ipRouteMask {ipRouteEntry 11}	R/NW	[Standard] A subnet mask value for ipRouteDest. [Implementation] Same as the standard. `Read_Only`.	Y
14	ipRouteMetric5 {ipRouteEntry 12}	R/NW	[Standard] An alternate routing metric. [Implementation] Fixed value of `-1`. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
15	ipRouteInfo {ipRouteEntry 13}	R/O	[Standard] The reference to the MIB that defines the specific routine protocol that can be trusted by this route. [Implementation] Fixed value of {0.0}	Y

2.4.4 ipNetToMediaTable

Relevant standards for the ipNetToMediaTable group are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
ip OBJECT IDENTIFIER ::= {mib-2 4}

ipNetToMediaTable OBJECT IDENTIFIER ::= {ip 22}
Object ID value  1.3.6.1.2.1.4.22
```

(2) Implementation specifications

The following table shows the implementation specifications for the ipNetToMediaTable group.

Table 2-8: ipNetToMediaTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipNetToMediaTable {ip 22}	NA	[Standard] An IP address translation table used to map the IP addresses to the physical addresses. [Implementation] Same as the standard.	Y
2	ipNetToMediaEntry {ipNetToMediaTable 1}	NA	[Standard] A list of IP addresses. Each IP address is associated with a physical address. INDEX { ipNetToMediaIfIndex, ipNetToMediaNetAddress } [Implementation] Same as the standard.	Y
3	ipNetToMediaIfIndex {ipNetToMediaEntry 1}	R/NW	[Standard] The validated interface ID number. [Implementation] Same as the standard. Read_Only.	Y
4	ipNetToMediaPhysAddress {ipNetToMediaEntry 2}	R/NW	[Standard] The medium-dependent physical address. [Implementation] Same as the standard. Read_Only.	Y
5	ipNetToMediaNetAddress {ipNetToMediaEntry 3}	R/NW	[Standard] An IP address that corresponds to a medium-dependent IP address. [Implementation] Same as the standard. Read_Only.	Y
6	ipNetToMediaType {ipNetToMediaEntry 4}	R/NW	[Standard] The mapping type: • other (1) • invalid (2) • dynamic (3) • static (4) [Implementation] Same as the standard. Read_Only.	Y
7	ipRoutingDiscards {ip 23}	R/O	[Standard] The number of routing entries that are valid but selected to be discarded. For example, this indicates the number of entries discarded due to insufficient routing buffers. [Implementation] Fixed value of 0.	M

2.4.5 ipForward

Relevant standards for the ipForward group are described in the following document:

- RFC 1354 (July 1992)

(1) ID

```
ip OBJECT IDENTIFIER ::= {mib-2 4}

ipForward OBJECT IDENTIFIER ::= {ip 24}
Object ID value  1.3.6.1.2.1.4.24
```

(2) Implementation specifications

The following table shows the implementation specifications for the ipForward group.

Table 2-9: ipForward group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipForwardNumber {ipForward 1}	R/O	[Standard] The number of entries in the forwarding table. [Implementation] Same as the standard.	Y
2	ipForwardTable {ipForward 2}	NA	[Standard] A table of information about each route. [Implementation] Same as the standard.	Y
3	ipForwardEntry {ipForwardTable 1}	NA	[Standard] A list of information about a specific route. INDEX { ipForwardDest, ipForwardProto, ipForwardPolicy, ipForwardNextHop } [Implementation] Same as the standard.	Y
4	ipForwardDest {ipForwardEntry 1}	R/O	[Standard] The destination address for this route. [Implementation] Same as the standard.	Y
5	ipForwardMask {ipForwardEntry 2}	R/NW	[Standard] The mask to be logically AND-operated with the destination. [Implementation] Same as the standard. `Read_Only`.	Y
6	ipForwardPolicy {ipForwardEntry 3}	R/O	[Standard] A condition used to select a single path from among multiple path routes (usually TOS). [Implementation] Fixed value of `0`.	M
7	ipForwardNextHop {ipForwardEntry 4}	R/O	[Standard] The address of the next system on the route. [Implementation] Same as the standard.	Y
8	ipForwardIfIndex {ipForwardEntry 5}	R/NW	[Standard] The identifier of a local interface connected to the next hop on this route. [Implementation] Same as the standard. `Read_Only`.	Y
9	ipForwardType {ipForwardEntry 6}	R/NW	[Standard] The route type: • Other (`1`) • Invalid (`2`) • Local (`3`) • Remote (`4`) [Implementation] Same as the standard. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	ipForwardProto {ipForwardEntry 7}	R/O	[Standard] The protocol that learned this route: • other (1) • local (2) • netmgmt (3) • icmp (4) • egp (5) • ggp (6) • hello (7) • rip (8) • is-is (9) • es-is (10) • ciscoIgrp (11) • bbnSpfIgp (12) • ospf (13) • bgp (14) • idpr (15) [Implementation] Same as the standard.	Y
11	ipForwardAge {ipForwardEntry 8}	R/ NW	[Standard] The time that has elapsed since this route was learned or updated (in seconds). [Implementation] Same as the standard.	Y
12	ipForwardInfo {ipForwardEntry 9}	R/ NW	[Standard] Additional information (on this route) that is protocol-specific. [Implementation] Fixed value of {0.0} `Read_Only`.	M
13	ipForwardNextHopAS {ipForwardEntry 10}	R/ NW	[Standard] The autonomous system number of the next hop. [Implementation] Same as the standard. `Read_Only`.	Y
14	ipForwardMetric1 {ipForwardEntry 11}	R/ NW	[Standard] A metric for this route. [Implementation] Same as the standard. `Read_Only`.	Y
15	ipForwardMetric2 {ipForwardEntry 12}	R/ NW	[Standard] An alternate route metric for this route. [Implementation] Same as the standard. `Read_Only`.	Y
16	ipForwardMetric3 {ipForwardEntry 13}	R/ NW	[Standard] An alternate route metric for this route. [Implementation] Fixed value of `-1`. `Read_Only`.	Y
17	ipForwardMetric4 {ipForwardEntry 14}	R/ NW	[Standard] An alternate route metric for this route. [Implementation] Fixed value of `-1`. `Read_Only`.	Y
18	ipForwardMetric5 {ipForwardEntry 15}	R/ NW	[Standard] An alternate route metric for this route. [Implementation] Fixed value of `-1`. `Read_Only`.	Y

2.5 icmp group (MIB-II)

Relevant standards for the icmp group (MIB-II) are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
icmp OBJECT IDENTIFIER ::= {mib-2 5}
Object ID value  1.3.6.1.2.1.5
```

(2) Implementation specifications

The following table shows the implementation specifications for the icmp group.

Table 2-10: icmp group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	icmpInMsgs {icmp 1}	R/O	[Standard] The total number of ICMP messages received by this entity. [Implementation] Same as the standard.	Y
2	icmpInErrors {icmp 2}	R/O	[Standard] The number of ICMP message errors received (such as checksum errors and frame length errors). [Implementation] Same as the standard.	Y
3	icmpInDestUnreachs {icmp 3}	R/O	[Standard] The number of ICMP Destination Unreachable messages received. [Implementation] Same as the standard.	Y
4	icmpInTimeExcds {icmp 4}	R/O	[Standard] The number of ICMP Time Exceeded messages received. [Implementation] Same as the standard.	Y
5	icmpInParmProbs {icmp 5}	R/O	[Standard] The number of ICMP Parameter Problem messages received. [Implementation] Same as the standard.	Y
6	icmpInSrcQuenchs {icmp 6}	R/O	[Standard] The number of ICMP Source Quench messages received. [Implementation] Same as the standard.	Y
7	icmpInRedirects {icmp 7}	R/O	[Standard] The number of ICMP Network Redirect messages received. [Implementation] Same as the standard.	Y
8	icmpInEchos {icmp 8}	R/O	[Standard] The number of ICMP Echo Request messages received. [Implementation] Same as the standard.	Y
9	icmpInEchoReps {icmp 9}	R/O	[Standard] The number of ICMP Echo Reply messages received. [Implementation] Same as the standard.	Y
10	icmpInTimestamps {icmp 10}	R/O	[Standard] The number of ICMP Timestamp request messages received. [Implementation] Same as the standard.	Y
11	icmpInTimestampReps {icmp 11}	R/O	[Standard] The number of ICMP Timestamp Reply messages received. [Implementation] Same as the standard.	Y
12	icmpInAddrMasks {icmp 12}	R/O	[Standard] The number of ICMP Address Mask Request messages received. [Implementation] Same as the standard.	Y
13	icmpInAddrMaskReps {icmp 13}	R/O	[Standard] The number of ICMP Address Mask Reply messages received. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support ?
14	icmpOutMsgs {icmp 14}	R/O	[Standard] The total number of attempts to send ICMP messages (including error attempts). [Implementation] Same as the standard.	Y
15	icmpOutErrors {icmp 15}	R/O	[Standard] The number of ICMP messages that failed to be sent due to an error. [Implementation] Only runs a count when there are no buffers.	Y
16	icmpOutDestUnreachs {icmp 16}	R/O	[Standard] The number of ICMP Destination Unreachable messages sent. [Implementation] Same as the standard.	Y
17	icmpOutTimeExcds {icmp 17}	R/O	[Standard] The number of ICMP Time Exceeded messages sent. [Implementation] Same as the standard.	Y
18	icmpOutParmProbs {icmp 18}	R/O	[Standard] The number of ICMP Parameter Problem messages sent. [Implementation] Same as the standard.	Y
19	icmpOutSrcQuenchs {icmp 19}	R/O	[Standard] The number of ICMP Source Quench messages sent. [Implementation] Same as the standard.	Y
20	icmpOutRedirects {icmp 20}	R/O	[Standard] The number of ICMP Redirect messages sent. [Implementation] Same as the standard.	Y
21	icmpOutEchos {icmp 21}	R/O	[Standard] The number of ICMP Echo Request messages sent. [Implementation] Same as the standard.	Y
22	icmpOutEchoReps {icmp 22}	R/O	[Standard] The number of ICMP Echo Reply messages sent. [Implementation] Same as the standard.	Y
23	icmpOutTimestamps {icmp 23}	R/O	[Standard] The number of ICMP Timestamp request messages sent. [Implementation] Same as the standard.	Y
24	icmpOutTimestampReps {icmp 24}	R/O	[Standard] The number of ICMP Timestamp Reply messages sent. [Implementation] Same as the standard.	Y
25	icmpOutAddrMasks {icmp 25}	R/O	[Standard] The number of ICMP Address Mask Request messages sent. [Implementation] Same as the standard.	Y
26	icmpOutAddrMaskReps {icmp 26}	R/O	[Standard] The number of ICMP Address Mask Reply messages sent. [Implementation] Same as the standard.	Y

2.6 tcp group (MIB-II and TCP MIB for IPv6)

2.6.1 tcp

Relevant standards for the tcp group are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
tcp OBJECT IDENTIFIER ::= {mib-2 6}
Object ID value  1.3.6.1.2.1.6
```

(2) Implementation specifications

The following table shows the implementation specifications for the tcp group.

Table 2-11: tcp group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	tcpRtoAlgorithm {tcp 1}	R/O	[Standard] The algorithm used to determine the timeout for resending: • other (1) • constant (2) • rsre (3) • vanj (4) [Implementation] Fixed value of vanj (4).	M
2	tcpRtoMin {tcp 2}	R/O	[Standard] The minimum resend timeout value (in milliseconds). [Implementation] Fixed value of 1000.	M
3	tcpRtoMax {tcp 3}	R/O	[Standard] The maximum resend timeout value (in milliseconds). [Implementation] Fixed value of 64000.	M
4	tcpMaxConn {tcp 4}	R/O	[Standard] The total number of TCP connections that can be supported. If the maximum number of connections is dynamic, a response of -1 is returned. [Implementation] Fixed value of -1.	M
5	tcpActiveOpens {tcp 5}	R/O	[Standard] The number of TCP connection state transitions from CLOSE to SYN-SENT. [Implementation] Same as the standard.	Y
6	tcpPassiveOpens {tcp 6}	R/O	[Standard] The number of TCP connection state transitions from LISTEN to SYN-RCVD. [Implementation] Same as the standard.	Y
7	tcpAttemptFails {tcp 7}	R/O	[Standard] The sum of the number of TCP connection state transitions from SYN-SENT or SYN-RCVD to CLOSE, and the number from SYN-RCVD to LISTEN. [Implementation] Same as the standard.	Y
8	tcpEstabResets {tcp 8}	R/O	[Standard] The number of TCP connection state transitions from ESTABLISHED or CLOSE-WAIT to CLOSE. [Implementation] Same as the standard.	Y
9	tcpCurrEstab {tcp 9}	R/O	[Standard] The total number of TCP connections in the ESTABLISHED or CLOSE-WAIT state. [Implementation] Same as the standard.	Y
10	tcpInSegs {tcp 10}	R/O	[Standard] The total number of segments received that contain an erroneous segment. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
11	tcpOutSegs {tcp 11}	R/O	[Standard] The total number of segments sent. [Implementation] Same as the standard.	Y
12	tcpRetransSegs {tcp 12}	R/O	[Standard] The total number of segments resent. [Implementation] Same as the standard.	Y
13	tcpConnTable {tcp 13}	NA	[Standard] A table that contains information specific to the TCP connections. [Implementation] Same as the standard.	Y
14	tcpConnEntry {tcpConnTable 1}	NA	[Standard] Entry information for a specific TCP connection. INDEX { tcpConnLocalAddress, tcpConnLocalPort, tcpConnRemAddress, tcpConnRemPort } [Implementation] Same as the standard.	Y
15	tcpConnState {tcpConnEntry 1}	R/NW	[Standard] The TCP connection state: • closed (1) • listen (2) • synSent (3) • synReceived (4) • established (5) • finWait1 (6) • finWait2 (7) • closeWait (8) • lastAck (9) • closing (10) • timeWait (11) • deleteTCB (12) [Implementation] Same as the standard. `Read_Only`.	Y
16	tcpConnLocalAddress {tcpConnEntry 2}	R/O	[Standard] The local IP address for this TCP connection. [Implementation] Same as the standard.	Y
17	tcpConnLocalPort {tcpConnEntry 3}	R/O	[Standard] The local port number for this TCP connection. [Implementation] Same as the standard.	Y
18	tcpConnRemAddress {tcpConnEntry 4}	R/O	[Standard] The remote IP address for this TCP connection. [Implementation] Same as the standard.	Y
19	tcpConnRemPort {tcpConnEntry 5}	R/O	[Standard] The remote port number for this TCP connection. [Implementation] Same as the standard.	Y
20	tcpInErrs {tcp 14}	R/O	[Standard] The total number of erroneous segments received. [Implementation] Same as the standard.	Y
21	tcpOutRsts {tcp 15}	R/O	[Standard] The number of segments sent that have an RST flag. [Implementation] Same as the standard.	Y

2.6.2 ipv6TcpConnTable

Relevant standards for the ipv6TcpConnTable group are described in the following document:

- RFC 2452 (December 1998)

(1) ID

```
tcp OBJECT IDENTIFIER ::= {mib-2 6}
```

```
ipv6TcpConnTable OBJECT IDENTIFIER ::= {tcp 16}
Object ID value  1.3.6.1.2.1.6.16
```

(2) Implementation specifications

The following table shows the implementation specifications for the ipv6TcpConnTable group.

Table 2-12: ipv6TcpConnTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6TcpConnTable {tcp 16}	NA	[Standard] A table that lists TCP connections. [Implementation] Same as the standard.	Y
2	ipv6TcpConnEntry {ipv6TcpConnTable 1}	NA	[Standard] A table entry. INDEX { ipv6TcpConnLocalAddress, ipv6TcpConnLocalPort, ipv6TcpConnRemAddress, ipv6TcpConnRemPort, ipv6TcpConnIfIndex } [Implementation] Same as the standard.	Y
3	ipv6TcpConnLocalAddress {ipv6TcpConnEntry 1}	NA	[Standard] The local IP address for the TCP connection. [Implementation] Same as the standard.	Y
4	ipv6TcpConnLocalPort {ipv6TcpConnEntry 2}	NA	[Standard] The local port number for the TCP connection. [Implementation] Same as the standard.	Y
5	ipv6TcpConnRemAddress {ipv6TcpConnEntry 3}	NA	[Standard] The remote IP address for the TCP connection. [Implementation] Same as the standard.	Y
6	ipv6TcpConnRemPort {ipv6TcpConnEntry 4}	NA	[Standard] The remote port number for the TCP connection. [Implementation] Same as the standard.	Y
7	ipv6TcpConnIfIndex {ipv6TcpConnEntry 5}	NA	[Standard] The local interface number for the TCP connection. [Implementation] Same as the standard.	Y
8	ipv6TcpConnState {ipv6TcpConnEntry 6}	R/NW	[Standard] The TCP connection state: • closed (1) • listen (2) • synSent (3) • synReceived (4) • established (5) • finWait1 (6) • finWait2 (7) • closeWait (8) • lastAck (9) • closing (10) • timeWait (11) • deleteTCB (12) [Implementation] Same as the standard. Read_Only.	Y

2.7 udp group (MIB-II and UDP MIB for IPv6)

2.7.1 udp

Relevant standards for the udp group are described in the following document:

- RFC 1213 (March 1991)

(1) ID

```
udp OBJECT IDENTIFIER ::= {mib-2 7}
Object ID value  1.3.6.1.2.1.7
```

(2) Implementation specifications

The following table shows the implementation specifications for the udp group.

Table 2-13: udp group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	udpInDatagrams {udp 1}	R/O	[Standard] The number of UDP datagrams sent to the upper layer. [Implementation] Same as the standard.	Y
2	udpNoPorts {udp 2}	R/O	[Standard] The total number of UDP datagrams received for which there is no upper application on a destination port. [Implementation] Same as the standard.	Y
3	udpInErrors {udp 3}	R/O	[Standard] The number of UDP datagrams that failed to be sent to the application due to reasons other than udpNoPorts. [Implementation] Same as the standard.	Y
4	udpOutDatagrams {udp 4}	R/O	[Standard] The total number of UDP datagrams sent by the upper application. [Implementation] Same as the standard.	Y
5	udpTable {udp 5}	NA	[Standard] A table that lists UDP listener information. [Implementation] Same as the standard.	Y
6	udpEntry {udpTable 1}	NA	[Standard] The number of entries for a specific UDP listener. INDEX { udpLocalAddress, udpLocalPort } [Implementation] Same as the standard.	Y
7	udpLocalAddress {udpEntry 1}	R/O	[Standard] The local IP address for this UDP listener. [Implementation] Same as the standard.	Y
8	udpLocalPort {udpEntry 2}	R/O	[Standard] The local port number for this UDP listener. [Implementation] Same as the standard.	Y

2.7.2 ipv6UdpTable

Relevant standards for the ipv6UdpTable group are described in the following document:

- RFC 2454 (December 1998)

(1) ID

```
udp OBJECT IDENTIFIER ::= {mib-2 7}

ipv6UdpTable OBJECT IDENTIFIER ::= {udp 6}
Object ID value  1.3.6.1.2.1.7.6
```

(2) Implementation specifications

The following table shows the implementation specifications for the ipv6UdpTable group.

Table 2-14: ipv6UdpTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6UdpTable {udp 6}	NA	[Standard] A table of UDP listener information. [Implementation] Same as the standard.	Y
2	ipv6UdpEntry {ipv6UdpTable 1}	NA	[Standard] Specific UDP listener information. INDEX { ipv6UdpLocalAddress, ipv6UdpLocalPort, ipv6UdpIfIndex } [Implementation] Same as the standard.	Y
3	ipv6UdpLocalAddress {ipv6UdpEntry 1}	NA	[Standard] The local IPv6 address for the UDP listener. [Implementation] Same as the standard.	Y
4	ipv6UdpLocalPort {ipv6UdpEntry 2}	NA	[Standard] The local port number for the UDP listener. [Implementation] Same as the standard.	Y
5	ipv6UdpIfIndex {ipv6UdpEntry 3}	R/O	[Standard] The local interface number for the UDP listener. [Implementation] Same as the standard.	Y

2.8 dot3 group (Ethernet-like MIBs)

Relevant standards for the dot3 group are described in the following document:

- RFC 1643 (July 1994)

(1) ID

```
dot3 OBJECT IDENTIFIER ::= {transmission 7}
Object ID value  1.3.6.1.2.1.10.7
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot3 group.

Table 2-15: dot3 group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot3StatsTable {dot3 2}	NA	[Standard] A table of statistics for Ethernet-like interfaces connected to a specific system. [Implementation] Same as the standard.	Y
2	dot3StatsEntry {dot3StatsTable 1}	NA	[Standard] A list of statistics for a specific interface to an Ethernet-like medium. INDEX { dot3StatsIndex } [Implementation] Same as the standard.	Y
3	dot3StatsIndex {dot3StatsEntry 1}	R/O	[Standard] The index value of the interface to an Ethernet-like medium. [Implementation] Same as the standard.	Y
4	dot3StatsAlignmentErrors {dot3StatsEntry 2}	R/O	[Standard] The number of frames received that are detected by FCS checking and have an incorrect frame length.# [Implementation] Same as the standard.	M
5	dot3StatsFCSErrors {dot3StatsEntry 3}	R/O	[Standard] The number of frames received that are detected by FCS checking and have the correct frame length.# [Implementation] The number of frames received that are detected by FCS checking and have the correct frame length.# If 1000BASE-T or 1000BASE-X is used, the long frames received are also included in the count.	Y
6	dot3StatsSingleCollisionFrames {dot3StatsEntry 4}	R/O	[Standard] The number of frames sent successfully that only encountered a single collision. [Implementation] Same as the standard.	Y
7	dot3StatsMultipleCollisionFrames {dot3StatsEntry 5}	R/O	[Standard] The number of frames sent successfully by a specific interface that encountered two or more collisions. [Implementation] Same as the standard.	Y
8	dot3StatsSQETestErrors {dot3StatsEntry 6}	R/O	[Standard] The number of SQE TEST ERROR messages encountered. [Implementation] Fixed value of 0.	M
9	dot3StatsDeferredTransmissions {dot3StatsEntry 7}	R/O	[Standard] The number of frames whose initial transmission was delayed because the transmission line was busy. [Implementation] Same as the standard.	Y
10	dot3StatsLateCollisions {dot3StatsEntry 8}	R/O	[Standard] The number of collisions detected after a 512-bit time elapsed. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
11	dot3StatsExcessiveCollisions {dot3StatsEntry 9}	R/O	[Standard] The number of transfer failures due to excessive collisions (16 times). [Implementation] Same as the standard.	Y
12	dot3StatsInternalMacTransmitErrors {dot3StatsEntry 10}	R/O	[Standard] The number of send failures due to a send error in the MAC sub-layer. [Implementation] Fixed value of `0`.	M
13	dot3StatsCarrierSenseErrors {dot3StatsEntry 11}	R/O	[Standard] The number of no-carrier errors that occurred during transmission. [Implementation] Same as the standard.	Y
14	dot3StatsFrameTooLongs {dot3StatsEntry 13}	R/O	[Standard] The number of received frames that exceed the maximum allowable frame length.# [Implementation] Same as the standard.	Y
15	dot3StatsInternalMacReceiveErrors {dot3StatsEntry 16}	R/O	[Standard] The number of frames that failed to be received due to a reception error in the MAC sub-layer. [Implementation] Fixed value of `0`.	Y
16	dot3StatsEtherChipSet {dot3StatsEntry 17}	R/O	[Standard] The object identifier of the chipset used in the interface. [Implementation] Fixed value of `0.0`.	M

#: The frame length indicates the length from the MAC header to the FCS field. For details about the frame format, see *14.1.3 Control on the MAC and LLC sublayers* in the manual *Configuration Guide Vol. 1 For Version 11.10*.

2.9 snmp group (MIB-II)

Relevant standards for the snmp group are described in the following document:

- RFC 1158 (May 1990)
- RFC 1213 (March 1991)
- RFC 3418 (December 2002)

The Switch support the snmp operation commands that have the functionality equivalent to the SNMP agent and the SNMP manager. This MIB group contains statistics about SNMP agents only, and does not contain statistics about snmp operation commands.

For the statistics in this MIB group, even when snmp operation commands are used to acquire MIBs, the number of messages and PDUs are counted like when MIBs are acquired from SNMP managers on the network.

(1) ID

```
snmp OBJECT IDENTIFIER ::= {mib-2 11}
Object ID value  1.3.6.1.2.1.11
```

(2) Implementation specifications

The following table shows the implementation specifications for the snmp group.

Table 2-16: snmp group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	snmpInPkts {snmp 1}	R/O	[Standard] The total number of SNMP received messages. [Implementation] Same as the standard.	Y
2	snmpOutPkts {snmp 2}	R/O	[Standard] The total number of SNMP sent messages. [Implementation] Same as the standard.	Y
3	snmpInBadVersions {snmp 3}	R/O	[Standard] The total number of messages received from an unsupported version. [Implementation] Same as the standard.	Y
4	snmpInBadCommunity Names {snmp 4}	R/O	[Standard] The total number of SNMP received messages from an unused community. [Implementation] Same as the standard.	Y
5	snmpInBadCommunity Uses {snmp 5}	R/O	[Standard] The total number of messages received that indicated a non-permitted operation in the community. [Implementation] Same as the standard.	Y
6	snmpInASNParseErrs {snmp 6}	R/O	[Standard] The total number of messages received that have an ANS.1 error. [Implementation] Same as the standard.	Y
7	snmpInBadTypes {snmp 7}	R/O	[Standard] The total number of unknown PDU types that are received. [Implementation] Same as the standard.	Y
8	snmpInTooBigs {snmp 8}	R/O	[Standard] The total number of received PDUs that have an error status of tooBig. [Implementation] Same as the standard.	Y
9	snmpInNoSuchNames {snmp 9}	R/O	[Standard] The total number of received PDUs that have an error status of noSuchName. [Implementation] Fixed value of `0`.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	snmpInBadValues {snmp 10}	R/O	[Standard] The total number of received PDUs that have an error status of badValue. [Implementation] Fixed value of 0.	Y
11	snmpInReadOnlys {snmp 11}	R/O	[Standard] The total number of received PDUs that have an error status of readOnly. [Implementation] Fixed value of 0.	Y
12	snmpInGenErrs {snmp 12}	R/O	[Standard] The total number of received PDUs that have an error status of genErr. [Implementation] Fixed value of 0.	Y
13	snmpInTotalReqVars {snmp 13}	R/O	[Standard] The total number of MIB objects for which a MIB was successfully collected. [Implementation] Same as the standard.	Y
14	snmpInTotalSetVars {snmp 14}	R/O	[Standard] The total number of MIB objects for which a MIB was successfully configured. [Implementation] Same as the standard.	Y
15	snmpInGetRequests {snmp 15}	R/O	[Standard] The total number of GetRequestPDUs received. [Implementation] Same as the standard.	Y
16	snmpInGetNexts {snmp 16}	R/O	[Standard] The total number of GetNextRequestPDUs received. [Implementation] Same as the standard.	Y
17	snmpInSetRequests {snmp 17}	R/O	[Standard] The total number of SetRequestPDUs received. [Implementation] Same as the standard.	Y
18	snmpInGetResponses {snmp 18}	R/O	[Standard] The total number of GetResponsePDUs received. [Implementation] Same as the standard.	Y
19	snmpInTraps {snmp 19}	R/O	[Standard] The total number of Trap-PDUs received. [Implementation] Fixed value of 0.	Y
20	snmpOutTooBigs {snmp 20}	R/O	[Standard] The total number of sent PDUs that have an error status of tooBig. [Implementation] Same as the standard.	Y
21	snmpOutNoSuchNames {snmp 21}	R/O	[Standard] The total number of sent PDUs that have an error status of noSuchName. [Implementation] Same as the standard.	Y
22	snmpOutBadValues {snmp 22}	R/O	[Standard] The total number of sent PDUs that have an error status of badValue. [Implementation] Same as the standard.	Y
23	snmpOutReadOnlys {snmp 23}	R/O	[Standard] The total number of sent PDUs that have an error status of readOnly. [Implementation] Same as the standard.	Y
24	snmpOutGenErrs {snmp 24}	R/O	[Standard] The total number of sent PDUs that have an error status of genErr. [Implementation] Same as the standard.	Y
25	snmpOutGetRequests {snmp 25}	R/O	[Standard] The total number of GetRequestPDUs sent. [Implementation] Fixed value of 0.	Y
26	snmpOutGetNexts {snmp 26}	R/O	[Standard] The total number of GetNextRequestPDUs sent. [Implementation] Fixed value of 0.	Y

#	Object identifier	Access	Implementation specifications	Support?
27	snmpOutSetRequests {snmp 27}	R/O	[Standard] The total number of SetRequestPDUs sent. [Implementation] Fixed value of `0`.	Y
28	snmpOutGetResponses {snmp 28}	R/O	[Standard] The total number of GetResponsePDUs sent. [Implementation] Same as the standard.	Y
29	snmpOutTraps {snmp 29}	R/O	[Standard] The total number of Trap-PDUs sent. [Implementation] Same as the standard.	Y
30	snmpEnableAuthenTraps {snmp 30}	R/NW	[Standard] Indicates whether an authentication-failure trap can be sent: • enable (`1`) • disable (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
31	snmpSilentDrops {snmp 31}	R/NW	[Standard] The total number of SNMP received messages that are discarded because the response message exceeded the maximum message size. [Implementation] Same as the standard.	Y

2.10 ospf group (OSPFv2 MIB) [OS-L3A]

Relevant standards for the ospf group are described in the following document:

- RFC 1850 (November 1995)

If the OSPF domain is partitioned, this MIB applies only to the domain information with the smallest domain number.

2.10.1 ospfGeneralGroup

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfGeneralGroup OBJECT IDENTIFIER ::= {ospf 1}
Object ID value  1.3.6.1.2.1.14.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfGeneralGroup group.

Table 2-17: ospfGeneralGroup group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfRouterId {ospfGeneralGroup 1}	R/NW	[Standard] A router identifier in an autonomous system. [Implementation] Same as the standard. `Read_Only`.	Y
2	ospfAdminStat {ospfGeneralGroup 2}	R/NW	[Standard] The OSPF management status of the router: • enabled (`1`) • disabled (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
3	ospfVersionNumber {ospfGeneralGroup 3}	R/O	[Standard] The version number of the OSPF protocol. [Implementation] Same as the standard (fixed value of `version2`).	Y
4	ospfAreaBdrRtrStatus {ospfGeneralGroup 4}	R/O	[Standard] Indicates whether the router is an area border router: • true (`1`) • false (`2`) [Implementation] Same as the standard.	Y
5	ospfASBdrRtrStatus {ospfGeneralGroup 5}	R/NW	[Standard] Indicates whether the router is an AS boundary router: • true (`1`) • false (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfExternLsaCount {ospfGeneralGroup 6}	R/O	[Standard] The number of external link status advertisements (LSA) in the link state database (LSDB). [Implementation] Same as the standard.	Y
7	ospfExternLsaCksumSum {ospfGeneralGroup 7}	R/O	[Standard] The sum of the LS checksums of external LSAs in the LSDB. [Implementation] Same as the standard.	Y
8	ospfTOSSupport {ospfGeneralGroup 8}	R/NW	[Standard] A flag that indicates whether the router supports TOS-based routing: • true (`1`) • false (`2`) [Implementation] Fixed value of false (`2`). `Read_Only`.	Y
9	ospfOriginateNewLsas {ospfGeneralGroup 9}	R/O	[Standard] The number of newly generated LSAs. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	ospfRxNewLsas {ospfGeneralGroup 10}	R/O	[Standard] The number of times an LSA containing new information was received. [Implementation] Same as the standard.	Y
11	ospfExtLsdbLimit {ospfGeneralGroup 11}	R/NW	[Standard] The maximum number of AS external LSAs that can be stored in the LSDB. No limit if `-1`. [Implementation] Fixed value of `-1`. `Read_Only`.	Y
12	ospfMulticastExtensions {ospfGeneralGroup 12}	R/NW	[Standard] Indicates the multicast forwarding algorithm (for a multicast extension to OSPF) as a bitmap value. 0 indicates that multicast forwarding is not supported. [Implementation] Multicast forwarding is not supported. Fixed value of not supported (`0`). `Read_Only`.	Y
13	ospfExitOverflowInterval {ospfGeneralGroup 13}	R/O	[Standard] The time (in seconds) it takes before the status of the entry changes to overflow. [Implementation] Not implemented.	N
14	ospfDemandExtensions {ospfGeneralGroup 14}	R/O	[Standard] Indicates whether the router supports on-demand routing: • true (`1`) • false (`2`) [Implementation] Not implemented.	N

2.10.2 ospfAreaTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfAreaTable OBJECT IDENTIFIER ::= {ospf 2}
Object ID value  1.3.6.1.2.1.14.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfAreaTable group.

Table 2-18: ospfAreaTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfAreaTable {ospf 2}	NA	[Standard] A table that contains information about each area to which a router connects. [Implementation] Same as the standard.	Y
2	ospfAreaEntry {ospfAreaTable 1}	NA	[Standard] A list of information about each area. INDEX { ospfAreaId } [Implementation] Same as the standard.	Y
3	ospfAreaId {ospfAreaEntry 1}	R/O	[Standard] An area identification number. [Implementation] Same as the standard.	Y
4	ospfAuthType {ospfAreaEntry 2}	R/NW	[Standard] The authentication type used by the area: • None (`0`) • Simple password (`1`) • md5 (`2`) [Implementation] Same as the standard. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
5	ospfImportAsExtern {ospfAreaEntry 3}	R/NW	[Standard] A flag that indicates whether the router imports an AS external link state advertisement (LSA): • importExternal (1) • importNoExternal (2) • importNssa (3) [Implementation] Same as the standard. Read_Only.	Y
6	ospfSpfRuns {ospfAreaEntry 4}	R/O	[Standard] The number of times the link state database (LSDB) for this area was used for intra-area route calculation. [Implementation] Same as the standard.	Y
7	ospfAreaBdrRtrCount {ospfAreaEntry 5}	R/O	[Standard] The total number of area border routes that can be reached in this area. [Implementation] Same as the standard.	Y
8	ospfAsBdrRtrCount {ospfAreaEntry 6}	R/O	[Standard] The total number of AS boundary routes in this area that can be reached. [Implementation] Same as the standard.	Y
9	ospfAreaLsaCount {ospfAreaEntry 7}	R/O	[Standard] The number of LSAs in the LSDB for this area, excluding the AS external LSAs. [Implementation] Same as the standard.	Y
10	ospfAreaLsaCksumSum {ospfAreaEntry 8}	R/O	[Standard] The sum of LS checksums in the LSAs included in the LSDB for this area. [Implementation] Same as the standard.	Y
11	ospfAreaSummary {ospfAreaEntry 9}	R/NW	[Standard] A variable value for controlling the import of the summary LSA to this area. • noAreaSummary (1) • sendAreaSummary (2) [Implementation] Same as the standard. Read_Only.	Y
12	ospfAreaStatus {ospfAreaEntry 10}	R/NW	[Standard] Indicates the status of this entry. [Implementation] Fixed value of active (1). Read_Only.	Y

2.10.3 ospfStubAreaTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfStubAreaTable OBJECT IDENTIFIER ::= {ospf 3}
Object ID value  1.3.6.1.2.1.14.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfStubAreaTable group.

Table 2-19: ospfStubAreaTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfStubAreaTable {ospf 3}	NA	[Standard] A table of information advertised in stub areas by an area border router. [Implementation] Same as the standard.	Y
2	ospfStubAreaEntry {ospfStubAreaTable 1}	NA	[Standard] A list of information about each stub area. INDEX { ospfStubAreaId, ospfStubTOS } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
3	ospfStubAreaId {ospfStubAreaEntry 1}	R/O	[Standard] The stub area ID. [Implementation] Same as the standard.	Y
4	ospfStubTOS {ospfStubAreaEntry 2}	R/O	[Standard] The service type in the stub area. [Implementation] Same as the standard (fixed value of `0`).	Y
5	ospfStubMetric {ospfStubAreaEntry 3}	R/NW	[Standard] A metric that corresponds to the service type in the stub area. [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfStubStatus {ospfStubAreaEntry 4}	R/NW	[Standard] Indicates the status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
7	ospfStubMetricType {ospfStubAreaEntry 5}	R/NW	[Standard] A metric type advertised as the default route: • ospfMetric (`1`) • comparableCost (`2`) • nonComparable (`3`) [Implementation] Same as the standard. `Read_Only`.	Y

2.10.4 ospfLsdbTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfLsdbTable OBJECT IDENTIFIER ::= {ospf 4}
Object ID value  1.3.6.1.2.1.14.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfLsdbTable group.

Table 2-20: ospfLsdbTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfLsdbTable {ospf 4}	NA	[Standard] A table of information about the link state database (LSDB) for an OSPF process. [Implementation] Same as the standard.	Y
2	ospfLsdbEntry {ospfLsdbTable 1}	NA	[Standard] A list of link state advertisements (LSAs). INDEX { ospfLsdbAreaId, ospfLsdbType, ospfLsdbLsid, ospfLsdbRouterId } [Implementation] Same as the standard.	Y
3	ospfLsdbAreaId {ospfLsdbEntry 1}	R/O	[Standard] The area ID of the area that receives this LSA. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	ospfLsdbType {ospfLsdbEntry 2}	R/O	[Standard] The LSA type. • Router (1) • Network (2) • Summary (3) • AS summary (4) • AS external link (5) • Multicast (6) • NSSA external link (7) [Implementation] Same as the standard.	Y
5	ospfLsdbLsid {ospfLsdbEntry 3}	R/O	[Standard] An ID that identifies each routing domain. [Implementation] Same as the standard.	Y
6	ospfLsdbRouterId {ospfLsdbEntry 4}	R/O	[Standard] The ID of a router that generated the LSA. [Implementation] Same as the standard.	Y
7	ospfLsdbSequence {ospfLsdbEntry 5}	R/O	[Standard] The LSA sequence number. [Implementation] Same as the standard.	Y
8	ospfLsdbAge {ospfLsdbEntry 6}	R/O	[Standard] The time that has elapsed (in seconds) since this LSA was generated. [Implementation] Same as the standard.	Y
9	ospfLsdbChecksum {ospfLsdbEntry 7}	R/O	[Standard] The checksum for this LSA. [Implementation] Same as the standard.	Y
10	ospfLsdbAdvertisement {ospfLsdbEntry 8}	R/O	[Standard] The full LSA, including the header. [Implementation] Same as the standard.	Y

2.10.5 ospfAreaRangeTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfAreaRangeTable OBJECT IDENTIFIER ::= {ospf 5}
Object ID value  1.3.6.1.2.1.14.5
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfAreaRangeTable group.

Table 2-21: ospfAreaRangeTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfAreaRangeTable {ospf 5}	NA	[Standard] A table of information about the range of addresses in the area that is accessed by a router. [Implementation] Same as the standard.	Y
2	ospfAreaRangeEntry {ospfAreaRangeTable 1}	NA	[Standard] A list of information about the range of addresses in the area that is accessed by a router. INDEX { ospfAreaRangeAreaId, ospfAreaRangeNet } [Implementation] Same as the standard.	Y
3	ospfAreaRangeAreaId {ospfAreaRangeEntry 1}	R/O	[Standard] The area ID to which the address range belongs. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	ospfAreaRangeNet {ospfAreaRangeEntry 2}	R/O	[Standard] The net or subnet IP address in this range. [Implementation] Same as the standard.	Y
5	ospfAreaRangeMask {ospfAreaRangeEntry 3}	R/NW	[Standard] The subnet mask placed on ospfAreaRangeNet. [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfAreaRangeStatus {ospfAreaRangeEntry 4}	R/NW	[Standard] Indicates the status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
7	ospfAreaRangeEffect {ospfAreaRangeEntry 5}	R/NW	[Standard] Indicates the range in the area to be advertised: • Subnet advertised outside the area (`1`) • Subnet advertised not outside the area (`2`) [Implementation] Same as the standard. `Read_Only`.	Y

2.10.6 ospfIfTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfIfTable OBJECT IDENTIFIER ::= {ospf 7}
Object ID value  1.3.6.1.2.1.14.7
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfIfTable group.

Table 2-22: ospfIfTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfIfTable {ospf 7}	NA	[Standard] A table of information about each interface that is accessed by a router. [Implementation] Same as the standard.	Y
2	ospfIfEntry {ospfIfTable 1}	NA	[Standard] A list of information about each interface that is accessed by a router. INDEX { ospfIfIpAddress, ospfAddressLessIf } [Implementation] Same as the standard.	Y
3	ospfIfIpAddress {ospfIfEntry 1}	R/O	[Standard] The IP address of the OSPF interface. [Implementation] Same as the standard.	Y
4	ospfAddressLessIf {ospfIfEntry 2}	R/O	[Standard] The valid interface ID of this interface when it is an interface without an address. [Implementation] Same as the standard.	Y
5	ospfIfAreaId {ospfIfEntry 3}	R/NW	[Standard] The area ID of the area to which this interface connects. [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfIfType {ospfIfEntry 4}	R/NW	[Standard] The interface type: • Broadcast (`1`) • Non-broadcast (`2`) • Point-Point (`3`) • Point-Multipoint (`5`) [Implementation] Same as the standard. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
7	ospfIfAdminStat {ospfIfEntry 5}	R/NW	[Standard] The management status of the interface: • enabled (1) • disabled (2) [Implementation] Same as the standard. Read_Only.	Y
8	ospfIfRtrPriority {ospfIfEntry 6}	R/NW	[Standard] The priority of this interface. [Implementation] Same as the standard. Read_Only.	Y
9	ospfIfTransitDelay {ospfIfEntry 7}	R/NW	[Standard] The time (in seconds) required to send a link state update packet over this interface. [Implementation] Same as the standard. Read_Only.	Y
10	ospfIfRetransInterval {ospfIfEntry 8}	R/NW	[Standard] The time interval (in seconds) between attempts to resend a link state advertisement (LSA). [Implementation] Same as the standard. Read_Only.	Y
11	ospfIfHelloInterval {ospfIfEntry 9}	R/NW	[Standard] The time interval (in seconds) between Hello packet transmissions. [Implementation] Same as the standard. Read_Only.	Y
12	ospfIfRtrDeadInterval {ospfIfEntry 10}	R/NW	[Standard] The maximum allowable interval (in seconds) between Hello packet receptions. [Implementation] Same as the standard. Read_Only.	Y
13	ospfIfPollInterval {ospfIfEntry 11}	R/NW	[Standard] The time interval between Hello packet transmissions sent to an inactive neighboring station over a non-broadcast multi-access network. [Implementation] Same as the standard. Read_Only.	Y
14	ospfIfState {ospfIfEntry 12}	R/O	[Standard] The interface state: • down (1) • loopback (2) • waiting (3) • PtoP (4) • DR (5) • BDR (6) • other (7) [Implementation] Same as the standard.	Y
15	ospfIfDesignatedRouter {ospfIfEntry 13}	R/O	[Standard] The IP address of a designated router. [Implementation] Same as the standard.	Y
16	ospfIfBackupDesignated Router {ospfIfEntry 14}	R/O	[Standard] The IP address of a backup designated router. [Implementation] Same as the standard.	Y
17	ospfIfEvents {ospfIfEntry 15}	R/O	[Standard] Indicates whether this interface encountered a state change (or indicates the number of errors encountered). [Implementation] Same as the standard.	Y
18	ospfIfAuthKey {ospfIfEntry 16}	R/NW	[Standard] The authentication key in this interface. [Implementation] Same as the standard. Read_Only.	Y
19	ospfIfStatus {ospfIfEntry 17}	R/NW	[Standard] Indicates the status of this entry. [Implementation] Fixed value of active (1). Read_Only.	Y
20	ospfIfMulticastForwarding {ospfIfEntry 18}	R/NW	[Standard] A multicast type used by this interface: • blocked (1) • multicast (2) • unicast (3) [Implementation] Fixed value of blocked (1). Read_Only.	Y

#	Object identifier	Access	Implementation specifications	Support?
21	ospfIfDemand {ospfIfEntry 19}	R/O	[Standard] Indicates whether this interface performs a Demand OSPF procedure. [Implementation] Not implemented.	N
22	ospfIfAuthType {ospfIfEntry 20}	R/O	[Standard] The authentication type used by the interface. • None (`0`) • Simple password (`1`) • MD5 (`2`) • IANA-specified one (`3-255`) [Implementation] Not implemented.	N

2.10.7 ospfIfMetricTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfIfMetricTable OBJECT IDENTIFIER ::= {ospf 8}
Object ID value  1.3.6.1.2.1.14.8
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfIfMetricTable group.

Table 2-23: ospfIfMetricTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfIfMetricTable {ospf 8}	NA	[Standard] A table that contains the service type metric information for each interface. [Implementation] Same as the standard.	Y
2	ospfIfMetricEntry {ospfIfMetricTable 1}	NA	[Standard] A list of service type metric information for each interface. INDEX { ospfIfMetricIpAddress, ospfIfMetricAddressLessIf, ospfIfMetricTOS } [Implementation] Same as the standard.	Y
3	ospfIfMetricIpAddress {ospfIfMetricEntry 1}	R/O	[Standard] The IP address of the OSPF interface. [Implementation] Same as the standard.	Y
4	ospfIfMetricAddressLessIf {ospfIfMetricEntry 2}	R/O	[Standard] The valid interface ID of this interface when it is an interface without an address. [Implementation] Same as the standard.	Y
5	ospfIfMetricTOS {ospfIfMetricEntry 3}	R/O	[Standard] The service type for this interface. [Implementation] Fixed value of `0`.	Y
6	ospfIfMetricValue {ospfIfMetricEntry 4}	R/NW	[Standard] A service type metric for this interface. [Implementation] Same as the standard. `Read_Only`.	Y
7	ospfIfMetricStatus {ospfIfMetricEntry 5}	R/NW	[Standard] The status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y

2.10.8 ospfVirtIfTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfVirtIfTable OBJECT IDENTIFIER ::= {ospf 9}
Object ID value  1.3.6.1.2.1.14.9
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfVirtIfTable group.

Table 2-24: ospfVirtIfTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfVirtIfTable {ospf 9}	NA	[Standard] A table of information about each virtual interface that is accessed by a router. [Implementation] Same as the standard.	Y
2	ospfVirtIfEntry {ospfVirtIfTable 1}	NA	[Standard] A list of information about each virtual interface. INDEX { ospfVirtIfAreaId, ospfVirtIfNeighbor } [Implementation] Same as the standard.	Y
3	ospfVirtIfAreaId {ospfVirtIfEntry 1}	R/O	[Standard] The area ID of an area the virtual link passes through. [Implementation] Same as the standard.	Y
4	ospfVirtIfNeighbor {ospfVirtIfEntry 2}	R/O	[Standard] The router ID of an neighboring virtual router. [Implementation] Same as the standard.	Y
5	ospfVirtIfTransitDelay {ospfVirtIfEntry 3}	R/NW	[Standard] The time (in seconds) required to send a link state update packet over this interface. [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfVirtIfRetransInterval {ospfVirtIfEntry 4}	R/NW	[Standard] The time interval (in seconds) between attempts to resend a link state advertisement (LSA). [Implementation] Same as the standard. `Read_Only`.	Y
7	ospfVirtIfHelloInterval {ospfVirtIfEntry 5}	R/NW	[Standard] The time interval (in seconds) between Hello packet transmissions. [Implementation] Same as the standard. `Read_Only`.	Y
8	ospfVirtIfRtrDeadInterval {ospfVirtIfEntry 6}	R/NW	[Standard] The maximum allowable interval (in seconds) between Hello packet receptions. [Implementation] Same as the standard. `Read_Only`.	Y
9	ospfVirtIfState {ospfVirtIfEntry 7}	R/O	[Standard] The interface state: • down (`1`) • PtoP (`4`) [Implementation] Same as the standard.	Y
10	ospfVirtIfEvents {ospfVirtIfEntry 8}	R/O	[Standard] Indicates whether this interface encountered a state change (or indicates the number of errors encountered). [Implementation] Same as the standard.	Y
11	ospfVirtIfAuthKey {ospfVirtIfEntry 9}	R/NW	[Standard] The authentication key in this interface. [Implementation] Same as the standard. `Read_Only`.	Y
12	ospfVirtIfStatus {ospfVirtIfEntry 10}	R/NW	[Standard] The status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
13	ospfVirtIfAuthType {ospfVirtIfEntry 11}	R/W	[Standard] The authentication type used by the virtual interface. [Implementation] Not implemented.	N

2.10.9 ospfNbrTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfNbrTable OBJECT IDENTIFIER ::= {ospf 10}
Object ID value  1.3.6.1.2.1.14.10
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfNbrTable group.

Table 2-25: ospfNbrTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfNbrTable {ospf 10}	NA	[Standard] A table of information about each non-virtual neighboring station. [Implementation] Same as the standard.	Y
2	ospfNbrEntry {ospfNbrTable 1}	NA	[Standard] A list of information about each neighboring station. INDEX { ospfNbrIpAddr, ospfNbrAddressLessIndex } [Implementation] Same as the standard.	Y
3	ospfNbrIpAddr {ospfNbrEntry 1}	R/O	[Standard] The IP address of a neighboring router. [Implementation] Same as the standard.	Y
4	ospfNbrAddressLessIndex {ospfNbrEntry 2}	R/O	[Standard] The interface ID validated when the interface of the neighboring router is an address interface. [Implementation] Same as the standard.	Y
5	ospfNbrRtrId {ospfNbrEntry 3}	R/O	[Standard] The router ID of the neighboring router. [Implementation] Same as the standard.	Y
6	ospfNbrOptions {ospfNbrEntry 4}	R/O	[Standard] The option capability of the neighboring router: • Bit 0: Service-type-based routing • Bit 1: External area processing • Bit 2: IP multicast routing • Bit 3: NSSA-related areas [Implementation] Same as the standard.	Y
7	ospfNbrPriority {ospfNbrEntry 5}	R/NW	[Standard] The priority of the neighboring router. [Implementation] Same as the standard. `Read_Only`.	Y
8	ospfNbrState {ospfNbrEntry 6}	R/O	[Standard] A state that indicates the relationship with this neighboring router: • down (`1`) • attempt (`2`) • init (`3`) • twoWay (`4`) • exchangeStart (`5`) • exchange (`6`) • loading (`7`) • full (`8`) [Implementation] Same as the standard.	Y
9	ospfNbrEvents {ospfNbrEntry 7}	R/O	[Standard] Indicates the number of state changes or errors in relation to the neighboring router. [Implementation] Same as the standard.	Y
10	ospfNbrLsRetransQLen {ospfNbrEntry 8}	R/O	[Standard] The current length of a resend queue. [Implementation] Same as the standard.	Y
11	ospfNbmaNbrStatus {ospfNbrEntry 9}	R/NW	[Standard] The status of this entry. [Implementation] Fixed value of active (`1`). This can be accessed when ospfIfType is nbma. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
12	ospfNbmaNbrPermanence {ospfNbrEntry 10}	R/NW	[Standard] The method for routing with the neighboring router. • dynamic (1) • permanent (2) [Implementation] Same as the standard. Read_Only.	Y
13	ospfNbrHelloSuppressed {ospfNbrEntry 11}	R/O	[Standard] Indicates whether Hello is suppressed by the neighboring router. [Implementation] Not implemented.	N

2.10.10 ospfVirtNbrTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfVirtNbrTable OBJECT IDENTIFIER ::= {ospf 11}
Object ID value  1.3.6.1.2.1.14.11
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfVirtNbrTable group.

Table 2-26: ospfVirtNbrTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfVirtNbrTable {ospf 11}	NA	[Standard] A table of information about each virtual neighboring router. [Implementation] Same as the standard.	Y
2	ospfVirtNbrEntry {ospfVirtNbrTable 1}	NA	[Standard] A list of information about each virtual neighboring router. INDEX { ospfVirtNbrArea, ospfVirtNbrRtrId } [Implementation] Same as the standard.	Y
3	ospfVirtNbrArea {ospfVirtNbrEntry 1}	R/O	[Standard] The area ID of the area passed through. [Implementation] Same as the standard.	Y
4	ospfVirtNbrRtrId {ospfVirtNbrEntry 2}	R/O	[Standard] The router ID of the virtual neighboring router. [Implementation] Same as the standard.	Y
5	ospfVirtNbrIpAddr {ospfVirtNbrEntry 3}	R/O	[Standard] The IP address of the virtual neighboring router. [Implementation] Same as the standard.	Y
6	ospfVirtNbrOptions {ospfVirtNbrEntry 4}	R/O	[Standard] The optional capability of the virtual neighboring router. • Bit 1: Service-type-based routing • Bit 2: IP multicast routing [Implementation] Same as the standard.	Y
7	ospfVirtNbrState {ospfVirtNbrEntry 5}	R/O	[Standard] A state that indicates the relationship with this virtual neighboring router: • down (1) • attempt (2) • init (3) • twoWay (4) • exchangeStart (5) • exchange (6) • loading (7) • full (8) [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
8	ospfVirtNbrEvents {ospfVirtNbrEntry 6}	R/O	[Standard] Indicates whether this virtual link encountered a state change (or indicates the number of encountered errors). [Implementation] Same as the standard.	Y
9	ospfVirtNbrLsRetransQLen {ospfVirtNbrEntry 7}	R/O	[Standard] The current length of a resend queue. [Implementation] Same as the standard.	Y
10	ospfVirtNbrHelloSuppressed {ospfVirtNbrEntry 8}	R/O	[Standard] Indicates whether Hello is suppressed by the neighboring router. [Implementation] Not implemented.	N

2.10.11 ospfExtLsdbTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfExtLsdbTable OBJECT IDENTIFIER ::= {ospf 12}
Object ID value  1.3.6.1.2.1.14.12
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfExtLsdbTable group.

Table 2-27: ospfExtLsdbTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfExtLsdbTable {ospf 12}	NA	[Standard] A table for the link state database (LSDB) for OSPF processing. [Implementation] Same as the standard.	Y
2	ospfExtLsdbEntry {ospfExtLsdbTable 1}	NA	[Standard] A list of link state advertisements (LSAs). INDEX { ospfExtLsdbType, ospfExtLsdbLsid, ospfExtLsdbRouterId } [Implementation] Same as the standard.	Y
3	ospfExtLsdbType {ospfExtLsdbEntry 1}	R/O	[Standard] The LSA type. • asExternalLink (5) [Implementation] Same as the standard.	Y
4	ospfExtLsdbLsid {ospfExtLsdbEntry 2}	R/O	[Standard] The link status ID. A link status ID is a field containing either the router ID or the IP address. [Implementation] Same as the standard.	Y
5	ospfExtLsdbRouterId {ospfExtLsdbEntry 3}	R/O	[Standard] A 32-bit number used to identify the source router in the autonomous system. [Implementation] Same as the standard.	Y
6	ospfExtLsdbSequence {ospfExtLsdbEntry 4}	R/O	[Standard] The LSA sequence number. [Implementation] Same as the standard.	Y
7	ospfExtLsdbAge {ospfExtLsdbEntry 5}	R/O	[Standard] The time that has elapsed (in seconds) since an LSA was generated. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
8	ospfExtLsdbChecksum {ospfExtLsdbEntry 6}	R/O	[Standard] The checksum of the advertisement content, excluding the Age field. [Implementation] Same as the standard.	Y
9	ospfExtLsdbAdvertisement {ospfExtLsdbEntry 7}	R/O	[Standard] The full LSA, including the header. [Implementation] Same as the standard.	Y

2.10.12 ospfAreaAggregateTable

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfAreaAggregateTable OBJECT IDENTIFIER ::= {ospf 14}
Object ID value  1.3.6.1.2.1.14.14
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfAreaAggregateTable group.

Table 2-28: ospfAreaAggregateTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfAreaAggregateTable {ospf 14}	NA	[Standard] A table of IP addresses that are specified as pairs of IP addresses and IP subnet masks. [Implementation] Same as the standard.	Y
2	ospfAreaAggregateEntry {ospfAreaAggregateTable 1}	NA	[Standard] A list of IP addresses that are specified as pairs of IP addresses and IP subnet masks. INDEX { ospfAreaAggregateAreaID, ospfAreaAggregateLsdbType, ospfAreaAggregateNet, ospfAreaAggregateMask } [Implementation] Same as the standard.	Y
3	ospfAreaAggregateAreaID {ospfAreaAggregateEntry 1}	R/O	[Standard] An area where addresses are aggregated. [Implementation] Same as the standard.	Y
4	ospfAreaAggregateLsdbType {ospfAreaAggregateEntry 2}	R/O	[Standard] The address aggregation type. This entry indicates the type of link state database (LSDB) applied to this address aggregation: • summaryLink (3) • nssaExternalLink (7) [Implementation] Same as the standard.	Y
5	ospfAreaAggregateNet {ospfAreaAggregateEntry 3}	R/O	[Standard] The IP address of a network or subnet. [Implementation] Same as the standard.	Y
6	ospfAreaAggregateMask {ospfAreaAggregateEntry 4}	R/O	[Standard] A subnet mask associated with the network or subnet. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
7	ospfAreaAggregateStatus {ospfAreaAggregateEntry 5}	R/NW	[Standard] The status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
8	ospfAreaAggregateEffect {ospfAreaAggregateEntry 6}	R/NW	[Standard] Indicates whether a subnet included in the range triggers the advertisement of the aggregated address, or remains a subnet without advertising the address outside the area: • advertiseMatching (`1`) • doNotAdvertiseMatching (`2`) [Implementation] Same as the standard. `Read_Only`.	Y

2.10.13 ospfTrap

(1) ID

```
ospf OBJECT IDENTIFIER ::= {mib-2 14}

ospfTrap OBJECT IDENTIFIER ::= {ospf 16}
Object ID value  1.3.6.1.2.1.14.16

ospfTrapControl OBJECT IDENTIFIER ::= {ospfTrap 1}
Object ID value  1.3.6.1.2.1.14.16.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the ospfTrap group.

Table 2-29: ospfTrap group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfTrapControl {ospfTrap 1}	NA	[Standard] Collected trap and inform information. [Implementation] Same as the standard.	Y
2	ospfSetTrap {ospfTrapControl 1}	R/NW	[Standard] A bitmap which indicates events that can be trapped and informed. Each bit indicates an ospfTraps object. 2^1 bit (`0x00000002`): ospfVirtIfStateChange to 2^{16} bit (`0x00010000`): ospfIfStateChange [Implementation] Same as the standard. Fixed value of `0x100fe` and `Read_Only`.	Y
3	ospfConfigErrorType {ospfTrapControl 2}	R/O	[Standard] An error event for which the last trap and inform were generated: • badVersion (`1`) • areaMismatch (`2`) • unknownNbmaNbr (`3`) • unknownVirtualNbr (`4`) • authTypeMismatch (`5`) • authFailure (`6`) • netMaskMismatch (`7`) • helloIntervalMismatch (`8`) • deadIntervalMismatch (`9`) • optionMismatch (`10`) [Implementation] The last error event that occurred, regardless of whether a trap or inform was issued. `0` indicates that no error event has occurred.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	ospfPacketType {ospfTrapControl 3}	R/O	[Standard] An error packet type used for the last trap and inform: • hello (1) • dbDescript (2) • lsReq (3) • lsUpdate (4) • lsAck (5) [Implementation] The last error packet type that occurred, regardless of whether a trap or inform was issued. 0 indicates that no error event has occurred.	Y
5	ospfPacketSrc {ospfTrapControl 4}	R/O	[Standard] The source address of the error packet used for the last trap and inform. [Implementation] The source address of the last error packet that occurred, regardless of whether a trap or inform was issued. 0.0.0.0 indicates that no error event has occurred.	Y
6	ospfTraps {ospfTrap 2}	NA	[Standard] Trap advertisement. [Implementation] Same as the standard.	Y

2.11 bgp group (BGP4 MIB) [OS-L3A]

Relevant standards for the bgp group are described in the following document:

- RFC 1657 (July 1994)

2.11.1 bgp

(1) ID

```
bgp OBJECT IDENTIFIER ::= {mib-2 15}
Object ID value  1.3.6.1.2.1.15
```

(2) Implementation specifications

The following table shows the implementation specifications for the bgp group.

Table 2-30: bgp group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	bgpVersion {bgp 1}	R/O	[Standard] Indicates the supported version as a bitmap. With the highest bit in the octet specified as 0, the bits are specified as being equal to the number of the supported version, minus one. [Implementation] Same as the standard.	Y
2	bgpLocalAs {bgp 2}	R/O	[Standard] The number of the local autonomous system. [Implementation] Same as the standard.	Y

2.11.2 bgpPeerTable

(1) ID

```
bgp OBJECT IDENTIFIER ::= {mib-2 15}

bgpPeerTable OBJECT IDENTIFIER ::= {bgp 3}
Object ID value  1.3.6.1.2.1.15.3
```

(2) Implementation specifications

The following table lists the implementation specifications for bgpPeerTable.

Table 2-31: bgpPeerTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	bgpPeerTable {bgp 3}	NA	[Standard] A table of BGP peers. [Implementation] Same as the standard.	Y
2	bgpPeerEntry {bgpPeerTable 1}	NA	[Standard] A table of information about each BGP peer connection. INDEX { bgpPeerRemoteAddr } [Implementation] Same as the standard.	Y
3	bgpPeerIdentifier {bgpPeerEntry 1}	R/O	[Standard] The BGP identifier of a BGP peer for this entry. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	bgpPeerState {bgpPeerEntry 2}	R/O	[Standard] The state of a BGP peer connection: • idle (1) • connect (2) • active (3) • opensent (4) • openconfirm (5) • established (6) [Implementation] Same as the standard.	Y
5	bgpPeerAdminStatus {bgpPeerEntry 3}	R/NW	[Standard] The desired state of a BGP peer connection. The generation of a BGPstart event changes the state to start, and the generation of a BGPstop event changes it to stop: • stop (1) • start (2) [Implementation] Fixed value of start (2). Read_Only.	Y
6	bgpPeerNegotiatedVersion {bgpPeerEntry 4}	R/O	[Standard] The version of the BGP which negotiated between peers. [Implementation] Same as the standard.	Y
7	bgpPeerLocalAddr {bgpPeerEntry 5}	R/O	[Standard] The local IP address of the BGP connection for this entry. [Implementation] Same as the standard.	Y
8	bgpPeerLocalPort {bgpPeerEntry 6}	R/O	[Standard] The local port number for the TCP connection between peers. [Implementation] Same as the standard.	Y
9	bgpPeerRemoteAddr {bgpPeerEntry 7}	R/O	[Standard] The remote IP address of the BGP connection for this entry. [Implementation] Same as the standard.	Y
10	bgpPeerRemotePort {bgpPeerEntry 8}	R/O	[Standard] The remote port number for the TCP connection between peers. [Implementation] Same as the standard.	Y
11	bgpPeerRemoteAs {bgpPeerEntry 9}	R/O	[Standard] The remote autonomous system number. [Implementation] Same as the standard.	Y
12	bgpPeerInUpdates {bgpPeerEntry 10}	R/O	[Standard] The number of BGP UPDATE messages received over this connection. [Implementation] Same as the standard.	Y
13	bgpPeerOutUpdates {bgpPeerEntry 11}	R/O	[Standard] The number of BGP UPDATE messages sent over this connection. [Implementation] Same as the standard.	Y
14	bgpPeerInTotalMessages {bgpPeerEntry 12}	R/O	[Standard] The number of messages received from remote peers over this connection. [Implementation] Same as the standard.	Y
15	bgpPeerOutTotalMessages {bgpPeerEntry 13}	R/O	[Standard] The number of messages sent to remote peers over this connection. [Implementation] Same as the standard.	Y
16	bgpPeerLastError {bgpPeerEntry 14}	R/O	[Standard] The last error code and sub-code recognized by a peer over this connection. [Implementation] Same as the standard.	Y
17	bgpPeerFsmEstablishedTransitions {bgpPeerEntry 15}	R/O	[Standard] The number of times the FSM entered into an Established state. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
18	bgpPeerFsmEstablishedTime {bgpPeerEntry 16}	R/O	[Standard] The time that has elapsed (in seconds) since the FSM entered into an Established state or since the FSM exited from the last Established state. [Implementation] Same as the standard.	Y
19	bgpPeerConnectRetryInterval {bgpPeerEntry 17}	R/NW	[Standard] A ConnectRetry timer value. [Implementation] Same as the standard. `Read_Only`.	Y
20	bgpPeerHoldTime {bgpPeerEntry 18}	R/O	[Standard] A HOLD timer value established with a peer. [Implementation] Same as the standard.	Y
21	bgpPeerKeepAlive {bgpPeerEntry 19}	R/O	[Standard] A KeepAlive timer value established with a peer. [Implementation] Same as the standard.	Y
22	bgpPeerHoldTimeConfigured {bgpPeerEntry 20}	R/NW	[Standard] A Hold timer value configured for the peer that is associated with this BGP speaker. [Implementation] Same as the standard. `Read_Only`.	Y
23	bgpPeerKeepAliveConfigured {bgpPeerEntry 21}	R/NW	[Standard] A keepAlive timer value configured for the peer that is associated with this BGP speaker. [Implementation] Same as the standard. `Read_Only`.	Y
24	bgpPeerMinASOriginationInterval {bgpPeerEntry 22}	R/NW	[Standard] A MinASOriginationInterval timer value (unit: seconds). [Implementation] The interval between UPDATE message advertisements. This can only be accessed by an external peer. `Read_Only`.	Y
25	bgpPeerMinRouteAdvertisementInterval {bgpPeerEntry 23}	R/NW	[Standard] A MinRouteAdvertisementInterval timer value (unit: seconds). [Implementation] The interval between UPDATE message advertisements. This can only be accessed by an internal peer. `Read_Only`.	Y
26	bgpPeerInUpdateElapsedTime {bgpPeerEntry 24}	R/O	[Standard] The time elapsed since the last update message was received. [Implementation] Same as the standard.	Y
27	bgpIdentifier {bgp 4}	R/O	[Standard] The BGP identifier of the local system. [Implementation] Same as the standard.	Y

2.11.3 bgp4PathAttrTable

(1) ID

```
bgp OBJECT IDENTIFIER ::= {mib-2 15}

bgp4PathAttrTable OBJECT IDENTIFIER ::= {bgp 6}
Object ID value  1.3.6.1.2.1.15.6
```

(2) Implementation specifications

The following table shows the implementation specifications for the bgp4PathAttrTable group.

Table 2-32: bgp4PathAttrTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	bgp4PathAttrTable {bgp 6}	NA	[Standard] A table that lists the information received from each BGP4 about the path to a destination network. [Implementation] Same as the standard.	Y
2	bgp4PathAttrEntry {bgp4PathAttrTable 1}	NA	[Standard] A list of information about the path to a destination network. INDEX { bgp4PathAttrIpAddrPrefix, bgp4PathAttrIpAddrPrefixLen, bpg4PathAttrPeer } [Implementation] Same as the standard.	Y
3	bgp4PathAttrPeer {bgp4PathAttrEntry 1}	R/O	[Standard] The IP address of a peer on which the path information was learned. [Implementation] Same as the standard.	Y
4	bgp4PathAttrIpAddrPrefixLen {bgp4PathAttrEntry 2}	R/O	[Standard] The bit length of an IP address in the Network Layer Reachability Information field [Implementation] Same as the standard.	Y
5	bgp4PathAttrIpAddrPrefix {bgp4PathAttrEntry 3}	R/O	[Standard] An IP address in the Network Layer Reachability Information field. [Implementation] Same as the standard.	Y
6	bgp4PathAttrOrigin {bgp4PathAttrEntry 4}	R/O	[Standard] The path information originator: • igp (1) • egp (2) • incomplete (3) [Implementation] Same as the standard.	Y
7	bgp4PathAttrASPathSegment {bgp4PathAttrEntry 5}	R/O	[Standard] The AS path segment column. [Implementation] Same as the standard.	Y
8	bgp4PathAttrNextHop {bgp4PathAttrEntry 6}	R/O	[Standard] The address of the next border router on the route. [Implementation] Same as the standard.	Y
9	bgp4PathAttrMultiExitDisc {bgp4PathAttrEntry 7}	R/O	[Standard] The Multi Exit attribute. -1 indicates that this attribute is not available. [Implementation] Same as the standard.	Y
10	bgp4PathAttrLocalPref {bgp4PathAttrEntry 8}	R/O	[Standard] The priority of the originating BGP4 speaker. -1 indicates that this attribute is not available. [Implementation] Same as the standard.	Y
11	bgp4PathAttrAtomicAggregate {bgp4PathAttrEntry 9}	R/O	[Standard] The AtomicAggregate attribute. • lessSpecificRouteNotSelected (1) • lessSpecificRouteSelected (2) [Implementation] Same as the standard.	Y
12	bgp4PathAttrAggregatorAS {bgp4PathAttrEntry 10}	R/O	[Standard] The AS number of the last BGP4 speaker in the route summarization. [Implementation] Same as the standard.	Y
13	bgp4PathAttrAggregatorAddr {bgp4PathAttrEntry 11}	R/O	[Standard] The IP address of the last BGP4 speaker in the route summarization. 0.0.0.0 indicates that this attribute is not available. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
14	bgp4PathAttrCalcLocalPref {bgp4PathAttrEntry 12}	R/O	[Standard] A priority value calculated by the receiving BGP4 speaker for the advertised path. `-1` indicates that this attribute is not available. [Implementation] Same as the standard.	Y
15	bgp4PathAttrBest {bgp4PathAttrEntry 13}	R/O	[Standard] Indicates whether this route has been selected as the best route for BGP4: • false (`1`) • true (`2`) [Implementation] Same as the standard.	Y
16	bgp4PathAttrUnknown {bgp4PathAttrEntry 14}	R/O	[Standard] One or more path attributes that are not recognized by this BGP4 speaker. [Implementation] Same as the standard.	Y

2.12 rmon group (Remote Network Monitoring MIB)

Relevant standards for the rmon group are described in the following document:

- RFC 1757 (February 1995)

2.12.1 Ethernet Statistics group

(1) ID

```
rmon OBJECT IDENTIFIER ::= {mib-2 16}

statistics OBJECT IDENTIFIER ::= {rmon 1}
Object ID value  1.3.6.1.2.1.16.1

etherStatsTable OBJECT IDENTIFIER ::= {statistics 1}
Object ID value  1.3.6.1.2.1.16.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the Ethernet Statistics group.

Table 2-33: Ethernet Statistics group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	etherStatsTable {statistics 1}	NA	[Standard] A table of statistics for an Ethernet interface. [Implementation] Same as the standard.	Y
2	etherStatsEntry {etherStatsTable 1}	NA	[Standard] An entry that contains statistics for a specific Ethernet interface. INDEX { etherStatsIndex } [Implementation] Same as the standard.	Y
3	etherStatsIndex {etherStatsEntry 1}	R/O	[Standard] An Index value that indicates a specific etherStats entry. The value ranges from `1` to `65535`. [Implementation] Same as the standard.	Y
4	etherStatsDataSource {etherStatsEntry 2}	R/NW	[Standard] The object ID of an interface associated with this information. This object instance is the ifIndex of the MIB-II interfaces group. [Implementation] Same as the standard. `Read_Only`.	Y
5	etherStatsDropEvents {etherStatsEntry 3}	R/O	[Standard] The number of events that a packet has dropped due to insufficient resources. This number indicates the detected packet drops, not the actual packet drops. [Implementation] Same as the standard.	Y
6	etherStatsOctets {etherStatsEntry 4}	R/O	[Standard] The number of octets (bytes), including bad packets, that are received over the network. [Implementation] The number of octets (bytes), including bad packets, that are sent or received over the network. Calculation of octet values is based on the range from the MAC header to the FCS field over the length of the frame.	Y
7	etherStatsPkts {etherStatsEntry 5}	R/O	[Standard] The total number of packets received, including bad, broadcast, and multicast packets. [Implementation] The total number of packets sent and received, including bad, broadcast, and multicast packets.	Y

#	Object identifier	Access	Implementation specifications	Support?
8	etherStatsBroadcastPkts {etherStatsEntry 6}	R/O	[Standard] The number of broadcast packets received, excluding bad and multicast packets. [Implementation] The number of broadcast packets sent and received, excluding bad and multicast packets.	Y
9	etherStatsMulticastPkts {etherStatsEntry 7}	R/O	[Standard] The number of multicast packets received, excluding bad and broadcast packets. [Implementation] The number of multicast packets sent and received, excluding bad and broadcast packets. Pause packets are handled as follows: For AX3640S: No pause packets are included. For AX3630S: Pause packets are included.	Y
10	etherStatsCRCAlignErrors {etherStatsEntry 8}	R/O	[Standard] The number of FCS error packets received. [Implementation] Same as the standard.	Y
11	etherStatsUndersizePkts {etherStatsEntry 9}	R/O	[Standard] The number of undersized packets (with a frame length of less than 64 octets) received. [Implementation] Same as the standard.	Y
12	etherStatsOversizePkts {etherStatsEntry 10}	R/O	[Standard] The number of oversized packets (with a frame length of more than 1518 octets) received. [Implementation] The number of oversized packets (which exceed the maximum frame length) received.	Y
13	etherStatsFragments {etherStatsEntry 11}	R/O	[Standard] The number of undersized packets (with a frame length of less than 64 octets) received that have an FCS or Alignment error. [Implementation] The number of undersized packets (with a frame length of less than 64 octets) received that have an FCS error.	Y
14	etherStatsJabbers {etherStatsEntry 12}	R/O	[Standard] The number of oversized packets (which exceed the maximum frame length) received that have an FCS or Alignment error. [Implementation] • gigabitethernet: Fixed value of `0`. • tengigabitethernet: The number of oversized packets (which exceed the maximum frame length) received that have an FCS error.	Y
15	etherStatsCollisions {etherStatsEntry 13}	R/O	[Standard] The number of collisions. [Implementation] Same as the standard.	Y
16	etherStatsPkts64Octets {etherStatsEntry 14}	R/O	[Standard] The number of packets received that have a frame length of 64 octets. [Implementation] The number of packets sent and received that have a frame length of 64 octets.	Y
17	etherStatsPkts65to127Octets {etherStatsEntry 15}	R/O	[Standard] The number of packets received that have a frame length of from 65 to 127 octets. [Implementation] The number of packets sent and received that have a frame length of from 65 to 127 octets.	Y
18	etherStatsPkts128to255Octets {etherStatsEntry 16}	R/O	[Standard] The number of packets received that have a frame length of from 128 to 255 octets. [Implementation] The number of packets sent and received that have a frame length of from 128 to 255 octets.	Y
19	etherStatsPkts256to511Octets {etherStatsEntry 17}	R/O	[Standard] The number of packets received that have a frame length of from 256 to 511 octets. [Implementation] The number of packets sent and received that have a frame length of from 256 to 511 octets.	Y

#	Object identifier	Access	Implementation specifications	Support?
20	etherStatsPkts512to1023Octets {etherStatsEntry 18}	R/O	[Standard] The number of packets received that have a frame length of from 512 to 1023 octets. [Implementation] The number of packets sent and received that have a frame length of from 512 to 1023 octets.	Y
21	etherStatsPkts1024to1518Octets {etherStatsEntry 19}	R/O	[Standard] The number of packets received that have a frame length of from 1024 to 1518 octets. [Implementation] The number of packets sent and received that have a frame length of from 1024 to 1518 octets.	Y
22	etherStatsOwner {etherStatsEntry 20}	R/NW	[Standard] The real entity that makes up this entry and the owner who assigns the resource. [Implementation] Returns a response of the character string `system`. `Read_Only`.	Y
23	etherStatsStatus {etherStatsEntry 21}	R/NW	[Standard] The entry status. • valid (`1`) • createRequest (`2`) • underCreation (`3`) • invalid (`4`) [Implementation] Fixed value of valid (`1`). `Read_Only`.	Y

Note: The frame length indicates the length from the MAC header to the FCS field. For details about the frame format, see *14.1.3 Control on the MAC and LLC sublayers* in the manual *Configuration Guide Vol. 1 For Version 11.10*.

2.12.2 History Control group

(1) ID

```
rmon OBJECT IDENTIFIER ::= {mib-2 16}

history OBJECT IDENTIFIER ::= {rmon 2}
Object ID value  1.3.6.1.2.1.16.2

historyControlTable OBJECT IDENTIFIER ::= {history 1}
Object ID value  1.3.6.1.2.1.16.2.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the History Control group.

Table 2-34: History Control group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	historyControlTable {history 1}	NA	[Standard] Ethernet statistics history control tables. [Implementation] Same as the standard.	Y
2	historyControlEntry {historyControlTable 1}	NA	[Standard] A list of Ethernet statistics history control tables. INDEX { historyControlIndex } [Implementation] Same as the standard. The list can contain no more than 32 entries.	Y
3	historyControlIndex {historyControlEntry 1}	R/O	[Standard] An Index value that indicates a specific historyControl entry. The value ranges from `1` to `65535`. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	historyControlDataSource {historyControlEntry 2}#1	R/W	[Standard] The object ID of an interface associated with this information. This object instance is the ifIndex of the MIB-II interfaces group. [Implementation] Same as the standard.	Y
5	historyControlBucketsRequested {historyControlEntry 3}#1	R/W	[Standard] The number of requested data buckets to be stored in etherHistoryTable. The default value is `50`. The value ranges from `1` to `65535`. [Implementation] Same as the standard.	Y
6	historyControlBucketsGranted {historyControlEntry 4}	R/O	[Standard] The number of granted data buckets to be stored in etherHistoryTable. The value ranges from `1` to `65535`. [Implementation] This number is equal to the value of historyControlBucketsRequested. If the historyControlBucketsRequested value exceeds `50`, this number is fixed at `50`.	Y
7	historyControlInterval {historyControlEntry 5}#1	R/W	[Standard] The sampling interval (in seconds) for the data to be stored in etherHistoryTable. The value ranges from `1` to `3600`. The default is `1800`. [Implementation] Same as the standard.	Y
8	historyControlOwner {historyControlEntry 6}#1	R/W	[Standard] The real entity that makes up this entry and the owner who assigns the resource. [Implementation] A character string of no more than 24 characters can be read and written.	Y
9	historyControlStatus {historyControlEntry 7}	R/W	[Standard] The entry status. • valid (`1`) • createRequest (`2`) • underCreation (`3`) • invalid (`4`) [Implementation] To add this entry, set createRequest (`2`) first. Perform set for the MIB in this entry, and then set valid (`1`). To remove this entry, set invalid (`4`) first. Next, set createRequest (`2`), and then acquire this entry. A response of underCreation (`3`) is then returned. Next, set valid (`1`), and then acquire this entry. A response of valid (`1`) is then returned.#2 If an entry already exists, set invalid (`4`), and then remove the existing entry before adding this entry. • valid (`1`): Statistics for the interface set in historyControlDataSource can be collected and sampled during the interval set in historyControlInterval. • invalid (`4`): Statistics for the interface cannot be collected or sampled during the interval set in historyInterval.	Y

#1: This can also be set by using the `rmon collection history` configuration command.

#2: To use Set from SNMP Manager to disable and then re-enable a history group that was set during configuration, delete the history settings that were set, and then set the history group again.

2.12.3 Ethernet History group

(1) ID

```
rmon OBJECT IDENTIFIER ::= {mib-2 16}

history OBJECT IDENTIFIER ::= {rmon 2}
Object ID value  1.3.6.1.2.1.16.2

etherHistoryTable OBJECT IDENTIFIER ::= {history 2}
```

```
Object ID value  1.3.6.1.2.1.16.2.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the Ethernet History group.

Table 2-35: Ethernet History group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	etherHistoryTable {history 2}	NA	[Standard] Ethernet statistics history tables. [Implementation] Same as the standard.	Y
2	etherHistoryEntry {etherHistoryTable 1}	NA	[Standard] A list of Ethernet statistics history tables. INDEX { etherHistoryIndex, etherHistorySampleIndex } [Implementation] Same as the standard.	Y
3	etherHistoryIndex {etherHistoryEntry 1}	R/O	[Standard] The same value as the historyControlIndex index value. The value ranges from `1` to `65535`. [Implementation] Same as the standard.	Y
4	etherHistorySampleIndex {etherHistoryEntry 2}	R/O	[Standard] A unique sequence value from the same etherHistoryIndex entry is set, starting at `1`. The value ranges from `1` to `2147483647`. [Implementation] Same as the standard.	Y
5	etherHistoryIntervalStart {etherHistoryEntry 3}	R/O	[Standard] The time at which the statistics collection was started (in units of 1/100 seconds). [Implementation] Same as the standard.	Y
6	etherHistoryDropEvents {etherHistoryEntry 4}	R/O	[Standard] The number of packet drops that were detected during sampling. [Implementation] Same as the standard.	Y
7	etherHistoryOctets {etherHistoryEntry 5}	R/O	[Standard] The number of octets (bytes) that were received within a specific period of time. This number includes bad packets. [Implementation] The number of octets (bytes) that were sent and received within a specific period of time. Calculation of octet values is based on the range from the MAC header to the FCS field over the length of the frame.	Y
8	etherHistoryPkts {etherHistoryEntry 6}	R/O	[Standard] The total number of packets received within a specific period of time. This number includes bad, broadcast, and multicast packets. [Implementation] The total number of packets sent and received within a specific period of time.	Y
9	etherHistoryBroadcastPkts {etherHistoryEntry 7}	R/O	[Standard] The number of broadcast packets received within a specific period of time. This number does not include bad or multicast packets. [Implementation] The number of broadcast packets sent and received within a specific period of time.	Y
10	etherHistoryMulticastPkts {etherHistoryEntry 8}	R/O	[Standard] The number of multicast packets received within a specific period of time. This number does not include bad or broadcast packets. [Implementation] The number of multicast packets sent and received within a specific period of time. Pause packets are handled as follows: For AX3640S series switches: No pause packets are included. For AX3630S series switches: Pause packets are included.	Y
11	etherHistoryCRCAlignErrors {etherHistoryEntry 9}	R/O	[Standard] The number of FCS error packets received within a specific period of time. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support ?
12	etherHistoryUndersizePkts {etherHistoryEntry 10}	R/O	[Standard] The number of undersized packets (with a frame length of less than 64 octets) received within a specific period of time. [Implementation] Same as the standard.	Y
13	etherHistoryOversizePkts {etherHistoryEntry 11}	R/O	[Standard] The number of oversized packets (with a frame length of more than 1518 octets) received within a specific period of time. [Implementation] The number of oversized packets (which exceed the maximum frame length) received within a specific period of time.	Y
14	etherHistoryFragments {etherHistoryEntry 12}	R/O	[Standard] The number of undersized packets (with a frame length of less than 64 octets) that were received within a specific period of time and have an FCS or Alignment error. [Implementation] Same as the standard.	Y
15	etherHistoryJabbers {etherHistoryEntry 13}	R/O	[Standard] The number of oversized packets (which exceed the maximum frame length) that were received within a specific period of time and have an FCS or Alignment error. [Implementation] • gigabitethernet: Fixed value of `0`. • tengigabitethernet: The number of oversized packets (which exceed the maximum frame length) that were received within a specific period of time and have an FCS error.	Y
16	etherHistoryCollisions {etherHistoryEntry 14}	R/O	[Standard] The number of collisions that occur within a specific period of time. [Implementation] Same as the standard.	Y
17	etherHistoryUtilization {etherHistoryEntry 15}	R/O	[Standard] The estimated usage rate of the physical layer. The value ranges from `0` to `10000`. [Implementation] Indicates the usage rate. The usage rate of a half-duplex line is estimated as follows: {*number-of-packets* x (9.6 + 6.4) + (*number-of-octets* x 0.8)} / {*time-interval* x *line-speed*} x 1000. The usage rate of a full-duplex line is estimated by: {*number-of-packets* x (9.6 + 6.4) + (*number-of-octets* x 0.8)} / {{*time-interval* x *line-speed*} x 2} x 1000.	Y

#: The frame length indicates the length from the MAC header to the FCS field. For details about the frame format, see *14.1.3 Control on the MAC and LLC sublayers* in the manual *Configuration Guide Vol. 1 For Version 11.10*.

2.12.4 Alarm group

(1) ID

```
rmon OBJECT IDENTIFIER ::= {mib-2 16}

alarm OBJECT IDENTIFIER ::= {rmon 3}
Object ID value  1.3.6.1.2.1.16.3

alarmTable OBJECT IDENTIFIER ::= {alarm 1}
Object ID value  1.3.6.1.2.1.16.3.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the Alarm group.

Table 2-36: Alarm group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	alarmTable {alarm 1}	NA	[Standard] Alarm tables. [Implementation] Same as the standard.	Y
2	alarmEntry {alarmTable 1}	NA	[Standard] A list of alarm tables. INDEX { alarmIndex } [Implementation] Same as the standard. The list can contain no more than 128 entries.	Y
3	alarmIndex {alarmEntry 1}	R/O	[Standard] An ID that uniquely identifies a row entry in alarmTable. The value ranges from `1` to `65535`. [Implementation] Same as the standard.	Y
4	alarmInterval {alarmEntry 2}#1	R/W	[Standard] The interval (in seconds) between threshold comparisons. The interval ranges from `1` to $2^{32}-1$. [Implementation] Same as the standard.#2	Y
5	alarmVariable {alarmEntry 3}#1	R/W	[Standard] The object identifier of the MIB to be sampled. [Implementation] Same as the standard.	Y
6	alarmSampleType {alarmEntry 4}#1	R/W	[Standard] Indicates the method for performing value and threshold comparison: • absoluteValue (`1`) • deltaValue (`2`) [Implementation] Same as the standard.	Y
7	alarmValue {alarmEntry 5}	R/O	[Standard] A statistic from the previous sampling. [Implementation] Same as the standard.	Y
8	alarmStartupAlarm {alarmEntry 6}#1	R/W	[Standard] The timing for generating the first alarm: • risingAlarm (`1`) • fallingAlarm (`2`) • rising Or fallingAlarm (`3`) [Implementation] Same as the standard.	Y
9	alarmRisingThreshold {alarmEntry 7}#1	R/W	[Standard] The upper threshold for the sampled statistic. [Implementation] Same as the standard.#2	Y
10	alarmFallingThreshold {alarmEntry 8}#1	R/W	[Standard] The lower threshold for the sampled statistic. [Implementation] Same as the standard.#2	Y
11	alarmRisingEventIndex {alarmEntry 9}#1	R/W	[Standard] The index number of the event group to be used when the upper threshold is exceeded. The value ranges from `0` to `65535`. [Implementation] Same as the standard.	Y
12	alarmFallingEventIndex {alarmEntry 10}#1	R/W	[Standard] The index number of the event group to be used when the lower threshold is exceeded. The value ranges from `0` to `65535`. [Implementation] Same as the standard.	Y
13	alarmOwner {alarmEntry 11}#1	R/W	[Standard] The real entity that makes up this entry and the owner who assigns the resource. [Implementation] A character string of no more than 24 characters can be read and written.	Y

#	Object identifier	Access	Implementation specifications	Support?
14	alarmStatus {alarmEntry 12}	R/W	[Standard] The status of this entry. [Implementation] To add this entry, set createRequest (2) first. Perform set for the MIB in this entry, and then set valid (1). To remove this entry, set invalid (4) first. Next, set createRequest (2), and then acquire this entry. A response of underCreation (3) is then returned. Next, set valid (1), and then acquire this entry. A response of valid (1) is then returned.#3 If an entry already exists, set invalid (4), and then remove the existing entry before adding this entry. • valid (1): Information about the object set in alarmVariable can be sampled during the interval set in alarmInterval. • invalid (4): The object set in alarmVariable does not exist. Or, the sampling attempted during the interval set in alarmIntervalhistoryInterval failed.	Y

#1: This can also be set by using the `rmon alarm` configuration command.

#2: If `2147483648` is set during configuration, `-2147483648` is shown, and the value increments by one. If `4294967295` is set, `-1` is shown.

#3: To use Set from SNMP Manager to disable and then re-enable an alarm group that was set during configuration, delete the alarm settings that were set, and then set the alarm group again.

2.12.5 Event group

(1) ID

```
rmon OBJECT IDENTIFIER ::= {mib-2 16}

event OBJECT IDENTIFIER ::= {rmon 9}
Object ID value  1.3.6.1.2.1.16.9

eventTable OBJECT IDENTIFIER ::= {event 1}
Object ID value  1.3.6.1.2.1.16.9.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the Event group.

Table 2-37: Event group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	eventTable {event 1}	NA	[Standard] A table of events generated by RMON agents. [Implementation] Same as the standard.	Y
2	eventEntry {eventTable 1}	NA	[Standard] A list of events generated by RMON agents. INDEX { eventIndex } [Implementation] Same as the standard. The list can contain no more than 16 entries.	Y
3	eventIndex {eventEntry 1}	R/O	[Standard] The index value of the eventEntry list. This is equivalent to the logEventIndex value in the logEntry list. The value ranges from 1 to 65535. [Implementation] Same as the standard.	Y
4	eventDescription {eventEntry 2}#1	R/W	[Standard] A description of this list. A character string of no more than 127 characters. [Implementation] A character string of no more than 79 characters.	Y

#	Object identifier	Access	Implementation specifications	Support?
5	eventType {eventEntry 3}#1	R/W	[Standard] The event notification method: • none (1) • log (2) • snmp-trap (3) • log-and-trap (4) [Implementation] Same as the standard.	Y
6	eventCommunity {eventEntry 4}#1	R/W	[Standard] The community name of a trap issued when Trap is specified as eventType. A character string of no more than 127 characters. [Implementation] A character string of no more than 60 characters.	Y
7	eventLastTimeSent {eventEntry 5}	R/O	[Standard] The sysUpTime value for when the last event was generated (in units of 1/100 seconds). [Implementation] Same as the standard.	Y
8	eventOwner {eventEntry 6}#1	R/W	[Standard] The real entity that makes up this entry and the owner who assigns a resource. No more than 127 characters. [Implementation] A character string of no more than 24 characters can be read and written.	Y
9	eventStatus {eventEntry 7}	R/W	[Standard] The status of this entry: • valid (1) • createRequest (2) • underCreation (3) • invalid (4) [Implementation] To add this entry, set createRequest (2) first. Perform set for the MIB in this entry, and then set valid (1). To remove this entry, set invalid (4) first. Next, set createRequest (2), and then acquire this entry. A response of underCreation (3) is then returned. Next, set valid (1), and then acquire this entry. A response of valid (1) is then returned.#2 If an entry already exists, set invalid (4), and then remove the existing entry before adding this entry.	Y
10	logTable {event 2}	NA	[Standard] A table of logged events. [Implementation] Same as the standard.	Y
11	logEntry {logTable 1}	NA	[Standard] A list of logged events. INDEX { logEventIndex, logIndex } [Implementation] Same as the standard. The list can contain no more than 128 entries.	Y
12	logEventIndex {logEntry 1}	R/O	[Standard] The index of an event that triggered the generation of this log. This value indicates the event that has the same eventIndex value. The value ranges from 1 to 65535. [Implementation] Same as the standard.	Y
13	logIndex {logEntry 2}	R/O	[Standard] The index of the log for the same event. The value ranges from 1 to 2147483647. [Implementation] Same as the standard.	Y
14	logTime {logEntry 3}	R/O	[Standard] The sysUpTime value for when this log list was generated. [Implementation] Same as the standard.	Y
15	logDescription {logEntry 4}	R/O	[Standard] A comment about the source event for this log list. A character string of no more than 255 characters. [Implementation] Returns a response containing a character string of no more than 72 characters.	Y

#1: This can also be set by using the `rmon event` configuration command.

#2: To use Set from SNMP Manager to invalidate and then revalidate an event group set during configuration, delete the event settings that were set and then set the event group again.

2.13 dot1dBridge group

Relevant standards for the dot1dBridgegroup are described in the following documents:

- RFC 1493 (June 1993)
- RFC 2674 (August 1999)

2.13.1 dot1dBase group

(1) ID

```
dot1dBridge OBJECT IDENTIFIER ::= {mib-2 17}

dot1dBase OBJECT IDENTIFIER ::= {dot1dBridge 1}
Object ID value  1.3.6.1.2.1.17.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1dBase group.

Table 2-38: dot1dBase group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1dBaseBridgeAddress {dot1dBase 1}	R/O	[Standard] The MAC address of a bridge. [Implementation] Same as the standard.	Y
2	dot1dBaseNumPorts {dot1dBase 2}	R/O	[Standard] The number of ports on the bridge. [Implementation] Same as the standard.	Y
3	dot1dBaseType {dot1dBase 3}	R/O	[Standard] The bridging type supported by the bridge: • unknown (1) • transparent-only (2) • sourceroute-only (3) • srt (4) [Implementation] Fixed value of transparent-only (2).	Y
4	dot1dBasePortTable {dot1dBase 4}	NA	[Standard] A table of information about each bridge port. [Implementation] Same as the standard.	Y
5	dot1dBasePortEntry {dot1dBasePortTable 1}	NA	[Standard] A list of information about each bridge port. INDEX { dot1dBasePort } [Implementation] Same as the standard.	Y
6	dot1dBasePort {dot1dBasePortEntry 1}	R/O	[Standard] The port number of a port (1-65535). [Implementation] Same as the standard.	Y
7	dot1dBasePortIfIndex {dot1dBasePortEntry 2}	R/O	[Standard] The interface which corresponds to this port is the instance value of the object defined in MIB-II. [Implementation] Same as the standard.	Y
8	dot1dBasePortCircuit {dot1dBasePortEntry 3}	R/O	[Standard] The identifier of the port with the same instance value set in the dot1dBasePortIfIndex. [Implementation] Fixed value of {0.0}	Y
9	dot1dBasePortDelayExceededDiscards {dot1dBasePortEntry 4}	R/O	[Standard] The total number of frames discarded due to a pass-through delay. [Implementation] Fixed value of 0.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	dot1dBasePortMtuExceededDiscards {dot1dBasePortEntry 5}	R/O	[Standard] The total number of frames discarded due to a data overflow. [Implementation] Same as the standard.	Y

2.13.2 dot1dStp group

(1) ID

```
dot1dBridge OBJECT IDENTIFIER ::= {mib-2 17}

dot1dStp OBJECT IDENTIFIER ::= {dot1dBridge 2}
Object ID value  1.3.6.1.2.1.17.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1dStp group.

Table 2-39: dot1dStp group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1dStpProtocolSpecification {dot1dStp 1}	R/O	[Standard] The version of the Spanning Tree Protocol run by the bridge: • unknown (1) • decLb100 (2) • ieee8021d (3) [Implementation] Fixed value of 3.	Y
2	dot1dStpPriority {dot1dStp 2}	R/NW	[Standard] The priority value of the bridge (0-65535). [Implementation] Same as the standard.	Y
3	dot1dStpTimeSinceTopologyChange {dot1dStp 3}	R/O	[Standard] The time (in units of 1/100 seconds) that has elapsed since a topology change occurred. [Implementation] Same as the standard.	Y
4	dot1dStpTopChanges {dot1dStp 4}	R/O	[Standard] The number of topology changes. [Implementation] Same as the standard.	Y
5	dot1dStpDesignatedRoot {dot1dStp 5}	R/O	[Standard] A root bridge identification value held by the bridge. [Implementation] Same as the standard.	Y
6	dot1dStpRootCost {dot1dStp 6}	R/O	[Standard] A root path cost value held by the bridge. [Implementation] Same as the standard.	Y
7	dot1dStpRootPort {dot1dStp 7}	R/O	[Standard] A root port value held by the bridge. [Implementation] Same as the standard. A value of 0 indicates that no root port exists. The ifIndex value of the VLAN used for the link is shown as a virtual link.	Y
8	dot1dStpMaxAge {dot1dStp 8}	R/O	[Standard] The maximum aging time (in units of 1/100 seconds) held by the bridge. [Implementation] Same as the standard.	Y
9	dot1dStpHelloTime {dot1dStp 9}	R/O	[Standard] The Hello time (in units of 1/100 seconds) held by the bridge. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	dot1dStpHoldTime {dot1dStp 10}	R/O	[Standard] The Hold time (in units of 1/100 seconds) held by the bridge. [Implementation] Same as the standard.	Y
11	dot1dStpForwardDelay {dot1dStp 11}	R/O	[Standard] The transfer delay time (in units of 1/100 seconds) held by the bridge. [Implementation] Same as the standard.	Y
12	dot1dStpBridgeMaxAge {dot1dStp 12}	R/NW	[Standard] The maximum aging time (600-4000 in units of 1/100 seconds) set in the bridge. [Implementation] Same as the standard.	Y
13	dot1dStpBridgeHelloTime {dot1dStp 13}	R/NW	[Standard] The Hello time (100-1000 in units of 1/100 seconds) set in the bridge. [Implementation] Same as the standard.	Y
14	dot1dStpBridgeForwardDelay {dot1dStp 14}	R/NW	[Standard] The transfer delay time (400-3000 in units of 1/100 seconds) set in the bridge. [Implementation] Same as the standard.	Y
15	dot1dStpPortTable {dot1dStp 15}	NA	[Standard] A table of port information for the Spanning Tree Protocol. [Implementation] Same as the standard.	Y
16	dot1dStpPortEntry {dot1dStpPortTable 1}	NA	[Standard] A list of Spanning Tree Protocol status information for each port INDEX { ifIndex } [Implementation] Same as the standard.	Y
17	dot1dStpPort {dot1dStpPortEntry 1}	R/O	[Standard] The port number of a port under the Spanning Tree Protocol (`1-65535`). [Implementation] Same as the standard.	Y
18	dot1dStpPortPriority {dot1dStpPortEntry 2}	R/NW	[Standard] The priority of the port (`0-255`). [Implementation] Same as the standard.	Y
19	dot1dStpPortState {dot1dStpPortEntry 3}	R/O	[Standard] The current status of the port: • disabled (`1`) • blocking (`2`) • listening (`3`) • learning (`4`) • forwarding (`5`) • broken (`6`) [Implementation] Same as the standard.	Y
20	dot1dStpPortEnable {dot1dStpPortEntry 4}	R/NW	[Standard] The enabled or disabled status of the port: • enabled (`1`) • disabled (`2`) [Implementation] Same as the standard.	Y
21	dot1dStpPortPathCost {dot1dStpPortEntry 5}	R/NW	[Standard] The path cost value for the port (`1-65535`). [Implementation] `0-200000000`. A value of `0` indicates that the port link is down.	Y
22	dot1dStpPortDesignatedRoot {dot1dStpPortEntry 6}	R/O	[Standard] The root bridge identifier in the configured BPDU. [Implementation] Same as the standard.	Y
23	dot1dStpPortDesignatedCost {dot1dStpPortEntry 7}	R/O	[Standard] The path cost value for the specified port. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
24	dot1dStpPortDesignated Bridge {dot1dStpPortEntry 8}	R/O	[Standard] The bridge identifier for the specified bridge. [Implementation] Same as the standard.	Y
25	dot1dStpPortDesignated Port {dot1dStpPortEntry 9}	R/O	[Standard] The port identifier for the specified bridge: • SIZE (2) [Implementation] Same as the standard.	Y
26	dot1dStpPortForwardTransitions {dot1dStpPortEntry 10}	R/O	[Standard] The number of times the port state changed from learning to transferring. [Implementation] Same as the standard.	Y

2.13.3 dot1dTp group

(1) ID

```
dot1dBridge OBJECT IDENTIFIER ::= {mib-2 17}

dot1dTp OBJECT IDENTIFIER ::= {dot1dBridge 4}
Object ID value  1.3.6.1.2.1.17.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1dTp group.

Table 2-40: dot1dTp group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1dTpLearnedEntryDiscards {dot1dTp 1}	R/O	[Standard] The number of forwarding entries discarded due to insufficient space in the forwarding database. [Implementation] Fixed value of 0.	Y
2	dot1dTpAgingTime {dot1dTp 2}	R/NW	[Standard] The timeout time (10-1000000 seconds) before aging out a forwarding entry that was dynamically learned. [Implementation] Same as the standard. A value of 0 indicates that aging was disabled during configuration.	Y
3	dot1dTpFdbTable {dot1dTp 3}	NA	[Standard] A table of unicast entries that contain filtering information. [Implementation] Not implemented.	N
4	dot1dTpFdbEntry {dot1dTpFdbTable 1}	NA	[Standard] A unicast MAC address that contains filtering information. INDEX { dot1dTpFdbAddress } [Implementation] Not implemented.	N
5	dot1dTpFdbAddress {dot1dTpFdbEntry 1}	R/O	[Standard] A unicast MAC address that contains filtering information. [Implementation] Not implemented.	N
6	dot1dTpFdbPort {dot1dTpFdbEntry 2}	R/O	[Standard] The port number of the port which sent a frame that has the same source address value as the corresponding instance value of dot1dTpFdbAddress. [Implementation] Not implemented.	N
7	dot1dTpFdbStatus {dot1dTpFdbEntry 3}	R/O	[Standard] The status of the MAC address table: • other (1) • invalid (2) • learned (3) • self (4) • mgmt (5) [Implementation] Not implemented.	N

#	Object identifier	Access	Implementation specifications	Support?
8	dot1dTpPortTable {dot1dTp 4}	NA	[Standard] A table of information about all ports. [Implementation] Same as the standard.	Y
9	dot1dTpPortEntry {dot1dTpPortTable 1}	NA	[Standard] A list of information about each port. INDEX { dot1dTpPort } [Implementation] Same as the standard.	Y
10	dot1dTpPort {dot1dTpPortEntry 1}	R/O	[Standard] A port number (1-65535) that indicates the port associated with the management information in this entry. [Implementation] Same as the standard.	Y
11	dot1dTpPortMaxInfo {dot1dTpPortEntry 2}	R/O	[Standard] The maximum size of a send-and-receive information field for this port. [Implementation] Same as the standard.	Y
12	dot1dTpPortInFrames {dot1dTpPortEntry 3}	R/O	[Standard] The number of frames received by this port. [Implementation] Same as the standard.	Y
13	dot1dTpPortOutFrames {dot1dTpPortEntry 4}	R/O	[Standard] The number of frames sent by this port. [Implementation] Same as the standard.	Y
14	dot1dTpPortInDiscards {dot1dTpPortEntry 5}	R/O	[Standard] The number of valid frames that are received but discarded. [Implementation] Same as the standard.	Y
15	dot1dTpHCPortTable {dot1dTp 5}	NA	[Standard] A table of information about a high-capacity port. [Implementation] Same as the standard.	Y
16	dot1dTpHCPortEntry {dot1dTpHCPortTable 1}	NA	[Standard] A list of information about a high-capacity port. INDEX { dot1dTpPort } [Implementation] Same as the standard.	Y
17	dot1dTpHCPortInFrames {dot1dTpHCPortEntry 1}	R/O	[Standard] The number of frames received by the high-capacity port. [Implementation] Same as the standard.	Y
18	dot1dTpHCPortOutFrames {dot1dTpHCPortEntry 2}	R/O	[Standard] The number of frames sent by the high-capacity port. [Implementation] Same as the standard.	Y
19	dot1dTpHCPortInDiscards {dot1dTpHCPortEntry 3}	R/O	[Standard] The number of frames that are received but discarded by the high-capacity port. [Implementation] Same as the standard.	Y
20	dot1dTpPortOverflowTable {dot1dTp 6}	NA	[Standard] A table of overflow information for the high-capacity port. [Implementation] Same as the standard.	Y
21	dot1dTpPortOverflowEntry {dot1dTpPortOverflowTable 1}	NA	[Standard] A list of overflow information for the high-capacity port. INDEX { dot1dTpPort } [Implementation] Same as the standard.	Y
22	dot1dTpPortInOverflowFrames {dot1dTpPortOverflowEntry 1}	R/O	[Standard] The number of times the dot1dTpPortInFrames counter overflowed. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
23	dot1dTpPortOutOverflowFrames {dot1dTpPortOverflowEntry 2}	R/O	[Standard] The number of times the dot1dTpPortOutFrames counter overflowed. [Implementation] Same as the standard.	Y
24	dot1dTpPortInOverflowDiscards {dot1dTpPortOverflowEntry 3}	R/O	[Standard] The number of times the dot1dTpPortInDiscards counter overflowed. [Implementation] Same as the standard.	Y

2.13.4 pBridgeMIB group

(1) ID

```
dot1dBridge OBJECT IDENTIFIER ::= {mib-2 17}

pBridgeMIB OBJECT IDENTIFIER ::= {dot1dBridge 6}
Object ID value  1.3.6.1.2.1.17.6

pBridgeMIBObjects  OBJECT IDENTIFIER ::= {pBridgeMIB 1}
dot1dExtBase       OBJECT IDENTIFIER ::= {pBridgeMIBObjects 1}
dot1dPriority      OBJECT IDENTIFIER ::= {pBridgeMIBObjects 2}
dot1dGarp          OBJECT IDENTIFIER ::= {pBridgeMIBObjects 3}
dot1dGmrp          OBJECT IDENTIFIER ::= {pBridgeMIBObjects 4}
pBridgeConformance OBJECT IDENTIFIER ::= {pBridgeMIB 2}
pBridgeGroups      OBJECT IDENTIFIER ::= {pBridgeConformance 1}
pBridgeCompliances OBJECT IDENTIFIER ::= {pBridgeConformance 2}
```

(2) Implementation specifications

The following table shows the implementation specifications for the pBridgeMIB group.

Table 2-41: pBridgeMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1dDeviceCapabilities {dot1dExtBase 1}	R/O	[Standard] IEEE 802.1D or 802.1Q options implemented in the device: • dot1dExtendedFilteringServices (0) • dot1dTrafficClasses (1) • dot1qStaticEntryIndividualPort (2) • dot1qIVLCapable (3) • dot1qSVLCapable (4) • dot1qHybridCapable (5) • dot1qConfigurablePvidTagging (6) • dot1dLocalVlanCapable (7) [Implementation] • dot1dTrafficClasses (1) • dot1qIVLCapable (3) • dot1qConfigurablePvidTagging (6) Manager displays the value as text.	Y
2	dot1dTrafficClassesEnabled {dot1dExtBase 2}	R/NW	[Standard] The traffic class support status of the bridge: • true (1) • false (2) [Implementation] true (1).	Y

#	Object identifier	Access	Implementation specifications	Support?
3	dot1dGmrpStatus {dot1dExtBase 3}	R/NW	[Standard] The GMRP status: • enabled (1) • disabled (2) [Implementation] disabled (2).	Y
4	dot1dPortCapabilitiesTable {dot1dExtBase 4}	NA	[Standard] A table of port capacity information. [Implementation] Same as the standard.	Y
5	dot1dPortCapabilitiesEntry {dot1dPortCapabilitiesTable 1}	NA	[Standard] A list of port capacity information. [Implementation] Same as the standard.	Y
6	dot1dPortCapabilities {dot1dPortCapabilitiesEntry 1}	R/O	[Standard] The IEEE 802.1D and 802.1Q status of the port: • dot1qDot1qTagging (0) • dot1qConfigurableAcceptableFrameTypes (1) • dot1qIngressFiltering (2) [Implementation] dot1qIngressFiltering (2). Manager displays the value as text.	Y
7	dot1dPortPriorityTable {dot1dPriority 1}	NA	[Standard] A table of port priority information [Implementation] Same as the standard.	Y
8	dot1dPortPriorityEntry {dot1dPortPriorityTable 1}	NA	[Standard] A list of port priority information. [Implementation] Same as the standard.	Y
9	dot1dPortDefaultUserPriority {dot1dPortPriorityEntry 1}	R/NW	[Standard] The default ingress user priority for the port (0-7). [Implementation] 0.	Y
10	dot1dPortNumTrafficClasses {dot1dPortPriorityEntry 2}	R/NW	[Standard] The ingress traffic class number for the port (1-8). [Implementation] 1.	Y
11	dot1dTrafficClassTable {dot1dPriority 3}	NA	[Standard] A table of traffic class information. [Implementation] Same as the standard.	Y
12	dot1dTrafficClassEntry {dot1dTrafficClassTable 1}	NA	[Standard] A list of traffic class information. INDEX { dot1dBasePort, dot1dTrafficClassPriority } [Implementation] Same as the standard.	Y
13	dot1dTrafficClassPriority {dot1dTrafficClassEntry 1}	NA	[Standard] The priority of the traffic class (0-7). [Implementation] Same as the standard.	Y
14	dot1dTrafficClass {dot1dTrafficClassEntry 2}	R/NW	[Standard] The traffic class (0-7). [Implementation] Same as the standard.	Y

2.13.5 qBridgeMIB group

(1) ID

```
dot1dBridge OBJECT IDENTIFIER ::= {mib-2 17}

qBridgeMIB OBJECT IDENTIFIER ::= {dot1dBridge 7}
```

```
Object ID value  1.3.6.1.2.1.17.7

qBridgeMIBObjects  OBJECT IDENTIFIER ::= {qBridgeMIB 1}
dot1qBase          OBJECT IDENTIFIER ::= {qBridgeMIBObjects 1}
dot1qTp            OBJECT IDENTIFIER ::= {qBridgeMIBObjects 2}
dot1qStatic        OBJECT IDENTIFIER ::= {qBridgeMIBObjects 3}
dot1qVlan          OBJECT IDENTIFIER ::= {qBridgeMIBObjects 4}
qBridgeConformance OBJECT IDENTIFIER ::= {qBridgeMIB 2}
qBridgeGroups      OBJECT IDENTIFIER ::= {qBridgeConformance 1}
qBridgeCompliances OBJECT IDENTIFIER ::= {qBridgeConformance 2}
dot1dPortPair      OBJECT IDENTIFIER ::= {dot1dBridge 10}
```

(2) Implementation specifications

The following table shows the implementation specifications for the qBridgeMIB group.

Table 2-42: qBridgeMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1qVlanVersionNumber {dot1qBase 1}	R/O	[Standard] The version number of IEEE 802.1Q. • version1 (1) [Implementation] 1.	Y
2	dot1qMaxVlanId {dot1qBase 2}	R/O	[Standard] The maximum number of IEEE 802.1Q VLAN IDs. [Implementation] 4094.	Y
3	dot1qMaxSupportedVlans {dot1qBase 3}	R/O	[Standard] The maximum number of IEEE 802.1Q VLANs. [Implementation] 4094.	Y
4	dot1qNumVlans {dot1qBase 4}	R/O	[Standard] The current number of IEEE 802.1Q VLANs. [Implementation] Same as the standard.	Y
5	dot1qGvrpStatus {dot1qBase 5}	R/NW	[Standard] The management status of GVRP. [Implementation] disabled (2).	Y
6	dot1qFdbTable {dot1qTp 1}	NA	[Standard] A table of MAC address tables. [Implementation] Same as the standard.	Y
7	dot1qFdbEntry {dot1qFdbTable 1}	NA	[Standard] A list of MAC address tables. INDEX { dot1qFdbId } [Implementation] Same as the standard.	Y
8	dot1qFdbId {dot1qFdbEntry 1}	NA	[Standard] The identifier of a MAC address table. [Implementation] Same as the standard.	Y
9	dot1qFdbDynamicCount {dot1qFdbEntry 2}	R/O	[Standard] The number of dynamic entries in the MAC address table. [Implementation] Fixed value of 0.	Y
10	dot1qTpFdbTable {dot1qTp 2}	NA	[Standard] A table of information about the transparent MAC address table. [Implementation] Same as the standard.#	Y
11	dot1qTpFdbEntry {dot1qTpFdbTable 1}	NA	[Standard] A list of information about the transparent MAC address table. INDEX { dot1qFdbId, dot1qTpFdbAddress } [Implementation] Same as the standard.#	Y
12	dot1qTpFdbAddress {dot1qTpFdbEntry 1}	NA	[Standard] Unicast MAC address in the transparent MAC address table. [Implementation] Same as the standard.#	Y

#	Object identifier	Access	Implementation specifications	Support?
13	dot1qTpFdbPort {dot1qTpFdbEntry 2}	R/O	[Standard] A port number in the transparent MAC address table (0-65535). [Implementation] Same as the standard.#	Y
14	dot1qTpFdbStatus {dot1qTpFdbEntry 3}	R/O	[Standard] The status of the MAC address table: • other (1) • invalid (2) • learned (3) • self (4) • mgmt (5) [Implementation] Returns learned (3) for a dynamic entry. Returns mgmt (5) for a non-dynamic entry.#	Y
15	dot1qTpGroupTable {dot1qTp 3}	NA	[Standard] A table of information about a transparent group. [Implementation] Not implemented.	N
16	dot1qTpGroupEntry {dot1qTpGroupTable 1}	NA	[Standard] A list of information about a transparent group. INDEX { dot1qVlanIndex, dot1qTpGroupAddress } [Implementation] Not implemented.	N
17	dot1qTpGroupAddress {dot1qTpGroupEntry 1}	NA	[Standard] A destination MAC address in the transparent group. [Implementation] Not implemented.	N
18	dot1qTpGroupEgressPorts {dot1qTpGroupEntry 2}	R/O	[Standard] The full set of ingress ports in the transparent group. [Implementation] Not implemented.	N
19	dot1qTpGroupLearnt {dot1qTpGroupEntry 3}	R/O	[Standard] A subset of learned ports in the transparent group. [Implementation] Not implemented.	N
20	dot1qForwardAllTable {dot1qTp 4}	NA	[Standard] A table of forwarding information for a VLAN that forwards all multicasts. [Implementation] Not implemented.	N
21	dot1qForwardAllEntry {dot1qForwardAllTable 1}	NA	[Standard] A list of forwarding information for a VLAN that forwards all multicasts. INDEX { dot1qVlanIndex } [Implementation] Not implemented.	N
22	dot1qForwardAllPorts {dot1qForwardAllEntry 1}	R/O	[Standard] The full set of VLAN ports that forward all multicast group addresses. [Implementation] Not implemented.	N
23	dot1qForwardAllStaticPorts {dot1qForwardAllEntry 2}	R/NW	[Standard] A set of static VLAN ports that forward all multicast group addresses. [Implementation] Not implemented.	N
24	dot1qForwardAllForbiddenPorts {dot1qForwardAllEntry 3}	R/NW	[Standard] A set of VLAN ports that do not forward any multicast group addresses. [Implementation] Not implemented.	N
25	dot1qForwardUnregisteredTable {dot1qTp 5}	NA	[Standard] A table of forwarding information for a VLAN that forwards unregistered multicast group addresses. [Implementation] Same as the standard.	Y
26	dot1qForwardUnregisteredEntry {dot1qForwardUnregisteredTable 1}	NA	[Standard] A list of forwarding information for a VLAN that forwards unregistered multicast group addresses. INDEX { dot1qVlanIndex } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
27	dot1qForwardUnregisteredPorts {dot1qForwardUnregisteredEntry 1}	R/O	[Standard] The full set of VLAN ports that forward unregistered multicast group addresses. [Implementation] Same as the standard.	Y
28	dot1qForwardUnregisteredStaticPorts {dot1qForwardUnregisteredEntry 2}	R/NW	[Standard] A set of static VLAN ports that forward unregistered multicast group addresses. [Implementation] Same as the standard.	Y
29	dot1qForwardUnregisteredForbiddenPorts {dot1qForwardUnregisteredEntry 3}	R/NW	[Standard] A set of static VLAN ports that do not forward any unregistered multicast group addresses. [Implementation] Same as the standard.	Y
30	dot1qStaticUnicastTable {dot1qStatic 1}	NA	[Standard] A table of filtering information for static unicast MAC addresses. [Implementation] Same as the standard.	Y
31	dot1qStaticUnicastEntry {dot1qStaticUnicastTable 1}	NA	[Standard] A list of filtering information for static unicast MAC addresses. INDEX { dot1qFdbId, dot1qStaticUnicastAddress, dot1qStaticUnicastReceivePort } [Implementation] Same as the standard.	Y
32	dot1qStaticUnicastAddress {dot1qStaticUnicastEntry 1}	NA	[Standard] A destination MAC address for static unicast. [Implementation] Same as the standard.	Y
33	dot1qStaticUnicastReceivePort {dot1qStaticUnicastEntry 2}	NA	[Standard] The port number (`0-65535`) of a port that receives static unicast addresses. [Implementation] `0`.	Y
34	dot1qStaticUnicastAllowedToGoTo {dot1qStaticUnicastEntry 3}	R/NW	[Standard] A set of ports that flood static unicast addresses. [Implementation] Same as the standard.	Y
35	dot1qStaticUnicastStatus {dot1qStaticUnicastEntry 4}	R/NW	[Standard] The entry status of a static unicast address: • other (`1`) • invalid (`2`) • permanent (`3`) • deleteOnReset (`4`) • deleteOnTimeout (`5`) [Implementation] Fixed value of permanent (`3`).	Y
36	dot1qStaticMulticastTable {dot1qStatic 2}	NA	[Standard] A table of filtering information for a VLAN that forwards static multicast and broadcast MAC addresses. [Implementation] Same as the standard.	Y
37	dot1qStaticMulticastEntry {dot1qStaticMulticastTable 1}	NA	[Standard] A list of filtering information for a VLAN that forwards static multicast and broadcast MAC addresses. INDEX { dot1qVlanIndex, dot1qStaticMulticastAddress, dot1qStaticMulticastReceivePort } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
38	dot1qStaticMulticastAddress {dot1qStaticMulticastEntry 1}	NA	[Standard] A destination MAC address for static multicast or broadcast. [Implementation] Same as the standard.	Y
39	dot1qStaticMulticastReceivePort {dot1qStaticMulticastEntry 2}	NA	[Standard] The port number of a port that receives static multicast or broadcast MAC addresses (0-65535). [Implementation] Same as the standard.	Y
40	dot1qStaticMulticastStaticEgressPorts {dot1qStaticMulticastEntry 3}	R/NW	[Standard] A set of ports that forward static multicast or broadcast MAC addresses. [Implementation] Same as the standard.	Y
41	dot1qStaticMulticastForbiddenEgressPorts {dot1qStaticMulticastEntry 4}	R/NW	[Standard] A set of ports that do not forward static multicast or broadcast MAC addresses. [Implementation] Same as the standard.	Y
42	dot1qStaticMulticastStatus {dot1qStaticMulticastEntry 5}	R/NW	[Standard] The entry status of static multicast or broadcast: • other (1) • invalid (2) • permanent (3) • deleteOnReset (4) • deleteOnTimeout (5) [Implementation] Fixed value of permanent (3).	Y
43	dot1qVlanNumDeletes {dot1qVlan 1}	R/O	[Standard] The number of VLAN entry deletions. [Implementation] Same as the standard.	Y
44	dot1qVlanCurrentTable {dot1qVlan 2}	NA	[Standard] A table of the current configuration information for a VLAN. [Implementation] Not implemented.	N
45	dot1qVlanCurrentEntry {dot1qVlanCurrentTable 1}	NA	[Standard] A list of the current configuration information for a VLAN. INDEX { dot1qVlanTimeMark, dot1qVlanIndex } [Implementation] Not implemented.	N
46	dot1qVlanTimeMark {dot1qVlanCurrentEntry 1}	NA	[Standard] A time filter for entries. [Implementation] Not implemented.	N
47	dot1qVlanIndex {dot1qVlanCurrentEntry 2}	NA	[Standard] A VLAN ID. [Implementation] Not implemented.	N
48	dot1qVlanFdbId {dot1qVlanCurrentEntry 3}	R/O	[Standard] The ID of a MAC address table used by the VLAN. [Implementation] Not implemented.	N
49	dot1qVlanCurrentEgressPorts {dot1qVlanCurrentEntry 4}	R/O	[Standard] A set of VLAN ports that send tagged frame traffic or untagged traffic. [Implementation] Not implemented.	N
50	dot1qVlanCurrentUntaggedPorts {dot1qVlanCurrentEntry 5}	R/O	[Standard] A set of VLAN ports that send untagged frame traffic. [Implementation] Not implemented.	N

#	Object identifier	Access	Implementation specifications	Support?
51	dot1qVlanStatus {dot1qVlanCurrentEntry 6}	R/O	[Standard] The VLAN status: • other (1) • permanent (2) • dynamicGvrp (3) [Implementation] Not implemented.	N
52	dot1qVlanCreationTime {dot1qVlanCurrentEntry 7}	R/O	[Standard] The sysUpTime value for when the VLAN was created. [Implementation] Not implemented.	N
53	dot1qVlanStaticTable {dot1qVlan 3}	NA	[Standard] A table of static configuration information for a VLAN. [Implementation] Same as the standard.	Y
54	dot1qVlanStaticEntry {dot1qVlanStaticTable 1}	NA	[Standard] A list of static configuration information for a VLAN. INDEX { dot1qVlanIndex } [Implementation] Same as the standard.	Y
55	dot1qVlanStaticName {dot1qVlanStaticEntry 1}	R/NW	[Standard] The static identification name of the VLAN. [Implementation] Same as the standard.	Y
56	dot1qVlanStaticEgressPorts {dot1qVlanStaticEntry 2}	R/NW	[Standard] A set of ports in the static egress list for the VLAN. [Implementation] Same as the standard.	Y
57	dot1qVlanForbiddenEgressPorts {dot1qVlanStaticEntry 3}	R/NW	[Standard] A set of ports that are forbidden from being registered in the VLAN egress list. [Implementation] Same as the standard.	Y
58	dot1qVlanStaticUntaggedPorts {dot1qVlanStaticEntry 4}	R/NW	[Standard] A set of untagged ports that send VLAN egress packets. [Implementation] Same as the standard.	Y
59	dot1qVlanStaticRowStatus {dot1qVlanStaticEntry 5}	R/NW	[Standard] The entry status. [Implementation] Same as the standard.	Y
60	dot1qNextFreeLocalVlanIndex {dot1qVlan 4}	R/O	[Standard] The next available VLAN index (0, or 4096-2147483647). [Implementation] 0 or 4096.	Y
61	dot1qPortVlanTable {dot1qVlan 5}	NA	[Standard] A table of VLAN configuration information for a port. [Implementation] Same as the standard.	Y
62	dot1qPortVlanEntry {dot1qPortVlanTable 1}	NA	[Standard] A list of VLAN configuration information for a port. [Implementation] Same as the standard.	Y
63	dot1qPvid {dot1qPortVlanEntry 1}	R/NW	[Standard] PVID VLAN ID assigned to untagged frames or Priority-Tagged frames. [Implementation] Same as the standard.	Y
64	dot1qPortAcceptableFrameTypes {dot1qPortVlanEntry 2}	R/NW	[Standard] Determines the frame type that can be received by the port: • admitAll (1) • admitOnlyVlanTagged (2) [Implementation] admitAll (1).	Y

#	Object identifier	Access	Implementation specifications	Support?
65	dot1qPortIngressFiltering {dot1qPortVlanEntry 3}	R/NW	[Standard] Filters frames to the port. [Implementation] Same as the standard.	Y
66	Dot1qPortGvrpStatus {dot1qPortVlanEntry 4}	R/NW	[Standard] The GVRP status of the port. [Implementation] disabled (2).	Y
67	Dot1qPortGvrpFailedRegistrations {dot1qPortVlanEntry 5}	R/O	[Standard] The total number of port GVRP registrations that failed. [Implementation] Not implemented.	N
68	dot1qPortGvrpLastPduOrigin {dot1qPortVlanEntry 6}	R/O	[Standard] The source MAC address for the last GVRP received by the port. [Implementation] Not implemented.	N
69	dot1qPortVlanStatisticsTable {dot1qVlan 6}	NA	[Standard] A table of VLAN statistics for the port. [Implementation] Same as the standard.	Y
70	dot1qPortVlanStatisticsEntry {dot1qPortVlanStatisticsTable 1}	NA	[Standard] A list of VLAN statistics for the port. INDEX { dot1dBasePort, dot1qVlanIndex } [Implementation] Same as the standard.	Y
71	dot1qTpVlanPortInFrames {dot1qPortVlanStatisticsEntry 1}	R/O	[Standard] The number of valid frames received by the VLAN port. [Implementation] Fixed value of 0.	M
72	dot1qTpVlanPortOutFrames {dot1qPortVlanStatisticsEntry 2}	R/O	[Standard] The number of valid frames sent by the VLAN port. [Implementation] Fixed value of 0.	M
73	dot1qTpVlanPortInDiscards {dot1qPortVlanStatisticsEntry 3}	R/O	[Standard] The number of valid frames that are received but discarded by the VLAN port. [Implementation] Fixed value of 0.	M
74	dot1qTpVlanPortInOverflowFrames {dot1qPortVlanStatisticsEntry 4}	R/O	[Standard] The number of times the dot1qTpVlanPortInFrames counter overflowed. [Implementation] Fixed value of 0.	M
75	dot1qTpVlanPortOutOverflowFrames {dot1qPortVlanStatisticsEntry 5}	R/O	[Standard] The number of times the dot1qTpVlanPortOutFrames counter overflowed. [Implementation] Fixed value of 0.	M
76	dot1qTpVlanPortInOverflowDiscards {dot1qPortVlanStatisticsEntry 6}	R/O	[Standard] The number of times the dot1qTpVlanPortInDiscards counter overflowed. [Implementation] Fixed value of 0.	M
77	dot1qPortVlanHCStatisticsTable {dot1qVlan 7}	NA	[Standard] A table of VLAN high-capacity statistics for the port. [Implementation] Same as the standard.	Y
78	dot1qPortVlanHCStatisticsEntry {dot1qPortVlanHCStatisticsTable 1}	NA	[Standard] A list of VLAN high-capacity statistics for the port. INDEX { dot1dBasePort, dot1qVlanIndex } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
79	dot1qTpVlanPortHCInFrames {dot1qPortVlanHCStatisticsEntry 1}	R/O	[Standard] The number of valid frames received by the VLAN port. [Implementation] Fixed value of `0`.	M
80	dot1qTpVlanPortHCOutFrames {dot1qPortVlanHCStatisticsEntry 2}	R/O	[Standard] The number of valid frames sent by the VLAN port. [Implementation] Fixed value of `0`.	M
81	dot1qTpVlanPortHCInDiscards {dot1qPortVlanHCStatisticsEntry 3}	R/O	[Standard] The number of valid frames that are received but discarded by the VLAN port. [Implementation] Fixed value of `0`.	M
82	dot1qLearningConstraintsTable {dot1qVlan 8}	NA	[Standard] A table of learning constraints. [Implementation] Same as the standard.	Y
83	dot1qLearningConstraintsEntry {dot1qLearningConstraintsTable 1}	NA	[Standard] A list of learning constraints. INDEX { dot1qConstraintVlan, dot1qConstraintSet } [Implementation] Same as the standard.	Y
84	dot1qConstraintVlan {dot1qLearningConstraintsEntry 1}	NA	[Standard] A VLAN constrained by the entry. [Implementation] Same as the standard.	Y
85	dot1qConstraintSet {dot1qLearningConstraintsEntry 2}	NA	[Standard] The constraint set identifier (`0-65535`). [Implementation] Same as the standard.	Y
86	dot1qConstraintType {dot1qLearningConstraintsEntry 3}	R/NW	[Standard] The constraint type: • independent (`1`) • shared (`2`) [Implementation] Fixed value of independent (`1`).	Y
87	dot1qConstraintStatus {dot1qLearningConstraintsEntry 4}	R/NW	[Standard] The constraint status. [Implementation] Same as the standard.	Y
88	dot1qConstraintSetDefault {dot1qVlan 9}	R/NW	[Standard] The default value (`0-65535`) of the constraint set. [Implementation] `0`.	Y
89	dot1qConstraintTypeDefault {dot1qVlan 10}	R/NW	[Standard] The constraint set type: • independent (`1`) • shared (`2`) [Implementation] Fixed value of independent (`1`).	Y

#: If this information is collected immediately after executing the `clear mac address table` command, the information of `mac-address-table` might not be shown as cleared.

2.14 ifMIB group (Interfaces Group MIB)

Relevant standards for the ifMIB group are described in the following document:

- RFC 2233 (November 1997)

2.14.1 ifMIB (When using Ethernet)

The following interface types are defined in the ifMIB group:

- 10BASE-T/100BASE-TX/1000BASE-T
- 100BASE-FX
- 1000BASE-X
- 10GBASE-R

(1) ID

```
ifMIB OBJECT IDENTIFIER ::= {mib-2 31}

ifMIBObjects OBJECT IDENTIFIER ::= {ifMIB 1}
Object ID value  1.3.6.1.2.1.31.1
```

(2) Implementation specifications

The following table lists the implementation specifications of the ifMIB group when using Ethernet.

Table 2-43: ifMIB group implementation specifications (When Ethernet is Used)

#	Object identifier	Access	Implementation specifications	Support?
1	ifXTable {ifMIBObjects 1}	NA	[Standard] A table of objects that are added to an interface entity. [Implementation] Same as the standard.	Y
2	ifXEntry {ifXTable 1}	NA	[Standard] A list of interface information that is added. AUGMENTS {ifEntry} [Implementation] Same as the standard.	Y
3	ifName {ifXEntry 1}	R/O	[Standard] The name of the interface. [Implementation] The interface name that is specified during configuration.	Y
4	ifInMulticastPkts {ifXEntry 2}	R/O	[Standard] The number of multicast packets sent to the upper layer protocol. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
5	ifInBroadcastPkts {ifXEntry 3}	R/O	[Standard] The number of broadcast packets sent to the upper layer protocol. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y

#	Object identifier	Access	Implementation specifications	Support?
6	ifOutMulticastPkts {ifXEntry 4}	R/O	[Standard] The number of multicast packets sent by the upper layer. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
7	ifOutBroadcastPkts {ifXEntry 5}	R/O	[Standard] The number of broadcast packets sent by the upper layer. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
8	ifHCInOctets {ifXEntry 6}	R/O	[Standard] The number of octets received by this interface. A 64-bit version of ifInOctets. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The total number of octets received whose frame length is from the DA field of the MAC header to the FCS field • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: The number of received octets whose frame length is from the DA field of the MAC header to the FCS field	Y
9	ifHCInUcastPkts {ifXEntry 7}	R/O	[Standard] The number of unicast packets sent to the higher-level protocol. A 64-bit version of ifInUcastPkts. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
10	ifHCInMulticastPkts {ifXEntry 8}	R/O	[Standard] The number of multicast packets sent to the upper layer protocol. A 64-bit version of ifInMulticastPkts. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
11	ifHCInBroadcastPkts {ifXEntry 9}	R/O	[Standard] The number of broadcast packets sent to the upper layer protocol. A 64-bit version of ifInBroadcastPkts. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Same as the standard	Y
12	ifHCOutOctets {ifXEntry 10}	R/O	[Standard] The number of octets sent by this interface. A 64-bit version of ifOutOctets. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: The total number of octets sent whose frame length is from the DA field of the MAC header to the FCS field • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: The number of octets sent whose frame length is from the DA field of the MAC header to the FCS field	Y

#	Object identifier	Access	Implementation specifications	Support?
13	ifHCOutUcastPkts {ifXEntry 11}	R/O	[Standard] The number of unicast packets sent by the higher-level layer. A 64-bit version of ifOutUcastPkts. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard **[AX3640S]** • When the ifIndex indicates a port: Fixed value of `0` **[AX3630S]** • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: Fixed value of `0`	Y **[AX3640S]** M **[AX3630S]**
14	ifHCOutMulticastPkts {ifXEntry 12}	R/O	[Standard] The number of multicast packets sent by the upper layer. A 64-bit version of ifOutMulticastPkts. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: Same as the standard	Y
15	ifHCOutBroadcastPkts {ifXEntry 13}	R/O	[Standard] The number of broadcast packets sent by the upper layer. A 64-bit version of ifOutBroadcastPkts. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: Same as the standard	Y
16	ifLinkUpDownTrapEnable {ifXEntry 14}	R/O	[Standard] Indicates whether this interface sends LinkUp and LinkDown traps or informs: • enable (`1`) • disable (`2`) [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Same as the standard • When the ifIndex indicates a VLAN: Same as the standard • When the ifIndex indicates a link aggregation: Same as the standard	Y
17	ifHighSpeed {ifXEntry 15}	R/O	[Standard] The current line speed (in Mbit/s) of this interface. Fractions are rounded off to the nearest megabit per second. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: If no bandwidth is set by using a configuration command, the line speed of the interface is shown. If a bandwidth has been set, the set bandwidth is shown. • When the ifIndex indicates a VLAN: Fixed value of `0` • When the ifIndex indicates a link aggregation: The sum of the ifHighSpeed values for the ports that belong to the channel group	Y
18	ifPromiscuousMode {ifXEntry 16}	R/O	[Standard] Receive mode: • true (`1`) • false (`2`) [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: If a brouter (bridge router) has been set, this is set to true (`1`).Otherwise, it is set to false (`2`). • When the ifIndex indicates a VLAN: false (`2`) • When the ifIndex indicates a link aggregation: false (`2`)	Y

#	Object identifier	Access	Implementation specifications	Support?
19	ifConnectorPresent {ifXEntry 17}	R/O	[Standard] The connection status of the physical line: • true (1) • false (2) [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: true (1) • When the ifIndex indicates a VLAN: false (2) • When the ifIndex indicates a link aggregation: false (2)	Y
20	ifAlias {ifXEntry 18}	R/O	[Standard] An alias name defined by Network Manager. [Implementation] Additional information that is set for each interface during configuration.	Y
21	ifCounterDiscontinuityTime {ifXEntry 19}	R/O	[Standard] The sysUpTime when the counter was discontinued. [Implementation] Depends on the interface as follows: • When the ifIndex indicates a port: Fixed value of 0 • When the ifIndex indicates a VLAN: Fixed value of 0 • When the ifIndex indicates a link aggregation: Fixed value of 0	M

2.15 ipv6MIB group (IPv6 MIB)

Relevant standards for the ipv6MIB group are described in the following document:

- RFC 2465 (December 1998)

2.15.1 ipv6MIB

(1) ID

```
ipv6MIB OBJECT IDENTIFIER ::= {mib-2 55}

ipv6MIBObjects OBJECT IDENTIFIER ::= {ipv6MIB 1}
Object ID value  1.3.6.1.2.1.55.1

ipv6Forwarding OBJECT IDENTIFIER ::= {ipv6MIBObjects 1}
Object ID value  1.3.6.1.2.1.55.1.1
```

(2) Implementation specifications

The following table lists the implementation specifications for the ipv6MIB group.

Table 2-44: ipv6MIB implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6Forwarding {ipv6MIBObjects 1}	R/NW	[Standard] Availability of IPv6 forwarding: • forwarding (1) • notForwarding (2) [Implementation] Same as the standard. Read_Only.	Y
2	ipv6DefaultHopLimit {ipv6MIBObjects 2}	R/NW	[Standard] The default value that was set in the Hop Limit field of the IPv6 header. DEFVAL {64} [Implementation] Fixed value of 64. Read_Only.	Y
3	ipv6Interfaces {ipv6MIBObjects 3}	R/O	[Standard] The total number of IPv6 interfaces. [Implementation] Same as the standard.	Y
4	ipv6IfTableLastChange {ipv6MIBObjects 4}	R/O	[Standard] The sysUpTime value for when the ipv6IfTable was last updated. [Implementation] Same as the standard.	Y

2.15.2 ipv6IfTable

(1) ID

```
ipv6MIB OBJECT IDENTIFIER ::= {mib-2 55}

ipv6MIBObjects OBJECT IDENTIFIER ::= {ipv6MIB 1}
Object ID value  1.3.6.1.2.1.55.1

ipv6IfTable OBJECT IDENTIFIER ::= {ipv6MIBObjects 5}
Object ID value  1.3.6.1.2.1.55.1.5
```

(2) Implementation specifications

The following table lists the implementation specifications for ipv6IfTable.

Table 2-45: ipv6IfTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6IfTable {ipv6MIBObjects 5}	NA	[Standard] A table of network layer interfaces (V6). [Implementation] Same as the standard.	Y
2	ipv6IfEntry {ipv6IfTable 1}	NA	[Standard] Network layer interface (V6) entries. INDEX { ipv6IfIndex } [Implementation] Same as the standard.	Y
3	ipv6IfIndex {ipv6IfEntry 1}	NA	[Standard] The index number of an IPv6 interface. [Implementation] Same as the standard.	Y
4	ipv6IfDescr {ipv6IfEntry 2}	R/NW	[Standard] IPv6 interface information (text). [Implementation] Same as the standard. `Read_Only`.	Y
5	ipv6IfLowerLayer {ipv6IfEntry 3}	R/O	[Standard] An object ID that indicates the layer directly below the network interface layer. [Implementation] Same as the standard.	Y
6	ipv6IfEffectiveMtu {ipv6IfEntry 4}	R/O	[Standard] The MTU length (or octet length) that can be sent and received by the interface. [Implementation] Same as the standard.	Y
7	ipv6IfReasmMaxSize {ipv6IfEntry 5}	R/O	[Standard] The maximum length of IPv6 datagrams received by the interface that can be reassembled. [Implementation] Fixed value of `65535`.	Y
8	ipv6IfIdentifier {ipv6IfEntry 6}	R/NW	[Standard] The address token of the interface. This can be obtained when the interface changes to UP. [Implementation] Same as the standard. `Read_Only`.	Y
9	ipv6IfIdentifierLength {ipv6IfEntry 7}	R/NW	[Standard] The bit length of the address token of the interface. [Implementation] Fixed value of `64`. `Read_Only`.	Y
10	ipv6IfPhysicalAddress {ipv6IfEntry 8}	R/O	[Standard] The physical address of the interface. [Implementation] Same as the standard.	Y
11	ipv6IfAdminStatus {ipv6IfEntry 9}	R/NW	[Standard] The active status of the interface: • up (`1`) • down (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
12	ipv6IfOperStatus {ipv6IfEntry 10}	R/O	[Standard] The operating status of the interface: • up (`1`) • down (`2`) • noIfIdentifier (`3`) • unknown (`4`) • notPresent (`5`) [Implementation] Returns a response of up (`1`), down (`2`), or testing (`3`).	Y
13	ipv6IfLastChange {ipv6IfEntry 11}	R/O	[Standard] The sysUpTime value for when the operating status of the interface last changed. [Implementation] Same as the standard.	Y

2.15.3 ipv6IfStatsTable

(1) ID

```
ipv6MIB OBJECT IDENTIFIER ::= {mib-2 55}

ipv6MIBObjects OBJECT IDENTIFIER ::= {ipv6MIB 1}
Object ID value  1.3.6.1.2.1.55.1
```

```
ipv6IfStatsTable OBJECT IDENTIFIER ::= {ipv6MIBObjects 6}
Object ID value  1.3.6.1.2.1.55.1.6
```

(2) Implementation specifications

The following table lists the implementation specifications for ipv6IfStatsTable.

Table 2-46: ipv6IfStatsTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6IfStatsTable {ipv6MIBObjects 6}	NA	[Standard] The statistics table of IPv6 interface traffic. [Implementation] Same as the standard.	Y
2	ipv6IfStatsEntry {ipv6IfStatsTable 1}	NA	[Standard] The statistics entry of IPv6 interface traffic. INDEX { ipv6IfIndex } [Implementation] Same as the standard.	Y
3	ipv6IfStatsInReceives {ipv6IfStatsEntry 1}	R/O	[Standard] The total number of datagrams received. [Implementation] Same as the standard. Fixed value of 0.	M
4	ipv6IfStatsInHdrErrors {ipv6IfStatsEntry 2}	R/O	[Standard] The number of datagrams that are received but discarded due to a V6 header error. [Implementation] Same as the standard. Fixed value of 0.	M
5	ipv6IfStatsInTooBigErrors {ipv6IfStatsEntry 3}	R/O	[Standard] The number of datagrams that are received but fail to be forwarded due to a MTU length error. [Implementation] Same as the standard.	Y
6	ipv6IfStatsInNoRoutes {ipv6IfStatsEntry 4}	R/O	[Standard] The number of datagrams that are received but discarded because no appropriate route exists. [Implementation] Same as the standard.	Y
7	ipv6IfStatsInAddrErrors {ipv6IfStatsEntry 5}	R/O	[Standard] The number of datagrams that are received but discarded due to an invalid V6 address. [Implementation] Same as the standard.	Y
8	ipv6IfStatsInUnknownProtos {ipv6IfStatsEntry 6}	R/O	[Standard] The number of datagrams that are received but discarded due to an unsupported protocol. [Implementation] Same as the standard.	Y
9	ipv6IfStatsInTruncatedPkts {ipv6IfStatsEntry 7}	R/O	[Standard] The number of datagrams that are received but discarded due to incomplete data. [Implementation] Same as the standard.	Y
10	ipv6IfStatsInDiscards {ipv6IfStatsEntry 8}	R/O	[Standard] The number of datagrams that are received but discarded (due to insufficient resources), even though the data had no problems. [Implementation] Same as the standard. Fixed value of 0.	M
11	ipv6IfStatsInDelivers {ipv6IfStatsEntry 9}	R/O	[Standard] The number of datagrams (including ICMP datagrams) sent to the IPv6 upper layer. [Implementation] Same as the standard.	Y
12	ipv6IfStatsOutForwDatagrams {ipv6IfStatsEntry 10}	R/O	[Standard] The number of datagrams forwarded and sent. [Implementation] Same as the standard. Fixed value of 0.	M
13	ipv6IfStatsOutRequests {ipv6IfStatsEntry 11}	R/O	[Standard] The number of datagrams (including ICMP datagrams) intended to be sent out from the V6 protocol. [Implementation] Same as the standard.	Y
14	ipv6IfStatsOutDiscards {ipv6IfStatsEntry 12}	R/O	[Standard] The number of datagrams sent that are discarded (due to insufficient resources), even though the data had no problems. [Implementation] Same as the standard. Fixed value of 0.	M

#	Object identifier	Access	Implementation specifications	Support?
15	ipv6IfStatsOutFragOKs {ipv6IfStatsEntry 13}	R/O	[Standard] The number of datagrams that successfully fragmented on the output interface. [Implementation] Same as the standard.	Y
16	ipv6IfStatsOutFragFails {ipv6IfStatsEntry 14}	R/O	[Standard] The number of datagrams sent that failed to fragment. [Implementation] Same as the standard.	Y
17	ipv6IfStatsOutFragCreates {ipv6IfStatsEntry 15}	R/O	[Standard] The number of datagram fragments sent that are generated by fragmentation. [Implementation] Same as the standard.	Y
18	ipv6IfStatsReasmReqds {ipv6IfStatsEntry 16}	R/O	[Standard] The number of datagram fragments that need to be reassembled on the interface. [Implementation] Same as the standard.	Y
19	ipv6IfStatsReasmOKs {ipv6IfStatsEntry 17}	R/O	[Standard] The number of datagrams that were successfully reassembled. [Implementation] Same as the standard.	Y
20	ipv6IfStatsReasmFails {ipv6IfStatsEntry 18}	R/O	[Standard] The number of reassembly attempts that failed. [Implementation] Same as the standard.	Y
21	ipv6IfStatsInMcastPkts {ipv6IfStatsEntry 19}	R/O	[Standard] The number of multicast packets received. [Implementation] Same as the standard. Fixed value of 0.	M
22	ipv6IfStatsOutMcastPkts {ipv6IfStatsEntry 20}	R/O	[Standard] The number of multicast packets sent. [Implementation] Same as the standard. Fixed value of 0.	M

2.15.4 ipv6AddrPrefixTable

(1) ID

```
ipv6MIB OBJECT IDENTIFIER ::= {mib-2 55}

ipv6MIBObjects OBJECT IDENTIFIER ::= {ipv6MIB 1}
Object ID value  1.3.6.1.2.1.55.1

ipv6AddrPrefixTable OBJECT IDENTIFIER ::= {ipv6MIBObjects 7}
Object ID value  1.3.6.1.2.1.55.1.7
```

(2) Implementation specifications

The table below lists the implementation specifications for ipv6AddrPrefixTable.

This MIB covers the prefix information distributed by the RA (router advertisement).

Table 2-47: ipv6AddrPrefixTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6AddrPrefixTable {ipv6MIBObjects 7}	NA	[Standard] A table of IPv6 interface address prefixes. [Implementation] Same as the standard.	Y
2	ipv6AddrPrefixEntry {ipv6AddrPrefixTable 1}	NA	[Standard] Address prefix entries. INDEX { ipv6IfIndex, ipv6AddrPrefix, ipv6AddrPrefixLength } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
3	ipv6AddrPrefix {ipv6AddrPrefixEntry 1}	NA	[Standard] The prefix for this interface. [Implementation] Same as the standard.	Y
4	ipv6AddrPrefixLength {ipv6AddrPrefixEntry 2}	NA	[Standard] The prefix length (in bits). [Implementation] Same as the standard.	Y
5	ipv6AddrPrefixOnLinkFlag {ipv6AddrPrefixEntry 3}	R/O	[Standard] The Autonomous address flag. • true (1) • false (2) [Implementation] Same as the standard.	Y
6	ipv6AddrPrefixAutonomousFlag {ipv6AddrPrefixEntry 4}	R/O	[Standard] The Autonomous address flag. • true (1) • false (2) [Implementation] Same as the standard.	Y
7	ipv6AddrPrefixAdvPreferredLifetime {ipv6AddrPrefixEntry 5}	R/O	[Standard] The preferred lifetime (in seconds). [Implementation] Same as the standard.	Y
8	ipv6AddrPrefixAdvValidLifetime {ipv6AddrPrefixEntry 6}	R/O	[Standard] The valid lifetime (in seconds). [Implementation] Same as the standard.	Y

2.15.5 ipv6AddrTable

(1) ID

```
ipv6MIB OBJECT IDENTIFIER ::= {mib-2 55}

ipv6MIBObjects OBJECT IDENTIFIER ::= {ipv6MIB 1}
Object ID value  1.3.6.1.2.1.55.1

ipv6AddrTable OBJECT IDENTIFIER ::= {ipv6MIBObjects 8}
Object ID value  1.3.6.1.2.1.55.1.8
```

(2) Implementation specifications

The following table lists the implementation specifications for ipv6AddrTable.

Table 2-48: ipv6AddrTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6AddrTable {ipv6MIBObjects 8}	NA	[Standard] A table of interface addresses. [Implementation] Same as the standard.	Y
2	ipv6AddrEntry {ipv6AddrTable 1}	NA	[Standard] A table of interface address entries INDEX { ipv6IfIndex, ipv6AddrAddress } [Implementation] Same as the standard.	Y
3	ipv6AddrAddress {ipv6AddrEntry 1}	NA	[Standard] An IPv6 address. [Implementation] Same as the standard.	Y
4	ipv6AddrPfxLength {ipv6AddrEntry 2}	R/O	[Standard] The prefix length. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
5	ipv6AddrType {ipv6AddrEntry 3}	R/O	[Standard] The address type: • stateless (1) • stateful (2) • unknown (3) [Implementation] Same as the standard.	Y
6	ipv6AddrAnycastFlag {ipv6AddrEntry 4}	R/O	[Standard] A flag that indicates whether the address is an Anycast address: • true (1) • false (2) [Implementation] Same as the standard.	Y
7	ipv6AddrStatus {ipv6AddrEntry 5}	R/O	[Standard] The address status: • preferred (1) • deprecated (2) • invalid (3) • inaccessible (4) • unknown (5) [Implementation] Same as the standard.	Y
8	ipv6RouteNumber {ipv6MIBObjects 9}	R/O	[Standard] The total number of V6 routing entries that are valid. [Implementation] Same as the standard.	Y
9	ipv6DiscardedRoutes {ipv6MIBObjects 10}	R/O	[Standard] The total number of V6 routing entries that are valid but discarded. [Implementation] Same as the standard.	Y

2.15.6 ipv6RouteTable

(1) ID

```
ipv6MIB OBJECT IDENTIFIER ::= {mib-2 55}

ipv6MIBObjects OBJECT IDENTIFIER ::= {ipv6MIB 1}
Object ID value  1.3.6.1.2.1.55.1

ipv6RouteTable OBJECT IDENTIFIER ::= {ipv6MIBObjects 11}
Object ID value  1.3.6.1.2.1.55.1.11
```

(2) Implementation specifications

The following table lists the implementation specifications for ipv6RouteTable.

Table 2-49: ipv6RouteTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6RouteTable {ipv6MIBObjects 11}	NA	[Standard] An IPv6 routing table. [Implementation] Same as the standard.	Y
2	ipv6RouteEntry {ipv6RouteTable 1}	NA	[Standard] IPv6 routing entries. INDEX { ipv6RouteDest, ipv6RoutePfxLength, ipv6RouteIndex } [Implementation] Same as the standard.	Y
3	ipv6RouteDest {ipv6RouteEntry 1}	NA	[Standard] A V6Dest address. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	ipv6RoutePfxLength {ipv6RouteEntry 2}	NA	[Standard] The prefix length (bit length). [Implementation] Same as the standard.	Y
5	ipv6RouteIndex {ipv6RouteEntry 3}	NA	[Standard] The route index. [Implementation] Fixed value of `1`.	Y
6	ipv6RouteIfIndex {ipv6RouteEntry 4}	R/O	[Standard] The IPv6 interface index. [Implementation] Same as the standard.	Y
7	ipv6RouteNextHop {ipv6RouteEntry 5}	R/O	[Standard] Next hop. A value of `::0` indicates that no next hop exists. [Implementation] Same as the standard.	Y
8	ipv6RouteType {ipv6RouteEntry 6}	R/O	[Standard] The route type: • other (`1`) • discard (`2`) • local (`3`) • remote (`4`) [Implementation] Same as the standard.	Y
9	ipv6RouteProtocol {ipv6RouteEntry 7}	R/O	[Standard] A routing mechanism that learned this route: • other (`1`) • local (`2`) • netmgmt (`3`) • ndisc (`4`) • rip (`5`) • ospf (`6`) • bgp (`7`) • idrp (`8`) • igrp (`9`) [Implementation] • A route other than the following: other (`1`) • Direct route: local (`2`) • Static route: netmgmt (`3`) • RIPng route: rip (`5`) • OSPFv3 route: ospf (`6`) • BGP4+ route: bgp (`7`)	Y
10	ipv6RoutePolicy {ipv6RouteEntry 8}	R/O	[Standard] The route policy. [Implementation] Fixed value of `0`.	M
11	ipv6RouteAge {ipv6RouteEntry 9}	R/O	[Standard] The time that has elapsed since this route was last updated (unit: seconds). [Implementation] Same as the standard.	Y
12	ipv6RouteNextHopRDI {ipv6RouteEntry 10}	R/O	[Standard] The RDI of the next hop. [Implementation] Fixed value of `0`.	M
13	ipv6RouteMetric {ipv6RouteEntry 11}	R/O	[Standard] A routing metric. [Implementation] Same as the standard.	Y
14	ipv6RouteWeight {ipv6RouteEntry 12}	R/O	[Standard] The priority of the route (lower value means higher priority). [Implementation] Fixed value of `0`.	M
15	ipv6RouteInfo {ipv6RouteEntry 13}	R/O	[Standard] The reference to a routing protocol MIB that learned this route. [Implementation] Fixed value of {0.0}	Y

#	Object identifier	Access	Implementation specifications	Support?
16	ipv6RouteValid {ipv6RouteEntry 14}	R/NW	[Standard] Indicates whether this route is valid. DEFVAL {true} [Implementation] Fixed value of `true`. `Read_Only`.	Y

2.15.7 ipv6NetToMediaTable

(1) ID

```
ipv6MIB OBJECT IDENTIFIER ::= {mib-2 55}

ipv6MIBObjects OBJECT IDENTIFIER ::= {ipv6MIB 1}
Object ID value  1.3.6.1.2.1.55.1

ipv6NetToMediaTable OBJECT IDENTIFIER ::= {ipv6MIBObjects 12}
Object ID value  1.3.6.1.2.1.55.1.12
```

(2) Implementation specifications

The following table lists the implementation specifications for ipv6NetToMediaTable.

Table 2-50: ipv6NetToMediaTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ipv6NetToMediaTable {ipv6MIBObjects 12}	NA	[Standard] An IPv6 address translation table. [Implementation] Same as the standard.	Y
2	ipv6NetToMediaEntry {ipv6NetToMediaTable 1}	NA	[Standard] IPv6 address entries. Each entry corresponds to a physical address. INDEX { ipv6IfIndex, ipv6NetToMediaNetAddress } [Implementation] Same as the standard.	Y
3	ipv6NetToMediaNetAddress {ipv6NetToMediaEntry 1}	NA	[Standard] An IPv6 address that corresponds to a medium-dependent physical address. [Implementation] Same as the standard.	Y
4	ipv6NetToMediaPhysAddress {ipv6NetToMediaEntry 2}	R/O	[Standard] The medium-dependent physical address. [Implementation] Same as the standard.	Y
5	ipv6NetToMediaType {ipv6NetToMediaEntry 3}	R/O	[Standard] The mapping type: • other (`1`) • dynamic (`2`) • static (`3`) • local (`4`) [Implementation] Same as the standard.	Y
6	ipv6IfNetToMediaState {ipv6NetToMediaEntry 4}	R/O	[Standard] The reachability state of the NDP table entry: • reachable (`1`) • stale (`2`) • delay (`3`) • probe (`4`) • invalid (`5`) • unknown (`6`) [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
7	ipv6IfNetToMediaLastUpdated {ipv6NetToMediaEntry 5}	R/O	[Standard] The sysUpTime for when the NDP table entry was last updated. [Implementation] Fixed value of `0`.	Y
8	ipv6NetToMediaValid {ipv6NetToMediaEntry 6}	R/NW	[Standard] A flag that indicates whether the entry is valid. DEFVAL {true} [Implementation] Fixed value of `true`. `Read_Only`.	Y

2.16 ipv6IcmpMIB group (ICMPv6 MIB)

Relevant standards for the ipv6IcmpMIB group are described in the following document:

- RFC 2466 (December 1998)

(1) ID

```
ipv6IcmpMIB MODULE-IDENTITY ::= {mib-2 56}

ipv6IcmpMIBObjects OBJECT IDENTIFIER ::= {ipv6IcmpMIB 1}
Object ID value  1.3.6.1.2.1.56.1
```

(2) Implementation specifications

The following table lists the implementation specifications for ipv6IcmpMIB.

Table 2-51: ipv6IcmpMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	ipv6IfIcmpTable {ipv6IcmpMIBObjects 1}	NA	[Standard] IPv6 ICMP statistics. [Implementation] Same as the standard.	Y
2	ipv6IfIcmpEntry {ipv6IfIcmpTable 1}	NA	[Standard] ICMPv6 statistics entries. INDEX { ipv6IfEntry } [Implementation] Same as the standard.	Y
3	ipv6IfIcmpInMsgs {ipv6IfIcmpEntry 1}	R/O	[Standard] The total number of ICMP messages (including errors) received by this interface. [Implementation] Same as the standard.	Y
4	ipv6IfIcmpInErrors {ipv6IfIcmpEntry 2}	R/O	[Standard] The total number of received ICMP messages in which errors are detected. [Implementation] Same as the standard.	Y
5	ipv6IfIcmpInDestUnreachs {ipv6IfIcmpEntry 3}	R/O	[Standard] The number of DestUnreachs type messages received. [Implementation] Same as the standard.	Y
6	ipv6IfIcmpInAdminProhibs {ipv6IfIcmpEntry 4}	R/O	[Standard] The total number of DestUnreachs type AdminProhibit messages that are received. [Implementation] Same as the standard.	Y
7	ipv6IfIcmpInTimeExcds {ipv6IfIcmpEntry 5}	R/O	[Standard] The number of TimeExceed messages received. [Implementation] Same as the standard.	Y
8	ipv6IfIcmpInParmProblems {ipv6IfIcmpEntry 6}	R/O	[Standard] The number of ParmProblem messages received. [Implementation] Same as the standard.	Y
9	ipv6IfIcmpInPktTooBigs {ipv6IfIcmpEntry 7}	R/O	[Standard] The number of PktTooBig messages received. [Implementation] Same as the standard.	Y
10	ipv6IfIcmpInEchos {ipv6IfIcmpEntry 8}	R/O	[Standard] The number of Echo messages received. [Implementation] Same as the standard.	Y
11	ipv6IfIcmpInEchoReplies {ipv6IfIcmpEntry 9}	R/O	[Standard] The number of EchoReply messages received. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
12	ipv6IfIcmpInRouterSolicits {ipv6IfIcmpEntry 10}	R/O	[Standard] The number of RouterSolicit messages received. [Implementation] Same as the standard.	Y
13	ipv6IfIcmpInRouterAdvertisements {ipv6IfIcmpEntry 11}	R/O	[Standard] The number of RouterAdvertisement messages received. [Implementation] Same as the standard.	Y
14	ipv6IfIcmpInNeighborSolicits {ipv6IfIcmpEntry 12}	R/O	[Standard] The number of NeighborSolicit messages received. [Implementation] Same as the standard.	Y
15	ipv6IfIcmpInNeighborAdvertisements {ipv6IfIcmpEntry 13}	R/O	[Standard] The number of Neighbor Advertisement messages received. [Implementation] Same as the standard.	Y
16	ipv6IfIcmpInRedirects {ipv6IfIcmpEntry 14}	R/O	[Standard] The number of Redirect messages received. [Implementation] Same as the standard.	Y
17	ipv6IfIcmpInGroupMembQueries {ipv6IfIcmpEntry 15}	R/O	[Standard] The number of GroupMemberQuery messages received. [Implementation] Same as the standard.	Y
18	ipv6IfIcmpInGroupMembResponses {ipv6IfIcmpEntry 16}	R/O	[Standard] The number of GroupMemberResponse messages received. [Implementation] Same as the standard.	Y
19	ipv6IfIcmpInGroupMembReductions {ipv6IfIcmpEntry 17}	R/O	[Standard] The number of GroupMemberReduction messages received. [Implementation] Same as the standard.	Y
20	ipv6IfIcmpOutMsgs {ipv6IfIcmpEntry 18}	R/O	[Standard] The total number of ICMP messages (including errors) sent by this interface. [Implementation] Same as the standard.	Y
21	ipv6IfIcmpOutErrors {ipv6IfIcmpEntry 19}	R/O	[Standard] The total number of sent ICMP messages in which errors are detected. [Implementation] Same as the standard. If IPv4 over IPv6 tunneling is specified for an interface that has a MTU length of 1280 or less, the number of packets in which errors are detected is shown.	Y
22	ipv6IfIcmpOutDestUnreachs {ipv6IfIcmpEntry 20}	R/O	[Standard] The number of DestUnreachs messages sent. [Implementation] Same as the standard.	Y
23	ipv6IfIcmpOutAdminProhibs {ipv6IfIcmpEntry 21}	R/O	[Standard] The total number of DestUnreachs type AdminProhibit messages sent. [Implementation] Same as the standard.	Y
24	ipv6IfIcmpOutTimeExcds {ipv6IfIcmpEntry 22}	R/O	[Standard] The number of TimeExceed messages sent. [Implementation] Same as the standard.	Y
25	ipv6IfIcmpOutParmProblems {ipv6IfIcmpEntry 23}	R/O	[Standard] The number of ParmProblem messages sent. [Implementation] Same as the standard.	Y
26	ipv6IfIcmpOutPktTooBigs {ipv6IfIcmpEntry 24}	R/O	[Standard] The number of PktTooBig messages sent. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
27	ipv6IfIcmpOutEchos {ipv6IfIcmpEntry 25}	R/O	[Standard] The number of Echo messages sent. [Implementation] Same as the standard.	Y
28	ipv6IfIcmpOutEchoReplies {ipv6IfIcmpEntry 26}	R/O	[Standard] The number of EchoReply messages sent. [Implementation] Same as the standard.	Y
29	ipv6IfIcmpOutRouterSolicits {ipv6IfIcmpEntry 27}	R/O	[Standard] The number of RouterSolicit messages sent. [Implementation] Same as the standard.	Y
30	ipv6IfIcmpOutRouterAdvertisements {ipv6IfIcmpEntry 28}	R/O	[Standard] The number of RouterAdvertisement messages sent. [Implementation] Same as the standard.	Y
31	ipv6IfIcmpOutNeighborSolicits {ipv6IfIcmpEntry 29}	R/O	[Standard] The number of NeighborSolicit messages sent. [Implementation] Same as the standard.	Y
32	ipv6IfIcmpOutNeighborAdvertisements {ipv6IfIcmpEntry 30}	R/O	[Standard] The number of Neighbor Advertisement messages sent. [Implementation] Same as the standard.	Y
33	ipv6IfIcmpOutRedirects {ipv6IfIcmpEntry 31}	R/O	[Standard] The number of Redirect messages sent. [Implementation] Same as the standard.	Y
34	ipv6IfIcmpOutGroupMembQueries {ipv6IfIcmpEntry 32}	R/O	[Standard] The number of GroupMemberQuery messages sent. [Implementation] Same as the standard.	Y
35	ipv6IfIcmpOutGroupMembResponses {ipv6IfIcmpEntry 33}	R/O	[Standard] The number of GroupMemberResponse messages sent. [Implementation] Same as the standard.	Y
36	ipv6IfIcmpOutGroupMembReductions {ipv6IfIcmpEntry 34}	R/O	[Standard] The number of GroupMemberReduction messages sent. [Implementation] Same as the standard.	Y

2.17 vrrpMIB group

Relevant standards for the vrrpMIB group are described in the following documents:

- RFC 2787 (March 2000)
- draft-ietf-vrrp-unified-mib-04 (September 2005)

2.17.1 vrrpOperations group

(1) ID

```
vrrpMIB OBJECT IDENTIFIER ::= {mib-2 68}

vrrpOperations OBJECT IDENTIFIER ::= {vrrpMIB 1}
Object ID value  1.3.6.1.2.1.68.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the vrrpOperations group.

Table 2-52: vrrpOperations group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	vrrpNodeVersion {vrrpOperations 1}	R/O	[Standard] The VRRP version supported by the Switch. [Implementation] Same as the standard.	Y
2	vrrpNotificationCntl {vrrpOperations 2}	R/NW	[Standard] Indicates whether a SNMP extension trap for VRRP is enabled or disabled. • enabled (1) • disabled (2) [Implementation] Same as the standard. Read_Only.	Y
3	vrrpOperTable {vrrpOperations 3}	NA	[Standard] An operation table for a VRRP router. [Implementation] Same as the standard.#	Y
4	vrrpOperEntry {vrrpOperTable 1}	NA	[Standard] vrrpOper table entry. INDEX { ifIndex, vrrpOperVrId } [Implementation] Same as the standard.	Y
5	vrrpOperVrId {vrrpOperEntry 1}	NA	[Standard] The router ID of a virtual router. [Implementation] Same as the standard.	Y
6	vrrpOperVirtualMacAddr {vrrpOperEntry 2}	R/O	[Standard] The virtual MAC address of a virtual router. [Implementation] Same as the standard.	Y
7	vrrpOperState {vrrpOperEntry 3}	R/O	[Standard] The current VRRP running state: • initialize (1) • backup (2) • master (3) [Implementation] Same as the standard.	Y
8	vrrpOperAdminState {vrrpOperEntry 4}	R/NW	[Standard] Whether VRRP functionality is enabled or disabled. • up (1) • down (2) [Implementation] Same as the standard. Read_Only.	Y
9	vrrpOperPriority {vrrpOperEntry 5}	R/NW	[Standard] The priority of a virtual router. [Implementation] Same as the standard. Read_Only.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	vrrpOperIpAddrCount {vrrpOperEntry 6}	R/O	[Standard] The number of virtual router IP addresses. [Implementation] Fixed value of `1`.	Y
11	vrrpOperMasterIpAddr {vrrpOperEntry 7}	R/O	[Standard] The real IP address of the master router. [Implementation] Same as the standard.	Y
12	vrrpOperPrimaryIpAddr {vrrpOperEntry 8}	R/NW	[Standard] The real IP address used by a virtual router. [Implementation] Same as the standard. `Read_Only`.	Y
13	vrrpOperAuthType {vrrpOperEntry 9}	R/NW	[Standard] The VRRP protocol authentication type that is exchanged between virtual routers. • noAuthentication (`1`): VRRP protocol exchanges are not authenticated. • simpleTextPassword (`2`): Exchanges are authenticated by a clear text password. • ipAuthenticationHeader (`3`): Exchanges are authenticated using the IP authentication header. [Implementation] No authentication, or text only. `Read_Only`.	Y
14	vrrpOperAuthKey {vrrpOperEntry 10}	R/NW	[Standard] An authentication key based on the vrrpOperAuthType value. [Implementation] Does not return an authentication key.	Y
15	vrrpOperAdvertisementInterval {vrrpOperEntry 11}	R/NW	[Standard] The time interval (in seconds) between VRRP packet transmissions. [Implementation] Same as the standard. `Read_Only`.	Y
16	vrrpOperPreemptMode {vrrpOperEntry 12}	R/NW	[Standard] Determines whether a virtual router with a higher priority acts for a different virtual router with a lower priority. [Implementation] Same as the standard. `Read_Only`.	Y
17	vrrpOperVirtualRouterUpTime {vrrpOperEntry 13}	R/O	[Standard] The startup time of a virtual router. [Implementation] Same as the standard.	Y
18	vrrpOperProtocol {vrrpOperEntry 14}	R/NW	[Standard] The operating protocol of a virtual router: • ip (`1`) • bridge (`2`) • decnet (`3`) • other (`4`) [Implementation] Fixed value of ip (`1`). `Read_Only`.	Y
19	vrrpOperRowStatus {vrrpOperEntry 15}	R/NW	[Standard] The vrrpOperTable access status. [Implementation] Same as the standard. `Read_Only`.	Y
20	vrrpAssoIpAddrTable {vrrpOperations 4}	NA	[Standard] A table of IP addresses for virtual routers. [Implementation] Same as the standard.#	Y
21	vrrpAssoIpAddrEntry {vrrpAssoIpAddrTable 1}	NA	[Standard] A vrrpAssoIpAddr table entry. INDEX { ifIndex, vrrpOperVrId, vrrpAssoIpAddr } [Implementation] Same as the standard.	Y
22	vrrpAssoIpAddr {vrrpAssoIpAddrEntry 1}	NA	[Standard] The IP address of a virtual router. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
23	vrrpAssoIpAddrRowStatus {vrrpAssoIpAddrEntry 2}	R/NW	[Standard] The vrrpAssoIpAddrTable access status: • active (1) • createAndGo (4) [Implementation] Fixed value of active (1). Read_Only.	Y
24	vrrpTrapPacketSrc {vrrpOperations 5}	AN	[Standard] An IP address. [Implementation] Same as the standard.	Y
25	vrrpTrapAuthErrorType {vrrpOperations 6}	AN	[Standard] The cause of a mismatched authentication type: • invalidAuthType (1) • authTypeMismatch (2) • authFailure (3) [Implementation] Same as the standard.	Y
26	vrrpOperationsTable {vrrpOperations 7}	NA	[Standard] An operation table for a VRRP router. [Implementation] Same as the standard.#	Y
27	vrrpOperationsEntry {vrrpOperationsTable 1}	NA	[Standard] vrrpOper table entry. INDEX { vrrpOperationsInetAddrType, vrrpOperationsVrId, ifIndex } [Implementation] Same as the standard.	Y
28	vrrpOperationsInetAddrType {vrrpOperationsEntry 1}	NA	[Standard] The current type: • ipv4 (1) • ipv6 (2) [Implementation] Same as the standard.	Y
29	vrrpOperationsVrId {vrrpOperationsEntry 2}	NA	[Standard] The router ID of a virtual router. [Implementation] Same as the standard.	Y
30	vrrpOperationsVirtualMacAddr {vrrpOperationsEntry 3}	R/O	[Standard] The virtual MAC address of a virtual router. [Implementation] Same as the standard.	Y
31	vrrpOperationsState {vrrpOperationsEntry 4}	R/O	[Standard] The current VRRP running state: • initialize (1) • backup (2) • master (3) [Implementation] Same as the standard.	Y
32	vrrpOperationsPriority {vrrpOperationsEntry 5}	R/NW	[Standard] The priority of a virtual router. [Implementation] Same as the standard. Read_Only.	Y
33	vrrpOperationsVersion {vrrpOperationsEntry 6}	R/NW	[Standard] The VRRP version that is running: • vrrpv2 (1) • vrrpv3 (2) [Implementation] Same as the standard. Read_Only.	Y
34	vrrpOperationsAddrCount {vrrpOperationsEntry 7}	R/O	[Standard] The number of virtual router IP addresses. [Implementation] Fixed value of 1.	Y
35	vrrpOperationsMasterIpAddr {vrrpOperationsEntry 9}	R/O	[Standard] The real IP address of the master router. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
36	vrrpOperationsPrimaryIpAddr {vrrpOperationsEntry 10}	R/NW	[Standard] The real IP address used by a virtual router. [Implementation] Same as the standard. `Read_Only`.	Y
37	vrrpOperationsAdvInterval {vrrpOperationsEntry 11}	R/NW	[Standard] The timer interval (in units of 1/100 seconds) between VRRP packet transmissions. 1 to 4096. [Implementation] 100-25500. `Read_Only`.	Y
38	vrrpOperationsPreemptMode {vrrpOperationsEntry 12}	R/NW	[Standard] Determines whether a virtual router with a higher priority preempts a different virtual router with a lower priority. [Implementation] Same as the standard. `Read_Only`.	Y
39	vrrpOperationsAcceptMode {vrrpOperationsEntry 13}	R/NW	[Standard] Determines whether a packet destined for a virtual IP address is to be accepted, even if the address does not indicate the address owner. [Implementation] Same as the standard. `Read_Only`.	Y
40	vrrpOperationsUpTime {vrrpOperationsEntry 14}	R/O	[Standard] The startup time of a virtual router. [Implementation] Same as the standard.	Y
41	vrrpOperationsRowStatus {vrrpOperationsEntry 15}	R/NW	[Standard] The vrrpOperTable access status. [Implementation] Same as the standard. `Read_Only`.	Y
42	vrrpAssociatedIpAddrTable {vrrpOperations 8}	NA	[Standard] A table of IP addresses for virtual routers. [Implementation] Same as the standard.[#]	Y
43	vrrpAssociatedIpAddrEntry {vrrpAssociatedIpAddrTable 1}	NA	[Standard] A vrrpAssoIpAddr table entry. INDEX { vrrpAssociatedInetAddrType, vrrpOperationsVrId, ifIndex, vrrpAssociatedIpAddr } [Implementation] Same as the standard.	Y
44	vrrpAssociatedInetAddrType {vrrpAssociatedIpAddrEntry2}	NA	[Standard] The vrrpAssociatedIpAddr address type: • ipv4 (`1`) • ipv6 (`2`) [Implementation] Same as the standard.	Y
45	vrrpAssociatedIpAddr {vrrpAssociatedIpAddrEntry 3}	NA	[Standard] The IP address of a virtual router. [Implementation] Same as the standard.	Y
46	vrrpAssociatedIpAddrRowStatus {vrrpAssociatedIpAddrEntry 4}	R/NW	[Standard] The vrrpAssoIpAddrTable access status: • active (`1`) • createAndGo (`4`) • createAndWait (`5`) [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
47	vrrpTrapNewMasterReason {vrrpOperations 9}	AN	[Standard] The reason a transition is made to the master: • priority (`0`) • prempted (`1`) • masterNpResponse (`2`) [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
48	vrrpTrapProtoErrReason {vrrpOperations 10}	AN	[Standard] The reason an advertised packet is discarded: • hopLimitError (0) • versionError (1) • checksumError (2) • vridError (3) [Implementation] Same as the standard.	Y

#: An attempt to collect a MIB might cause the CPU utilization to reach 100% or result in a timeout. In addition, the VRRP status might change to master, or the status might change frequently. When attempting to collect multiple MIBs in succession, wait a while before proceeding to the next MIB.

2.17.2 vrrpStatistics group

(1) ID

```
vrrpMIB OBJECT IDENTIFIER ::= {mib-2 68}

vrrpStatistics OBJECT IDENTIFIER ::= {vrrpMIB 2}
Object ID value  1.3.6.1.2.1.68.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the vrrpStatistics group.

Table 2-53: vrrpStatistics group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	vrrpRouterChecksumErrors {vrrpStatistics 1}	R/O	[Standard] The total number of VRRP packets received that have an invalid checksum. [Implementation] Same as the standard.	Y
2	vrrpRouterVersionErrors {vrrpStatistics 2}	R/O	[Standard] The total number of VRRP packets received that have a version error. [Implementation] Same as the standard.	Y
3	vrrpRouterVrIdErrors {vrrpStatistics 3}	R/O	[Standard] The total number of VRRP packets received that have an invalid virtual router VRID. [Implementation] Same as the standard.	Y
4	vrrpRouterStatsTable {vrrpStatistics 4}	NA	[Standard] The statistics table of virtual router. [Implementation] Same as the standard.#	Y
5	vrrpRouterStatsEntry {vrrpRouterStatsTable 1}	NA	[Standard] vrrpRouterStats table entry. INDEX { ifIndex, vrrpOperVrId } [Implementation] Same as the standard.	Y
6	vrrpStatsBecomeMaster {vrrpRouterStatsEntry 1}	R/O	[Standard] The number of transitions made to the master. [Implementation] Same as the standard.	Y
7	vrrpStatsAdvertiseRcvd {vrrpRouterStatsEntry 2}	R/O	[Standard] The total number of VRRP ADVERTISEMENT packets received. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support ?
8	vrrpStatsAdvertiseIntervalErrors {vrrpRouterStatsEntry 3}	R/O	[Standard] The total number of VRRP ADVERTISEMENT packets received that have an invalid ADVERTISEMENT interval. [Implementation] Same as the standard.	Y
9	vrrpStatsAuthFailures {vrrpRouterStatsEntry 4}	R/O	[Standard] The total number of VRRP packets received that have an authentication error. [Implementation] Same as the standard.	Y
10	vrrpStatsIpTtlErrors {vrrpRouterStatsEntry 5}	R/O	[Standard] The total number of VRRP packets received that have an invalid TTL. [Implementation] Same as the standard.	Y
11	vrrpStatsPriorityZeroPktsRcvd {vrrpRouterStatsEntry 6}	R/O	[Standard] The total number of VRRP packets received that have a priority of 0. [Implementation] Same as the standard.	Y
12	vrrpStatsPriorityZeroPktsSent {vrrpRouterStatsEntry 7}	R/O	[Standard] The total number of VRRP packets sent that have a priority of 0. [Implementation] Same as the standard.	Y
13	vrrpStatsInvalidTypePktsRcvd {vrrpRouterStatsEntry 8}	R/O	[Standard] The total number of VRRP packets received that have an invalid Type field. [Implementation] Same as the standard.	Y
14	vrrpStatsAddressListErrors {vrrpRouterStatsEntry 9}	R/O	[Standard] The total number of packets received that have an invalid virtual router IP address. [Implementation] Same as the standard.	Y
15	vrrpStatsInvalidAuthType {vrrpRouterStatsEntry 10}	R/O	[Standard] The total number of packets received that have an invalid authentication type. [Implementation] Same as the standard.	Y
16	vrrpStatsAuthTypeMismatch {vrrpRouterStatsEntry 11}	R/O	[Standard] The total number of packets received that have an invalid authentication type. [Implementation] Same as the standard.	Y
17	vrrpStatsPacketLengthErrors {vrrpRouterStatsEntry 12}	R/O	[Standard] The total number of packets received that have an invalid length value. [Implementation] Same as the standard.	Y
18	vrrpRouterStatisticsTable {vrrpStatistics 5}	NA	[Standard] The statistics table of virtual router. [Implementation] Same as the standard.#	Y
19	vrrpRouterStatisticsEntry {vrrpRouterStatisticsTable 1}	NA	[Standard] A vrrpRouterStatistics table entry. INDEX { vrrpOperationsInetAddrType, vrrpOperationsVrId, ifIndex } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
20	vrrpStatisticsBecomeMaster {vrrpRouterStatisticsEntry 1}	R/O	[Standard] The number of transitions made to the master. [Implementation] Same as the standard.	Y
21	vrrpStatisticsAdvertiseRcvd {vrrpRouterStatisticsEntry 2}	R/O	[Standard] The total number of VRRP ADVERTISEMENT packets received. [Implementation] Same as the standard.	Y
22	vrrpStatisticsAdvIntervalErrors {vrrpRouterStatisticsEntry 3}	R/O	[Standard] The total number of VRRP ADVERTISEMENT packets received that have an invalid ADVERTISEMENT interval. [Implementation] Same as the standard.	Y
23	vrrpStatisticsIpTtlErrors {vrrpRouterStatisticsEntry 4}	R/O	[Standard] The total number of VRRP packets received that have an invalid TTL. [Implementation] Same as the standard.	Y
24	vrrpStatisticsPriZeroPktsRcvd {vrrpRouterStatisticsEntry 5}	R/O	[Standard] The total number of VRRP packets received that have a priority of 0. [Implementation] Same as the standard.	Y
25	vrrpStatisticsPriZeroPktsSent {vrrpRouterStaitsticsEntry 6}	R/O	[Standard] The total number of VRRP packets sent that have a priority of 0. [Implementation] Same as the standard.	Y
26	vrrpStatisticsInvldTypePktsRcvd {vrrpRouterStatisticsEntry 7}	R/O	[Standard] The total number of VRRP packets received that have an invalid Type field. [Implementation] Same as the standard.	Y
27	vrrpStatisticsAddressListErrors {vrrpRouterStatisticsEntry 8}	R/O	[Standard] The total number of packets received that have an invalid virtual router IP address. [Implementation] Same as the standard.	Y
28	vrrpStatisticsPacketLengthErrors {vrrpRouterStatisticsEntry 11}	R/O	[Standard] The total number of packets received that have an invalid length value. [Implementation] Same as the standard.	Y
29	vrrpStatisticsDiscontinuityTime {vrrpRouterStatisticsEntry 12}	R/O	[Standard] The last startup time. [Implementation] Same as the standard.	Y
30	vrrpStatisticsRefreshRate {vrrpRouterStatisticsEntry 13}	R/O	[Standard] The minimum polling interval (in milliseconds). [Implementation] Same as the standard.	Y
31	vrrpStatisticsInvalidAuthType {vrrpRouterStatisticsEntry 14}	R/O	[Standard] The total number of packets received that have an invalid packet authentication type. [Implementation] Same as the standard.	Y

#: An attempt to collect a MIB might cause the CPU utilization to reach 100% or result in a timeout. In addition, the VRRP status might change to master, or the status might change frequently. When attempting to collect multiple MIBs in succession, wait a while before

proceeding to the next MIB.

2.18 powerEthernetMIB group (Power Ethernet MIB) [AX3630S]

Relevant standards for the powerEthernetMIB group are described in the following document:

- RFC 3621 (December 2003)

(1) ID

```
powerEthernetMIB OBJECT IDENTIFIER ::= {mib-2 105}

pethObjects             OBJECT IDENTIFIER ::= {powerEthernetMIB 1}
Object ID value  1.3.6.1.2.1.105.1

pethMainPseObjects      OBJECT IDENTIFIER ::= {pethObjects 3}
Object ID value  1.3.6.1.2.1.105.1.3

pethNotificationControl OBJECT IDENTIFIER ::= {pethObjects 4}
Object ID value  1.3.6.1.2.1.105.1.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the pethObjects group.

Table 2-54: pethObjects group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	pethPsePortTable {pethObjects 1}	NA	[Standard] Displays and controls the power characteristics of the ports on a power supply. [Implementation] Same as the standard.	Y
2	pethPsePortEntry {pethPsePortTable 1}	NA	[Standard] A list of information about the ports on each power supply. INDEX { pethPsePortGroupIndex } [Implementation] Same as the standard.	Y
3	pethPsePortGroupIndex {pethPsePortEntry 1}	NA	[Standard] An identifier that indicates the group which contains a connecting port. [Implementation] Fixed value of 1.	Y
4	pethPsePortIndex {pethPsePortEntry 2}	NA	[Standard] The identifier of the port in pethPsePortGroupIndex. [Implementation] Same as the standard.	Y
5	pethPsePortAdminEnable {pethPsePortEntry 3}	R/NW	[Standard] Indicates whether the power supply function is enabled or disabled: • true (1): Enabled • false (2): Disabled [Implementation] Same as the standard.	Y
6	pethPsePortPowerPairsControlAbility {pethPsePortEntry 4}	R/O	[Standard] Indicates whether power supply pairs can be switched: • true (1): Allowed • false (2): Not allowed [Implementation] Fixed value of false (2) because the type of power supply pairs is specified as pattern A, which prohibits switching.	Y
7	pethPsePortPowerPairs {pethPsePortEntry 5}	R/NW	[Standard] The type of power supply pairs: • signal (1): Use pairs for data transfer (pattern A). • spare (2): Use spare pairs (pattern B). [Implementation] Fixed value of signal (1) because the type of power supply pairs is specified as pattern A.	Y

#	Object identifier	Access	Implementation specifications	Support?
8	pethPsePortDetectionStatus {pethPsePortEntry 6}	R/O	[Standard] The detection status of a power receiving switch: • disabled (1): DISABLED • deliveringPower (3): POWER_ON • fault (4): TEST_ERROR • test (5): TEST_MODE • otherFault (6): IDLE due to an error • searching (2): Other status [Implementation] Same as the standard.	Y
9	pethPsePortPowerPriority {pethPsePortEntry 7}	R/NW	[Standard] The power management priority of a port: • critical (1) • high (2) • low (3) [Implementation] Same as the standard. This object is invalid if the value of pethPsePortDetectionStatus is disabled (1).	Y
10	pethPsePortMPSAbsentCounter {pethPsePortEntry 8}	R/O	[Standard] This counter is incremented when the status of the power receiving switch directly changes from POWER_ON to IDLE due to a no response timeout on the switch. [Implementation] Same as the standard. This counter is incremented when unplugging the port causes Underload.	Y
11	pethPsePortType {pethPsePortEntry 9}	R/NW	[Standard] The type of the switch connected to the port. [Implementation] Fixed value of NULL.	Y
12	pethPsePortPowerClassifications {pethPsePortEntry 10}	R/O	[Standard] The power class of the port. This object is only valid when the value of pethPsePortDetectionStatus is deliveringPower (3). • class0 (1) • class1 (2) • class2 (3) • class3 (4) • class4 (5) [Implementation] Same as the standard.	Y
13	pethPsePortInvalidSignatureCounter {pethPsePortEntry 11}	R/O	[Standard] This counter incremented when the status of the switch changes to SIGNATURE_INVALID. [Implementation] Same as the standard. This counter is incremented when class identification fails.	Y
14	pethPsePortPowerDeniedCounter {pethPsePortEntry 12}	R/O	[Standard] This counter is incremented when the status of the switch to POWER-DENIED. [Implementation] Same as the standard. This counter is incremented when the priority control forces the device to stop.	Y
15	pethPsePortOverLoadCounter {pethPsePortEntry 13}	R/O	[Standard] This counter is incremented when the status of the switch changes to ERROR_DELAY_OVER. [Implementation] Same as the standard. This counter is incremented when an error on another device causes an overload.	Y
16	pethPsePortShortCounter {pethPsePortEntry 14}	R/O	[Standard] This counter is incremented when the status of the switch changes to ERROR_DELAY_SHORT. [Implementation] Same as the standard. This counter is incremented when a short occurs.	Y

The following table shows the implementation specifications for the pethMainPseObjects group.

Table 2-55: pethMainPseObjects group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	pethMainPseTable {pethMainPseObjects 1}	NA	[Standard] A table that contains the main power supply information for a power supply. [Implementation] Same as the standard.	Y
2	pethMainPseEntry {pethMainPseTable 1}	NA	[Standard] A list that contains the main power supply information for a power supply. INDEX { pethMainPseGroupIndex } [Implementation] Same as the standard.	Y
3	pethMainPseGroupIndex {pethMainPseEntry 1}	NA	[Standard] The identifier (1-2147483647) of the power supply group that is connected. [Implementation] Same as the standard.	Y
4	pethMainPsePower {pethMainPseEntry 2}	R/O	[Standard] The total power (1-65535 watts) of the power supply. [Implementation] Same as the standard.	Y
5	pethMainPseOperStatus {pethMainPseEntry 3}	R/O	[Standard] The control status of the main power supply: • on (1) • off (2) • faulty (3) [Implementation] Fixed value of on (1).	Y
6	pethMainPseConsumptionPower {pethMainPseEntry 4}	R/O	[Standard] The power consumption (0-65535 watts). [Implementation] Same as the standard.	Y
7	pethMainPseUsageThreshold {pethMainPseEntry 5}	R/NW	[Standard] The power consumption threshold (1-99 percent). If the threshold is exceeded, an alarm is reported. [Implementation] Fixed value of 92.	Y

The following table shows the implementation specifications for the pethNotificationControl group.

Table 2-56: pethNotificationControl group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	pethNotificationControlTable {pethNotificationControl 1}	NA	[Standard] Displays and controls notification information from a power supply. [Implementation] Same as the standard.	Y
2	pethNotificationControlEntry {pethNotificationControlTable 1}	NA	[Standard] Notification event information entries. [Implementation] Same as the standard.	Y
3	pethNotificationControlGroupIndex {pethNotificationControlEntry 1}	NA	[Standard] A notification information group entry (1-2147483647). [Implementation] Same as the standard.	Y
4	pethNotificationControlEnable {pethNotificationControlEntry 2}	R/NW	[Standard] Indicates whether the notification functionality can be controlled • true (1): Allowed • false (2): Not allowed [Implementation] Same as the standard.	Y

2.19 pimMIB group (IPv4 PIM MIB)

Relevant standards for the pimMIB group are described in the following document:

- RFC 2934 (October 2000)

2.19.1 pimJoinPruneInterval

(1) ID

```
pimMIB        OBJECT IDENTIFIER ::= {experimental 61}

pimMIBObjects OBJECT IDENTIFIER ::= {pimMIB 1}

pim           OBJECT IDENTIFIER ::= {pimMIBObjects 1}
Object ID value  1.3.6.1.3.61.1.1

pimJoinPruneInterval  OBJECT IDENTIFIER ::= {pim 1}
Object ID value  1.3.6.1.3.61.1.1.1
```

(2) Implementation specifications

The following table lists the implementation specifications for pimJoinPruneInterval.

Table 2-57: pimJoinPruneInterval group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	pimJoinPruneInterval {pim 1}	R/NW	[Standard] The default frequency (in seconds) of the PIM-SM Join/Prune transmission. [Implementation] Fixed value of 60.	Y

2.19.2 pimInterfaceTable

(1) ID

```
pimMIB        OBJECT IDENTIFIER ::= {experimental 61}

pimMIBObjects OBJECT IDENTIFIER ::= {pimMIB 1}

pim           OBJECT IDENTIFIER ::= {pimMIBObjects 1}
Object ID value  1.3.6.1.3.61.1.1

pimInterfaceTable  OBJECT IDENTIFIER ::= {pim 2}
Object ID value  1.3.6.1.3.61.1.1.2
```

(2) Implementation specifications

The following table lists the implementation specifications for pimInterfaceTable.

Table 2-58: pimInterfaceTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	pimInterfaceTable {pim 2}	NA	[Standard] A table of PIM interfaces. [Implementation] Same as the standard.	Y
2	pimInterfaceEntry {pimInterfaceTable 1}	NA	[Standard] PIM interface table entries. INDEX { pimInterfaceIfIndex } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support ?
3	pimInterfaceIfIndex {pimInterfaceEntry 1}	NA	[Standard] The ifIndex value of a PIM interface. [Implementation] Same as the standard.	Y
4	pimInterfaceAddress {pimInterfaceEntry 2}	R/O	[Standard] The IP address of a PIM interface. [Implementation] Same as the standard.	Y
5	pimInterfaceNetMask {pimInterfaceEntry 3}	R/O	[Standard] The network mask for the IP address of a PIM interface. [Implementation] Same as the standard.	Y
6	pimInterfaceMode {pimInterfaceEntry 4}	R/NW	[Standard] The PIM interface mode: • dense (1) • sparse (2) • sparseDense (3) DEFVAL {dense} [Implementation] Fixed value of sparse (2).	Y
7	pimInterfaceDR {pimInterfaceEntry 5}	R/O	[Standard] The designated-router address for the PIM interface. Returns a value of 0.0.0.0 for a point-to-point connection interface. [Implementation] Same as the standard.	Y
8	pimInterfaceHelloInterval {pimInterfaceEntry 6}	R/NW	[Standard] The frequency (in seconds) of the Hello message transmission from the PIM interface. DEFVAL {30} [Implementation] Same as the standard.	Y
9	pimInterfaceStatus {pimInterfaceEntry 7}	R/NW	[Standard] RowStatus. [Implementation] Fixed value of active (1).	Y
10	pimInterfaceJoinPruneInterval {pimInterfaceEntry 8}	R/NW	[Standard] The frequency (in seconds) of the Join/Prune message transmission from the PIM interface. [Implementation] Same as the standard.	Y
11	pimInterfaceCBSRPreference {pimInterfaceEntry 9}	R/NW	[Standard] The preference value for this interface when it is available as a bootstrap router (BSR). The value is -1 if the interface is not available as a BSR. DEFVAL {0} [Implementation] Fixed value of -1.	Y

2.19.3 pimNeighborTable

(1) ID

```
pimMIB        OBJECT IDENTIFIER ::= {experimental 61}

pimMIBObjects OBJECT IDENTIFIER ::= {pimMIB 1}

pim           OBJECT IDENTIFIER ::= {pimMIBObjects 1}
Object ID value  1.3.6.1.3.61.1.1

pimNeighborTable  OBJECT IDENTIFIER ::= {pim 3}
Object ID value  1.3.6.1.3.61.1.1.3
```

(2) Implementation specifications

The following table lists the implementation specifications for pimNeighborTable.

Table 2-59: pimNeighborTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	pimNeighborTable {pim 3}	NA	[Standard] A table of PIM neighboring routers. [Implementation] Same as the standard.	Y
2	pimNeighborEntry {pimNeighborTable 1}	NA	[Standard] PIM neighboring router entries. INDEX { pimNeighborAddress } [Implementation] Same as the standard.	Y
3	pimNeighborAddress {pimNeighborEntry 1}	NA	[Standard] The IP address of a PIM neighboring router. [Implementation] Same as the standard.	Y
4	pimNeighborIfIndex {pimNeighborEntry 2}	R/O	[Standard] The ifIndex value of the interface that reaches the PIM neighboring router. [Implementation] Same as the standard.	Y
5	pimNeighborUpTime {pimNeighborEntry 3}	R/O	[Standard] The time (in tens of milliseconds) that has elapsed since the PIM neighboring router was learned. [Implementation] Same as the standard.	Y
6	pimNeighborExpiryTime {pimNeighborEntry 4}	R/O	[Standard] The remaining live time (in tens of milliseconds) for the PIM neighboring router. [Implementation] Same as the standard.	Y
7	pimNeighborMode {pimNeighborEntry 5}	R/O	[Standard] The PIM mode of the PIM neighboring router: • dense (1) • sparse (2) [Implementation] Fixed value of sparse (2).	Y

2.20 ospfv3MIB group (OSPFv3 MIB) [OS-L3A]

Relevant standards for the ospfv3MIB group are described in the following document:

- draft-ietf-ospf-ospfv3-mib-03 (November 2000)

If the OSPFv3 domain is partitioned, this MIB applies only to the domain information with the smallest domain number.

2.20.1 ospfv3GeneralGroup

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3GeneralGroup OBJECT IDENTIFIER ::= {ospfv3 1}
Object ID value  1.3.6.1.3.102.1.1
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3GeneralGroup.

Table 2-60: ospfv3GeneralGroup implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3RouterId {ospfv3GeneralGroup 1}	R/NW	[Standard] A router identifier in an autonomous system. [Implementation] Same as the standard. `Read_Only`.	Y
2	ospfv3AdminStat {ospfv3GeneralGroup 2}	R/NW	[Standard] The OSPFv3 management status of the router: • enabled (`1`) • disabled (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
3	ospfv3VersionNumber {ospfv3GeneralGroup 3}	R/O	[Standard] The version number of the OSPFv3 protocol. [Implementation] Same as the standard (fixed value of `version3`).	Y
4	ospfv3AreaBdrRtrStatus {ospfv3GeneralGroup 4}	R/O	[Standard] Indicates whether the router is an area border router: • true (`1`) • false (`2`) [Implementation] Same as the standard.	Y
5	ospfv3ASBdrRtrStatus {ospfv3GeneralGroup 5}	R/NW	[Standard] Indicates whether the router is an AS boundary router: • true (`1`) • false (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfv3AsScopeLsaCount {ospfv3GeneralGroup 6}	R/O	[Standard] The number of external link status advertisements (LSA) in the link state database (LSDB). [Implementation] Same as the standard.	Y
7	ospfv3AsScopeLsaCksumSum {ospfv3GeneralGroup 7}	R/O	[Standard] The sum of the AsScopeLSA LS checksums in the LSDB. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
8	ospfv3OriginateNewLsas {ospfv3GeneralGroup 8}	R/O	[Standard] The number of newly generated LSAs. [Implementation] Same as the standard.	Y
9	ospfv3RxNewLsas {ospfv3GeneralGroup 9}	R/O	[Standard] The number of times an LSA containing new information was received. [Implementation] Same as the standard.	Y
10	ospfv3ExtAreaLsdbLimit {ospfv3GeneralGroup 10}	R/NW	[Standard] The maximum number of AS external LSAs that can be stored in the LSDB. No limit if `-1`. [Implementation] Fixed value of `-1`. `Read_Only`.	Y
11	ospfv3MulticastExtensions {ospfv3GeneralGroup 11}	R/NW	[Standard] Indicates the multicast forwarding algorithm (as a bitmap value) of a multicast extension to OSPFv3. 0 indicates that multicast forwarding is not supported. [Implementation] Multicast forwarding is not supported. Fixed value of not supported (`0`). `Read_Only`.	Y
12	ospfv3ExitOverflowInterval {ospfv3GeneralGroup 12}	R/NW	[Standard] The time it takes (in seconds) before the status of the router changes to overflow. [Implementation] Not implemented.#	N
13	ospfv3DemandExtensions {ospfv3GeneralGroup 13}	R/NW	[Standard] Indicates whether the router supports on-demand routing: • true (`1`) • false (`2`) [Implementation] Fixed value of false (`2`). `Read_Only`.	Y
14	ospfv3TrafficEngineeringSupport {ospfv3GeneralGroup 14}	R/NW	[Standard] Indicates whether the router supports traffic engineering extensions: • true (`1`) • false (`2`) [Implementation] Fixed value of false (`2`). `Read_Only`.	Y

#: This object is not implemented because the extended functionality is not supported.

2.20.2 ospfv3AreaTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3AreaTable OBJECT IDENTIFIER ::= {ospfv3 2}
Object ID value  1.3.6.1.3.102.1.2
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3AreaTable.

Table 2-61: ospfv3AreaTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3AreaTable {ospfv3 2}	NA	[Standard] A table that contains information about each area to which a router connects. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
2	ospfv3AreaEntry {ospfv3AreaTable 1}	NA	[Standard] A list of information about each area. INDEX { ospfv3AreaId } [Implementation] Same as the standard.	Y
3	ospfv3AreaId {ospfv3AreaEntry 1}	R/O	[Standard] An area identification number. [Implementation] Same as the standard.	Y
4	ospfv3ImportAsExtern {ospfv3AreaEntry 2}	R/NW	[Standard] A flag that indicates whether the router imports an AS external link state advertisement (LSA): • importExternal (1) • importNoExternal (2) • importNssa (3) [Implementation] Same as the standard. Read_Only.	Y
5	ospfv3SpfRuns {ospfv3AreaEntry 3}	R/O	[Standard] The number of times the link state database (LSDB) for this area was used for intra-area route calculation. [Implementation] Same as the standard.	Y
6	ospfv3AreaBdrRtrCount {ospfv3AreaEntry 4}	R/O	[Standard] The total number of area border routes that can be reached in this area. [Implementation] Same as the standard.	Y
7	ospfv3AsBdrRtrCount {ospfv3AreaEntry 5}	R/O	[Standard] The total number of AS boundary routes in this area that can be reached. [Implementation] Same as the standard.	Y
8	ospfv3AreaScopeLsaCount {ospfv3AreaEntry 6}	R/O	[Standard] The number of AreaScope LSAs in the LSDB for this area. [Implementation] Same as the standard.	Y
9	ospfv3AreaScopeLsaChksumSum {ospfv3AreaEntry 7}	R/O	[Standard] The sum of the LS checksums for the AreaScope LSAs in the LSDB for this area. [Implementation] Same as the standard.	Y
10	ospfv3AreaSummary {ospfv3AreaEntry 8}	R/NW	[Standard] A variable value for controlling the import of the summary LSA to this area. • noAreaSummary (1) • sendAreaSummary (2) [Implementation] Same as the standard. Read_Only.	Y
11	ospfv3AreaStatus {ospfv3AreaEntry 9}	R/NW	[Standard] Indicates the status of this entry. [Implementation] Fixed value of active (1). Read_Only.	Y
12	ospfv3StubMetric {ospfv3AreaEntry 10}	R/NW	[Standard] The default route metric that is advertised to a Stub or NSSA area. [Implementation] Same as the standard. Read_Only.	Y
13	ospfv3AreaNssaTranslatorRole {ospfv3AreaEntry 11}	R/NW	[Standard] The role of the NSSA border router as a NSSA translator. [Implementation] Not implemented.#	N
14	ospfv3AreaNssaTranslatorState {ospfv3AreaEntry 12}	R/O	[Standard] The state of the NSSA translator. [Implementation] Not implemented.#	N
15	ospfv3AreaNssaTranslatorStabilityInterval {ospfv3AreaEntry 13}	R/NW	[Standard] The Stability Interval of the NSSA translator. [Implementation] Not implemented.#	N
16	ospfv3AreaNssaTranslatorEvents {ospfv3AreaEntry 14}	R/O	[Standard] The number of NSSA translator events. [Implementation] Not implemented.#	N

#: This object is not implemented because NSSA is not supported.

2.20.3 ospfv3AsLsdbTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3AsLsdbTable OBJECT IDENTIFIER ::= {ospfv3 3}
Object ID value  1.3.6.1.3.102.1.3
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3AsLsdbTable.

Table 2-62: ospfv3AsLsdbTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3AsLsdbTable {ospfv3 3}	NA	[Standard] A table that contains information about the AS Scope link state database for OSPFv3. [Implementation] Same as the standard.	Y
2	ospfv3AsLsdbEntry {ospfv3AsLsdbTable 1}	NA	[Standard] A list of link state advertisements (LSAs). INDEX { ospfv3AsLsdbType, ospfv3AsLsdbRouterId, ospfv3AsLsdbLsid } [Implementation] Same as the standard.	Y
3	ospfv3AsLsdbType {ospfv3AsLsdbEntry 1}	R/O	[Standard] The LSA type. • asExternal (`0x4005`) [Implementation] Same as the standard.	Y
4	ospfv3AsLsdbRouterId {ospfv3AsLsdbEntry 2}	R/O	[Standard] The ID of a router that generated the LSA. [Implementation] Same as the standard.	Y
5	ospfv3AsLsdbLsid {ospfv3AsLsdbEntry 3}	R/O	[Standard] The ID that identifies each LSA. [Implementation] Same as the standard.	Y
6	ospfv3AsLsdbSequence {ospfv3AsLsdbEntry 4}	R/O	[Standard] The LSA sequence number. [Implementation] Same as the standard.	Y
7	ospfv3AsLsdbAge {ospfv3AsLsdbEntry 5}	R/O	[Standard] The time that has elapsed (in seconds) since this LSA was generated. [Implementation] Same as the standard.	Y
8	ospfv3AsLsdbChecksum {ospfv3AsLsdbEntry 6}	R/O	[Standard] The checksum for this LSA. [Implementation] Same as the standard.	Y
9	ospfv3AsLsdbAdvertisement {ospfv3AsLsdbEntry 7}	R/O	[Standard] The full LSA, including the header. [Implementation] Same as the standard.	Y

2.20.4 ospfv3AreaLsdbTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3AreaLsdbTable OBJECT IDENTIFIER ::= {ospfv3 4}
Object ID value  1.3.6.1.3.102.1.4
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3AreaLsdbTable.

Table 2-63: ospfv3AreaLsdbTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3AreaLsdbTable {ospfv3 4}	NA	[Standard] A table that contains information on the AreaScope link state database for OSPFv3. [Implementation] Same as the standard.	Y
2	ospfv3AreaLsdbEntry {ospfv3AreaLsdbTable 1}	NA	[Standard] A list of link state advertisements (LSAs). INDEX { ospfv3AreaLsdbAreaId, ospfv3AreaLsdbType, ospfv3AreaLsdbRouterId, ospfv3AreaLsdbLsid } [Implementation] Same as the standard.	Y
3	ospfv3AreaLsdbAreaId {ospfv3AreaLsdbEntry 1}	R/O	[Standard] The area ID of the area that receives this LSA. [Implementation] Same as the standard.	Y
4	ospfv3AreaLsdbType {ospfv3AreaLsdbEntry 2}	R/O	[Standard] The LSA type. • Router (`8193=0x2001`) • Network (`8194=0x2002`) • interAreaPrefix (`8195=0x2003`) • interAreaRouter (`8196=0x2004`) • Multicast (`8198=0x2006`) • NSSA external link (`8199=0x2007`) • intraAreaPrefix (`8201=0x2009`) [Implementation] Same as the standard.	Y
5	ospfv3AreaLsdbRouterId {ospfv3AreaLsdbEntry 3}	R/O	[Standard] The ID of a router that generated the LSA. [Implementation] Same as the standard.	Y
6	ospfv3AreaLsdbLsid {ospfv3AreaLsdbEntry 4}	R/O	[Standard] The ID that identifies each LSA. [Implementation] Same as the standard.	Y
7	ospfv3AreaLsdbSequence {ospfv3AreaLsdbEntry 5}	R/O	[Standard] The LSA sequence number. [Implementation] Same as the standard.	Y
8	ospfv3AreaLsdbAge {ospfv3AreaLsdbEntry 6}	R/O	[Standard] The time that has elapsed (in seconds) since this LSA was generated. [Implementation] Same as the standard.	Y
9	ospfv3AreaLsdbChecksum {ospfv3AreaLsdbEntry 7}	R/O	[Standard] The checksum for this LSA. [Implementation] Same as the standard.	Y
10	ospfv3AreaLsdbAdvertisement {ospfv3AreaLsdbEntry 8}	R/O	[Standard] The full LSA, including the header. [Implementation] Same as the standard.	Y

2.20.5 ospfv3LinkLsdbTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3LinkLsdbTable OBJECT IDENTIFIER ::= {ospfv3 5}
Object ID value  1.3.6.1.3.102.1.5
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3LinkLsdbTable.

Table 2-64: ospfv3LinkLsdbTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3LinkLsdbTable {ospfv3 5}	NA	[Standard] A table that contains information about the LinkScope link state database for OSPFv3. [Implementation] Same as the standard.	Y
2	ospfv3LinkLsdbEntry {ospfv3LinkLsdbTable 1}	NA	[Standard] A list of link state advertisements (LSAs). INDEX { ospfv3LinkLsdbIfIndex, ospfv3LinkLsdbType, ospfv3LinkLsdbRouterId, ospfv3LinkLsdbLsid } [Implementation] Same as the standard.	Y
3	ospfv3LinkLsdbIfIndex {ospfv3LinkLsdbEntry 1}	R/O	[Standard] The identifier of a link that received the LSA. [Implementation] Same as the standard.	Y
4	ospfv3LinkLsdbType {ospfv3LinkLsdbEntry 2}	R/O	[Standard] The LSA type. • Link (`0x0008`) [Implementation] Same as the standard.	Y
5	ospfv3LinkLsdbRouterId {ospfv3LinkLsdbEntry 3}	R/O	[Standard] The ID of a router that generated the LSA. [Implementation] Same as the standard.	Y
6	ospfv3LinkLsdbLsid {ospfv3LinkLsdbEntry 4}	R/O	[Standard] The ID that identifies each LSA. [Implementation] Same as the standard.	Y
7	ospfv3LinkLsdbSequence {ospfv3LinkLsdbEntry 5}	R/O	[Standard] The LSA sequence number. [Implementation] Same as the standard.	Y
8	ospfv3LinkLsdbAge {ospfv3LinkLsdbEntry 6}	R/O	[Standard] The time that has elapsed (in seconds) since this LSA was generated. [Implementation] Same as the standard.	Y
9	ospfv3LinkLsdbChecksum {ospfv3LinkLsdbEntry 7}	R/O	[Standard] The checksum for this LSA. [Implementation] Same as the standard.	Y
10	ospfv3LinkLsdbAdvertisement {ospfv3LinkLsdbEntry 8}	R/O	[Standard] The full LSA, including the header. [Implementation] Same as the standard.	Y

2.20.6 ospfv3IfTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3IfTable OBJECT IDENTIFIER ::= {ospfv3 7}
Object ID value  1.3.6.1.3.102.1.7
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3IfTable.

Table 2-65: ospfv3IfTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3IfTable {ospfv3 7}	NA	[Standard] A table of information about each interface that is accessed by a router. [Implementation] Same as the standard.	Y
2	ospfv3IfEntry {ospfv3IfTable 1}	NA	[Standard] A list of information about each interface that is accessed by a router. INDEX { ospfv3IfIndex } [Implementation] Same as the standard.	Y
3	ospfv3IfIndex {ospfv3IfEntry 1}	R/O	[Standard] The interface index of this OPSFv3 interface. [Implementation] Same as the standard.	Y
4	ospfv3IfAreaId {ospfv3IfEntry 2}	R/NW	[Standard] The area ID of the area to which this interface connects. [Implementation] Same as the standard. `Read_Only`.	Y
5	ospfv3IfType {ospfv3IfEntry 3}	R/NW	[Standard] The interface type: • Broadcast (`1`) • Non-broadcast (`2`) • Point-Point (`3`) • Point-Multipoint (`5`) [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfv3IfAdminStat {ospfv3IfEntry 4}	R/NW	[Standard] The management status of the interface: • enabled (`1`) • disabled (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
7	ospfv3IfRtrPriority {ospfv3IfEntry 5}	R/NW	[Standard] The priority of this interface. [Implementation] Same as the standard. `Read_Only`.	Y
8	ospfv3IfTransitDelay {ospfv3IfEntry 6}	R/NW	[Standard] The time (in seconds) required to send a link state update packet over this interface. [Implementation] Same as the standard. `Read_Only`.	Y
9	ospfv3IfRetransInterval {ospfv3IfEntry 7}	R/NW	[Standard] The time interval (in seconds) between attempts to resend a link state advertisement (LSA). [Implementation] Same as the standard. `Read_Only`.	Y
10	ospfv3IfHelloInterval {ospfv3IfEntry 8}	R/NW	[Standard] The time interval (in seconds) between Hello packet transmissions. [Implementation] Same as the standard. `Read_Only`.	Y
11	ospfv3IfRtrDeadInterval {ospfv3IfEntry 9}	R/NW	[Standard] The maximum allowable interval (in seconds) between Hello packet receptions. [Implementation] Same as the standard. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
12	ospfv3IfPollInterval {ospfv3IfEntry 10}	R/NW	[Standard] The time interval (in seconds) between Hello packet transmissions sent to an inactive neighboring station over a non-broadcast multi-access network. [Implementation] Same as the standard. `Read_Only`.	Y
13	ospfv3IfState {ospfv3IfEntry 11}	R/O	[Standard] The interface state: • down (`1`) • loopback (`2`) • waiting (`3`) • PtoP (`4`) • DR (`5`) • BDR (`6`) • other (`7`) [Implementation] Same as the standard.	Y
14	ospfv3IfDesignatedRouter {ospfv3IfEntry 12}	R/O	[Standard] The router ID of a designated router. [Implementation] Same as the standard.	Y
15	ospfv3IfBackupDesignatedRouter {ospfv3IfEntry 14}	R/O	[Standard] The router ID of a backup designated router. [Implementation] Same as the standard.	Y
16	ospfv3IfEvents {ospfv3IfEntry 15}	R/O	[Standard] Indicates the number of state changes or errors encountered in this interface. [Implementation] Same as the standard.	Y
17	ospfv3IfStatus {ospfv3IfEntry 17}	R/NW	[Standard] Indicates the status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
18	ospfv3IfMulticastForwarding {ospfv3IfEntry 18}	R/NW	[Standard] A multicast type used by this interface: • blocked (`1`) • multicast (`2`) • unicast (`3`) [Implementation] Fixed value of blocked (`1`). `Read_Only`.	Y
19	ospfv3IfDemand {ospfv3IfEntry 19}	R/NW	[Standard] Indicates whether this interface performs a Demand OSPFv3 procedure. • true (`1`) • false (`2`) [Implementation] Fixed value of false (`2`). `Read_Only`.	Y
20	ospfv3IfMetricValue {ospfv3IfEntry 20}	R/NW	[Standard] A metric for this interface. [Implementation] Same as the standard. `Read_Only`.	Y
21	ospfv3IfLinkScopeLsaCount {ospfv3IfEntry 21}	R/O	[Standard] The number of LinkScope link status advertisements (LSAs) in the link state database (LSDB). [Implementation] Same as the standard.	Y
22	ospfv3IfLinkLsaCksumSum {ospfv3IfEntry 22}	R/O	[Standard] The sum of LinkScope LSA LS checksums in the LSDB. [Implementation] Same as the standard.	Y
23	ospfv3IfInstId {ospfv3IfEntry 23}	R/NW	[Standard] The instance ID of this OSPFv3 interface. [Implementation] Same as the standard. `Read_Only`.	Y

2.20.7 ospfv3VirtIfTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
```

```
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3VirtIfTable OBJECT IDENTIFIER ::= {ospfv3 8}
Object ID value  1.3.6.1.3.102.1.8
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3VirtIfTable.

Table 2-66: ospfv3VirtIfTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3VirtIfTable {ospfv3 8}	NA	[Standard] A table that contains interface information about each virtual link accessed by the router. [Implementation] Same as the standard.	Y
2	ospfv3VirtIfEntry {ospfv3VirtIfTable 1}	NA	[Standard] A list of interface information about each virtual link. INDEX { ospfv3VirtIfAreaId, ospfv3VirtIfNeighbor } [Implementation] Same as the standard.	Y
3	ospfv3VirtIfAreaId {ospfv3VirtIfEntry 1}	R/O	[Standard] The area ID of an area the virtual link passes through. [Implementation] Same as the standard.	Y
4	ospfv3VirtIfNeighbor {ospfv3VirtIfEntry 2}	R/O	[Standard] The router ID of a neighboring virtual router. [Implementation] Same as the standard.	Y
5	ospfv3VirtIfIndex {ospfv3VirtIfEntry 3}	R/NW	[Standard] The interface index of this interface. [Implementation] Same as the standard. `Read_Only`.	Y
6	ospfv3VirtIfTransitDelay {ospfv3VirtIfEntry 4}	R/NW	[Standard] The time (in seconds) required to send a link state update packet over this interface. [Implementation] Same as the standard. `Read_Only`.	Y
7	ospfv3VirtIfRetransInterval {ospfv3VirtIfEntry 5}	R/NW	[Standard] The time interval (in seconds) between attempts to resend a link state advertisement (LSA). [Implementation] Same as the standard. `Read_Only`.	Y
8	ospfv3VirtIfHelloInterval {ospfv3VirtIfEntry 6}	R/NW	[Standard] The time interval (in seconds) between Hello packet transmissions. [Implementation] Same as the standard. `Read_Only`.	Y
9	ospfv3VirtIfRtrDeadInterval {ospfv3VirtIfEntry 7}	R/NW	[Standard] The maximum allowable interval (in seconds) between Hello packet receptions. [Implementation] Same as the standard. `Read_Only`.	Y
10	ospfv3VirtIfState {ospfv3VirtIfEntry 8}	R/O	[Standard] The interface state: • down (`1`) • PtoP (`4`) [Implementation] Same as the standard.	Y
11	ospfv3VirtIfEvents {ospfv3VirtIfEntry 9}	R/O	[Standard] Indicates the number of state changes or errors encountered in this interface. [Implementation] Same as the standard.	Y
12	ospfv3VirtIfStatus {ospfv3VirtIfEntry 10}	R/NW	[Standard] The status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
13	ospfv3VirtIfLinkScopeLsaCount {ospfv3VirtIfEntry 11}	R/O	[Standard] The number of LinkScope link status advertisements (LSAs) in the link state database (LSDB). [Implementation] Same as the standard.	Y
14	ospfv3VirtIfLinkLsaCksumSum {ospfv3VirtIfEntry 12}	R/O	[Standard] The sum of LinkScope LSA LS checksums in the LSDB. [Implementation] Same as the standard.	Y

2.20.8 ospfv3NbrTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3NbrTable OBJECT IDENTIFIER ::= {ospfv3 9}
Object ID value  1.3.6.1.3.102.1.9
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3NbrTable.

Table 2-67: ospfv3NbrTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	ospfv3NbrTable {ospfv3 9}	NA	[Standard] A table of information about each non-virtual neighboring station. [Implementation] Same as the standard.	Y
2	ospfv3NbrEntry {ospfv3NbrTable 1}	NA	[Standard] A list of information about each neighboring station. INDEX { ospfv3NbrIfIndex, ospfv3NbrIpv6Addr } [Implementation] Same as the standard.	Y
3	ospfv3NbrIfIndex {ospfv3NbrEntry 1}	R/O	[Standard] The local link ID of a link connected to the neighboring router. [Implementation] Same as the standard.	Y
4	ospfv3NbrIpv6Addr {ospfv3NbrEntry 2}	R/O	[Standard] The IPv6 address of the neighboring router. [Implementation] Same as the standard.	Y
5	ospfv3NbrRtrId {ospfv3NbrEntry 3}	R/O	[Standard] The router ID of the neighboring router. [Implementation] Same as the standard.	Y
6	ospfv3NbrOptions {ospfv3NbrEntry 4}	R/O	[Standard] An optional field for the neighboring router. [Implementation] Same as the standard.	Y
7	ospfv3NbrPriority {ospfv3NbrEntry 5}	R/NW	[Standard] The priority of the neighboring router. [Implementation] Same as the standard. `Read_Only`.	Y
8	ospfv3NbrState {ospfv3NbrEntry 6}	R/O	[Standard] A state that indicates the relationship with this neighboring router: • down (`1`) • attempt (`2`) • init (`3`) • twoWay (`4`) • exchangeStart (`5`) • exchange (`6`) • loading (`7`) • full (`8`) [Implementation] Same as the standard.	Y
9	ospfv3NbrEvents {ospfv3NbrEntry 7}	R/O	[Standard] Indicates the number of state changes or errors encountered in this interface because of the relationship with the neighboring router. [Implementation] Same as the standard.	Y
10	ospfv3NbrLsRetransQLen {ospfv3NbrEntry 8}	R/O	[Standard] The current length of a resend queue. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
11	ospfv3NbmaNbrStatus {ospfv3NbrEntry 9}	R/NW	[Standard] Indicates the enabled or disabled status of this entry. [Implementation] Not implemented.#	N
12	ospfv3NbmaNbrPermanence {ospfv3NbrEntry 10}	R/O	[Standard] The method used to recognize the neighboring router: • dynamic (1) • permanent (2) [Implementation] Not implemented.#	N
13	ospfv3NbrHelloSuppressed {ospfv3NbrEntry 11}	R/O	[Standard] Indicates whether Hello is suppressed by the neighboring router. [Implementation] Same as the standard.	Y
14	ospfv3NbrIfId {ospfv3NbrEntry 12}	R/O	[Standard] The interface ID the neighboring router advertises to this link with a Hello packet. [Implementation] Same as the standard.	Y

#: This object is not implemented because NBMA is not supported.

2.20.9 ospfv3VirtNbrTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3VirtNbrTable OBJECT IDENTIFIER ::= {ospfv3 10}
Object ID value  1.3.6.1.3.102.1.10
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3VirtNbrTable.

Table 2-68: ospfv3VirtNbrTable implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3VirtNbrTable {ospfv3 10}	NA	[Standard] A table of information about each virtual neighboring router. [Implementation] Same as the standard.	Y
2	ospfv3VirtNbrEntry {ospfv3VirtNbrTable 1}	NA	[Standard] A list of information about each virtual neighboring router. INDEX { ospfv3VirtNbrArea, ospfv3VirtNbrRtrId } [Implementation] Same as the standard.	Y
3	ospfv3VirtNbrArea {ospfv3VirtNbrEntry 1}	R/O	[Standard] The area ID of the area passed through. [Implementation] Same as the standard.	Y
4	ospfv3VirtNbrRtrId {ospfv3VirtNbrEntry 2}	R/O	[Standard] The router ID of the virtual neighboring router. [Implementation] Same as the standard.	Y
5	ospfv3VirtNbrIfIndex {ospfv3VirtNbrEntry 3}	R/O	[Standard] The local link ID of a link connected to the neighboring router. [Implementation] Same as the standard.	Y
6	ospfv3VirtNbrIpv6Addr {ospfv3VirtNbrEntry 4}	R/O	[Standard] The IPv6 address of the virtual neighboring router. [Implementation] Same as the standard.	Y
7	ospfv3VirtNbrOptions {ospfv3VirtNbrEntry 5}	R/O	[Standard] An optional field for the virtual neighboring router. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
8	ospfv3VirtNbrState {ospfv3VirtNbrEntry 6}	R/O	[Standard] A state that indicates the relationship with this virtual neighboring router: • down (1) • attempt (2) • init (3) • twoWay (4) • exchangeStart (5) • exchange (6) • loading (7) • full (8) [Implementation] Same as the standard.	Y
9	ospfv3VirtNbrEvents {ospfv3VirtNbrEntry 7}	R/O	[Standard] Indicates the number of state changes or errors encountered in this interface. [Implementation] Same as the standard.	Y
10	ospfv3VirtNbrLsRetransQLen {ospfv3VirtNbrEntry 8}	R/O	[Standard] The current length of a resend queue. [Implementation] Same as the standard.	Y
11	ospfv3VirtNbrHelloSuppressed {ospfv3VirtNbrEntry 9}	R/O	[Standard] Indicates whether Hello is suppressed by the neighboring router. [Implementation] Same as the standard.	Y
12	ospfv3VirtNbrIfId {ospfv3VirtNbrEntry 10}	R/O	[Standard] The interface ID that the neighboring router advertises to this link with a Hello packet. [Implementation] Same as the standard.	Y

2.20.10 ospfv3AreaAggregateTable

(1) ID

```
ospfv3MIB OBJECT IDENTIFIER ::= {experimental 102}
ospfv3    OBJECT IDENTIFIER ::= {ospfv3MIB 1}

ospfv3AreaAggregateTable OBJECT IDENTIFIER ::= {ospfv3 11}
Object ID value  1.3.6.1.3.102.1.11
```

(2) Implementation specifications

The following table lists the implementation specifications for ospfv3AreaAggregateTable.

Table 2-69: ospfv3AreaAggregateTable Implementation Specifications

#	Object identifier	Access	Implementation specifications	Support?
1	ospfv3AreaAggregateTable {ospfv3 11}	NA	[Standard] A table of IPv6 prefixes that are specified as a pair made of prefix and prefix length. [Implementation] Same as the standard.	Y
2	ospfv3AreaAggregateEntry {ospfv3AreaAggregateTable 1}	NA	[Standard] A list of IPv6 prefixes that are specified as a pair made of prefix and prefix length. INDEX { ospfv3AreaAggregateAreaID, ospfv3AreaAggregateAreaLsdbType, ospfv3AreaAggregateIndex } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
3	ospfv3AreaAggregateAreaID {ospfv3AreaAggregateEntry 1}	R/O	[Standard] An area where addresses are aggregated. [Implementation] Same as the standard.	Y
4	ospfv3AreaAggregateAreaLsdbType {ospfv3AreaAggregateEntry 2}	R/O	[Standard] The address aggregation type. This entry indicates the type of link state database (LSDB) applied to this address aggregation: • interAreaPrefixLsa (`0x2003`) • nssaExternalLsa (`0x2007`) [Implementation] Same as the standard.	Y
5	ospfv3AreaAggregateIndex {ospfv3AreaAggregateEntry 3}	R/O	[Standard] The identifier of an aggregate table. [Implementation] Same as the standard.	Y
6	ospfv3AreaAggregatePrefix {ospfv3AreaAggregateEntry 4}	R/NW	[Standard] IPv6 prefix. [Implementation] Same as the standard. `Read_Only`.	Y
7	ospfv3AreaAggregatePrefixLen {ospfv3AreaAggregateEntry 5}	R/NW	[Standard] IPv6 prefix length. [Implementation] Same as the standard. `Read_Only`.	Y
8	ospfv3AreaAggregateStatus {ospfv3AreaAggregateEntry 6}	R/NW	[Standard] Indicates the status of this entry. [Implementation] Fixed value of active (`1`). `Read_Only`.	Y
9	ospfv3AreaAggregateEffect {ospfv3AreaAggregateEntry 7}	R/NW	[Standard] Indicates whether a subnet included in the range triggers the advertisement of the aggregated address, or remains a subnet without advertising the address outside the area: • advertiseMatching (`1`) • doNotAdvertiseMatching (`2`) [Implementation] Same as the standard. `Read_Only`.	Y

2.21 IEEE 8023-LAG-MIB group

Relevant standards for the IEEE 8023-LAG-MIB group are described in the following document:

- IEEE 8023-LAG-MIB (March 2000)

2.21.1 dot3adAgg group

(1) ID

```
member-body   OBJECT IDENTIFIER ::= {iso 2}
us            OBJECT IDENTIFIER ::= {member-body 840}
ieee802dot3   OBJECT IDENTIFIER ::= {us 10006}
snmpmibs      OBJECT IDENTIFIER ::= {ieee802dot3 300}
lagMIB        OBJECT IDENTIFIER ::= {snmpmibs 43}
lagMIBObjects OBJECT IDENTIFIER ::= {lagMIB 1}

dot3adAgg OBJECT IDENTIFIER ::= {lagMIBObjects 1}
Object ID value  1.2.840.10006.300.43.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot3adAgg group.

Table 2-70: dot3adAgg group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot3adAggTable {dot3adAgg 1}	NA	[Standard] A table of Aggregators in this system. [Implementation] Same as the standard.	Y
2	dot3adAggEntry {dot3adAggTable 1}	NA	[Standard] A list of Aggregator parameters. INDEX { ifIndex } [Implementation] Same as the standard.	Y
3	dot3adAggIndex {dot3adAggEntry 1}	NA	[Standard] The number that identifies the interface. [Implementation] Same as the standard.	Y
4	dot3adAggMACAddress {dot3adAggEntry 2}	R/O	[Standard] A MAC address assigned to an Aggregator. [Implementation] Same as the standard.	Y
5	dot3adAggActorSystemPriority {dot3adAggEntry 3}	R/NW	[Standard] A priority value associated with the system ID of the Actor. [Implementation] Same as the standard.	Y
6	dot3adAggActorSystemID {dot3adAggEntry 4}	R/NW	[Standard] A unique identifier for the system. [Implementation] Same as the standard.	Y
7	dot3adAggAggregateOrIndividual {dot3adAggEntry 5}	R/O	[Standard] Indicates whether the Aggregator performs link aggregation or treats links individually. [Implementation] Same as the standard.	Y
8	dot3adAggActorAdminKey {dot3adAggEntry 6}	R/O	[Standard] The current administrative key for the Aggregator. [Implementation] Same as the standard.	Y
9	dot3adAggActorOperKey {dot3adAggEntry 7}	R/O	[Standard] The current operational key for the Aggregator. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	dot3adAggPartnerSystemID {dot3adAggEntry 8}	R/O	[Standard] A MAC address that is the unique identifier of the current protocol partner for the Aggregator. [Implementation] Same as the standard.	Y
11	dot3adAggPartnerSystemPriority {dot3adAggEntry 9}	R/O	[Standard] A priority value associated with the system ID of the Partner. [Implementation] Same as the standard.	Y
12	dot3adAggPartnerOperKey {dot3adAggEntry 10}	R/O	[Standard] An operational key value for the current protocol partner of the Aggregator. [Implementation] Same as the standard.	Y
13	dot3adAggCollectorMaxDelay {dot3adAggEntry 11}	R/NW	[Standard] The maximum delay (10 microseconds) before a frame received by FrameCollector is sent from AggregatorParser to MACClient, or the maximum delay before the frame is discarded. [Implementation] Same as the standard.	Y
14	dot3adAggPortListTable {dot3adAgg 2}	NA	[Standard] A list of AggregationPorts connected to the Aggregator. [Implementation] Same as the standard.	Y
15	dot3adAggPortListEntry {dot3adAggPortListTable 1}	NA	[Standard] A list of ports associated with the Aggregator. [Implementation] Same as the standard.	Y
16	dot3adAggPortListPorts {dot3adAggPortListEntry 1}	R/O	[Standard] The full set of ports associated with the Aggregator. [Implementation] Same as the standard.	Y

2.21.2 dot3adAggPort group

(1) ID

```
member-body   OBJECT IDENTIFIER ::= {iso 2}
us            OBJECT IDENTIFIER ::= {member-body 840}
ieee802dot3   OBJECT IDENTIFIER ::= {us 10006}
snmpmibs      OBJECT IDENTIFIER ::= {ieee802dot3 300}
lagMIB        OBJECT IDENTIFIER ::= {snmpmibs 43}
lagMIBObjects OBJECT IDENTIFIER ::= {lagMIB 1}

dot3adAggPort OBJECT IDENTIFIER ::= {lagMIBObjects 2}
Object ID value  1.2.840.10006.300.43.1.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot3adAggPort dot3adAggPort group.

Table 2-71: dot3adAggPort group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot3adAggPortTable {dot3adAggPort 1}	NA	[Standard] The Link Aggregation Control configuration information for each AggregationPort. [Implementation] Same as the standard.	Y
2	dot3adAggPortEntry {dot3adAggPortTable 1}	NA	[Standard] A list of Link Aggregation Control configuration parameters for each AggregationPort. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
3	dot3adAggPortIndex {dot3adAggPortEntry 1}	NA	[Standard] The number that identifies the interface. [Implementation] Same as the standard.	Y
4	dot3adAggPortActorSystemPriority {dot3adAggPortEntry 2}	R/NW	[Standard] A priority value associated with the system ID of the Actor. [Implementation] Same as the standard.	Y
5	dot3adAggPortActorSystemID {dot3adAggPortEntry 3}	R/O	[Standard] A MAC address that determines the system ID value of the system for the AggregationPort. [Implementation] Same as the standard.	Y
6	dot3adAggPortActorAdminKey {dot3adAggPortEntry 4}	R/NW	[Standard] An administrative key for the AggregationPort. [Implementation] Same as the standard.	Y
7	dot3adAggPortActorOperKey {dot3adAggPortEntry 5}	R/O	[Standard] An operational key for the AggregationPort. [Implementation] Same as the standard.	Y
8	dot3adAggPortPartnerAdminSystemPriority {dot3adAggPortEntry 6}	R/NW	[Standard] An administrative priority value associated with the system ID of the Partner. [Implementation] Same as the standard.	Y
9	dot3adAggPortPartnerOperSystemPriority {dot3adAggPortEntry 7}	R/O	[Standard] An operational priority value associated with the system ID of the Partner. [Implementation] Same as the standard.	Y
10	dot3adAggPortPartnerAdminSystemID {dot3adAggPortEntry 8}	R/NW	[Standard] The system ID administrative value for the protocol partner of the AggregationPort. [Implementation] Fixed value of `00 00 00 00 00 00`.	Y
11	dot3adAggPortPartnerOperSystemID {dot3adAggPortEntry 9}	R/O	[Standard] The system ID operational value for the protocol partner. [Implementation] Same as the standard.	Y
12	dot3adAggPortPartnerAdminKey {dot3adAggPortEntry 10}	R/NW	[Standard] An administrative key value for the current protocol partner of the Aggregator. [Implementation] Fixed value of `0`.	Y
13	dot3adAggPortPartnerOperKey {dot3adAggPortEntry 11}	R/O	[Standard] An operational key for the protocol partner. [Implementation] Same as the standard.	Y
14	dot3adAggPortSelectedAggID {dot3adAggPortEntry 12}	R/O	[Standard] The identification value of the Aggregator for the AggregationPort. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
15	dot3adAggPortAttachedAggID {dot3adAggPortEntry 13}	R/O	[Standard] The identification value of the Aggregator on which the AggregationPort is installed. [Implementation] Same as the standard.	Y
16	dot3adAggPortActorPort {dot3adAggPortEntry 14}	R/O	[Standard] A port number assigned to the AggregationPort. [Implementation] Same as the standard.	Y
17	dot3adAggPortActorPortPriority {dot3adAggPortEntry 15}	R/NW	[Standard] A priority value assigned to the AggregationPort. [Implementation] Same as the standard.	Y
18	dot3adAggPortPartnerAdminPort {dot3adAggPortEntry 16}	R/NW	[Standard] The identification value of the Aggregator on which the AggregationPort is installed. [Implementation] Fixed value of `0`.	Y
19	dot3adAggPortPartnerOperPort {dot3adAggPortEntry 17}	R/O	[Standard] An operational port number that is assigned to the AggregationPort by its protocol partner. [Implementation] Same as the standard.	Y
20	dot3adAggPortPartnerAdminPortPriority {dot3adAggPortEntry 18}	R/NW	[Standard] An administrative port priority value for the protocol partner. [Implementation] Fixed value of `0`.	Y
21	dot3adAggPortPartnerOperPortPriority {dot3adAggPortEntry 19}	R/O	[Standard] A priority value that is assigned to the AggregationPort by the partner. [Implementation] Same as the standard.	Y
22	dot3adAggPortActorAdminState {dot3adAggPortEntry 20}	R/NW	[Standard] An administrative `Actor_State` value sent by the Actor in LACPDUs. [Implementation] Same as the standard. Manager displays the value as text.	Y
23	dot3adAggPortActorOperState {dot3adAggPortEntry 21}	R/O	[Standard] An operational `Actor_State` value sent by the Actor in LACPDUs. [Implementation] Same as the standard. Manager displays the value as text.	Y
24	dot3adAggPortPartnerAdminState {dot3adAggPortEntry 22}	R/NW	[Standard] An administrative `Actor_State` value for the protocol partner. [Implementation] Fixed value of `(01000100)2`. Manager displays the value as text.	Y
25	dot3adAggPortPartnerOperState {dot3adAggPortEntry 23}	R/O	[Standard] An `Actor_State` value sent by the protocol partner in the most recent LACPDUs. [Implementation] Same as the standard. Manager displays the value as text.	Y
26	dot3adAggPortAggregateOrIndividual {dot3adAggPortEntry 24}	R/O	[Standard] Indicates whether the AggregationPort can be aggregated or can only be operated as an individual link. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
27	dot3adAggPortStatsTable {dot3adAggPort 2}	NA	[Standard] A table of Link Aggregation information for each port. [Implementation] Same as the standard.	Y
28	dot3adAggPortStatsEntry {dot3adAggPortStatsTable 1}	NA	[Standard] A list of Link Aggregation control protocol statistics for each port. [Implementation] Same as the standard.	Y
29	dot3adAggPortStatsLACPDUsRx {dot3adAggPortStatsEntry 1}	R/O	[Standard] The number of valid LACPDUs received on the AggregationPort. [Implementation] Same as the standard.	Y
30	dot3adAggPortStatsMarkerPDUsRx {dot3adAggPortStatsEntry 2}	R/O	[Standard] The number of valid MarkerPDUs received on the AggregationPort. [Implementation] Same as the standard.	Y
31	dot3adAggPortStatsMarkerResponsePDUsRx {dot3adAggPortStatsEntry 3}	R/O	[Standard] The number of valid MarkerResponsePDUs received on the AggregationPort. [Implementation] Same as the standard.	Y
32	dot3adAggPortStatsUnknownRx {dot3adAggPortStatsEntry 4}	R/O	[Standard] The number of frames received that were either carried as a Slow Protocols Ethernet type value (88-09) but contained an unknown PDU, or were addressed to the Slow Protocols group MAC address (0180.C200.0002) but not carried as a Slow Protocols Ethernet type. [Implementation] Same as the standard.	Y
33	dot3adAggPortStatsIllegalRx {dot3adAggPortStatsEntry 5}	R/O	[Standard] The number of frames received that were either carried as a Slow Protocols Ethernet type value (88-09) but contained an unknown PDU, or contained an invalid Protocol Subtype value. [Implementation] Same as the standard.	Y
34	dot3adAggPortStatsLACPDUsTx {dot3adAggPortStatsEntry 6}	R/O	[Standard] The number of LACPDUs sent on the AggregationPort. [Implementation] Same as the standard.	Y
35	dot3adAggPortStatsMarkerPDUsTx {dot3adAggPortStatsEntry 7}	R/O	[Standard] The number of MarkerPDUs sent on the AggregationPort. [Implementation] Fixed value of 0.	Y
36	dot3adAggPortStatsMarkerResponsePDUsTx {dot3adAggPortStatsEntry 8}	R/O	[Standard] The number of MarkerResponsePDUs sent on the AggregationPort. [Implementation] Same as the standard.	Y
37	dot3adAggPortDebugTable {dot3adAggPort 3}	NA	[Standard] A table of link aggregation debug information for each port. [Implementation] Same as the standard.	Y
38	dot3adAggPortDebugEntry {dot3adAggPortDebugTable 1}	NA	[Standard] A list of debug parameters for a port. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
39	dot3adAggPortDebugRxState {dot3adAggPortDebugEntry 1}	R/O	[Standard] The state of the Receive state machine for the AggregationPort: • currentRx (1) • expired (2) • defaulted (3) • initialize (4) • lacpDisabled (5) • portDisabled (6) [Implementation] Same as the standard.	Y
40	dot3adAggPortDebugLastRxTime {dot3adAggPortDebugEntry 2}	R/O	[Standard] The aTimeSinceSystemReset value for when the AggregationPort received the last LACPDUs. [Implementation] Same as the standard.	Y
41	dot3adAggPortDebugMuxState {dot3adAggPortDebugEntry 3}	R/O	[Standard] The state of the Mux state machine for the AggregationPort: • detached (1) • waiting (2) • attached (3) • collecting (4) • distributing (5) • collecting_distributing (6) [Implementation] Same as the standard.	Y
42	dot3adAggPortDebugMuxReason {dot3adAggPortDebugEntry 4}	R/O	[Standard] The reason for the most recent state change of the Mux state machine. [Implementation] Same as the standard.	Y
43	dot3adAggPortDebugActorChurnState {dot3adAggPortDebugEntry 5}	R/O	[Standard] The state of the ActorChurnDetection state machine for the AggregationPort. [Implementation] Same as the standard.	Y
44	dot3adAggPortDebugPartnerChurnState {dot3adAggPortDebugEntry 6}	R/O	[Standard] The state of the PartnerChurnDetection state machine for the AggregationPort. [Implementation] Same as the standard.	Y
45	dot3adAggPortDebugActorChurnCount {dot3adAggPortDebugEntry 7}	R/O	[Standard] The number of times the state of the ActorChurn state machine changed to ACTOR_CHURN. [Implementation] Same as the standard.	Y
46	dot3adAggPortDebugPartnerChurnCount {dot3adAggPortDebugEntry 8}	R/O	[Standard] The number of times the state of the PartnerChurn state machine changed to PARTNER_CHURN. [Implementation] Same as the standard.	Y
47	dot3adAggPortDebugActorSyncTransitionCount {dot3adAggPortDebugEntry 9}	R/O	[Standard] The number of times the state of the Mux state machine for the Actor changed to IN_SYNC. [Implementation] Same as the standard.	Y
48	dot3adAggPortDebugPartnerSyncTransitionCount {dot3adAggPortDebugEntry 10}	R/O	[Standard] The number of times the state of the Mux state machine for the Partner changed to IN_SYNC. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
49	dot3adAggPortDebugActorChangeCount {dot3adAggPortDebugEntry 11}	R/O	[Standard] The number of times the Actor's perception of the LAG ID for the AggregationPort changed. [Implementation] Same as the standard.	Y
50	dot3adAggPortDebugPartnerChangeCount {dot3adAggPortDebugEntry 12}	R/O	[Standard] The number of times the Partner's perception of the LAG ID for the AggregationPort changed. [Implementation] Same as the standard.	Y

2.21.3 dot3adTablesLastChanged group

(1) ID

```
member-body   OBJECT IDENTIFIER ::= {iso 2}
us            OBJECT IDENTIFIER ::= {member-body 840}
ieee802dot3   OBJECT IDENTIFIER ::= {us 10006}
snmpmibs      OBJECT IDENTIFIER ::= {ieee802dot3 300}
lagMIB        OBJECT IDENTIFIER ::= {snmpmibs 43}
lagMIBObjects OBJECT IDENTIFIER ::= {lagMIB 1}

dot3adTablesLastChanged OBJECT IDENTIFIER ::= {lagMIBObjects 3}
Object ID value  1.2.840.10006.300.43.1.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot3adTablesLastChanged group.

Table 2-72: dot3adTablesLastChanged group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot3adTablesLastChanged { lagMIBObjects 3 }	R/O	[Standard] When changes recently occurred to dot3adAggTable, dot3adAggPortListTable, or dot3adAggPortTable. [Implementation] Same as the standard.	Y

2.22 IEEE 802.1X MIB group

Relevant standards for the IEEE 802.1X MIB group are described in the following document:

- IEEE 8021-PAE-MIB (June 2001)

(1) ID

```
std             OBJECT IDENTIFIER ::= {iso 0}
iso8802         OBJECT IDENTIFIER ::= {std 8802}
ieee802dot1     OBJECT IDENTIFIER ::= {iso8802 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021paeMIB  OBJECT IDENTIFIER ::= {ieee802dot1mibs 1}
paeMIBObjects   OBJECT IDENTIFIER ::= {ieee8021paeMIB 1}

dot1xPaeSystem OBJECT IDENTIFIER ::= {paeMIBObjects 1}
Object ID value  1.0.8802.1.1.1.1.1

dot1xPaeAuthenticator OBJECT IDENTIFIER ::= {paeMIBObjects 2}
Object ID value  1.0.8802.1.1.1.1.2

dot1xPaeSupplicant OBJECT IDENTIFIER ::= {paeMIBObjects 3}
Object ID value  1.0.8802.1.1.1.1.3

dot1xPaeConformance OBJECT IDENTIFIER ::= {ieee8021paeMIB 2}
dot1xPaeGroups      OBJECT IDENTIFIER ::= {dot1xPaeConformance 1}
Object ID value  1.0.8802.1.1.1.2.1

dot1xPaeCompliances OBJECT IDENTIFIER ::= {dot1xPaeConformance 2}
Object ID value  1.0.8802.1.1.1.2.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the IEEE 802.1X MIB group.

Table 2-73: IEEE 802.1X MIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1xPaeSystemAuthControl {dot1xPaeSystem 1}	R/NW	[Standard] The administratively enabled or disabled state (INTEGER) of the PAE (Port Access Entity) for the entire device: • enabled (1) • disabled (2) [Implementation] Same as the standard.	Y
2	dot1xPaePortTable {dot1xPaeSystem 2}	NA	[Standard] A table of system-level information for each PAE port. [Implementation] Same as the standard.	Y
3	dot1xPaePortEntry {dot1xPaePortTable 1}	NA	[Standard] A list of port-specific information. INDEX { dot1xPaePortNumber } [Implementation] Same as the standard.	Y
4	dot1xPaePortNumber {dot1xPaePortEntry 1}	NA	[Standard] A PAE port number. This number is used as an index to identify the table. [Implementation] Same as the standard. ifIndex is added to one of the following interfaces: • Ethernet physical port • VLAN group • Channel group For VLAN-based authentication (dynamic), this is represented by the following value (although this value does not conform to the standard): • The maximum value of the ifIndex for the VLAN group, plus one	Y

#	Object identifier	Access	Implementation specifications	Support?
5	dot1xPaePortProtocolVersion {dot1xPaePortEntry 2}	R/O	[Standard] The protocol version. [Implementation] Fixed value of `0x01`.	Y
6	dot1xPaePortCapabilities {dot1xPaePortEntry 3}	R/O	[Standard] The PAE capability (BITS) supported by the port: • dot1xPaePortAuthCapable (`0`) • dot1xPaePortSuppCapable (`1`) [Implementation] Fixed value of dot1xPaePortAuthCapable (`0`).	Y
7	dot1xPaePortInitialize {dot1xPaePortEntry 4}	R/NW	[Standard] Initialization control for the port. When this attribute is set to `TRUE`, the port is initialized. The attribute returns to `FALSE` after initialization has finished. [Implementation] Same as the standard.	Y
8	dot1xPaePortReauthenticate {dot1xPaePortEntry 5}	R/NW	[Standard] Re-authentication control for the port. When this attribute is set to `TRUE`, the Authenticator PAE state machine for the port re-authenticates the Supplicant. There is no effect when this attribute is set to `FALSE`. This attribute returns to `FALSE` whenever it is read. [Implementation] Same as the standard.	Y
9	dot1xAuthConfigTable {dot1xPaeAuthenticator 1}	NA	[Standard] A table of configuration objects for the Authenticator PAE associated with each port. The table contains a list of ports that can be authenticated for access. [Implementation] Almost the same as the standard.	Y
10	dot1xAuthConfigEntry {dot1xAuthConfigTable 1}	NA	[Standard] A list of configuration information for the Authenticator PAE. INDEX { dot1xPaePortNumber } [Implementation] Same as the standard.	Y
11	dot1xAuthPaeState {dot1xAuthConfigEntry 1}	R/O	[Standard] The current value of the Authenticator PAE state machine: • initialize (`1`) • disconnected (`2`) • connecting (`3`) • authenticating (`4`) • authenticated (`5`) • aborting (`6`) • held (`7`) • forceAuth (`8`) • forceUnauth (`9`) [Implementation] Same as the standard.	Y
12	dot1xAuthBackendAuthState {dot1xAuthConfigEntry 2}	R/O	[Standard] The current value of the back-end authentication state machine: • request (`1`) • response (`2`) • success (`3`) • fail (`4`) • timeout (`5`) • idle (`6`) • initialize (`7`) [Implementation] Same as the standard.	Y
13	dot1xAuthAdminControlledDirections {dot1xAuthConfigEntry 3}	R/NW	[Standard] The current value of the administratively controlled directions parameter for the port. [Implementation] Fixed value of both (`0`).	Y

#	Object identifier	Access	Implementation specifications	Support?
14	dot1xAuthOperControlledDirections {dot1xAuthConfigEntry 4}	R/O	[Standard] The current value of the operationally controlled directions parameter for the port. [Implementation] Fixed value of both (0).	Y
15	dot1xAuthAuthControlledPortStatus {dot1xAuthConfigEntry 5}	R/O	[Standard] The current value of the control port state parameter for the port. [Implementation] Same as the standard.	Y
16	dot1xAuthAuthControlledPortControl {dot1xAuthConfigEntry 6}	R/NW	[Standard] The current value of the control port control parameter for the port. [Implementation] Same as the standard.	Y
17	dot1xAuthQuietPeriod {dot1xAuthConfigEntry 7}	R/NW	[Standard] The current quietPeriod constant value (in seconds) used by the Authenticator PAE state machine. DEFVAL {60} [Implementation] Same as the standard (0-65535).	Y
18	dot1xAuthTxPeriod {dot1xAuthConfigEntry 8}	R/NW	[Standard] The current txPeriod constant value (in seconds) used by the Authenticator PAE state machine. DEFVAL {30} [Implementation] Same as the standard (1-65535).	Y
19	dot1xAuthSuppTimeout {dot1xAuthConfigEntry 9}	R/NW	[Standard] The current suppTimeout constant value (in seconds) used by the back-end authentication state machine. DEFVAL {30} [Implementation] Same as the standard (1-65535).	Y
20	dot1xAuthServerTimeout {dot1xAuthConfigEntry 10}	R/NW	[Standard] The current serverTimeout constant value (in seconds) used by the back-end authentication state machine. DEFVAL {30} [Implementation] Same as the standard.	Y
21	dot1xAuthMaxReq {dot1xAuthConfigEntry 11}	R/NW	[Standard] The current maxReq constant value used by the back-end authentication state machine. DEFVAL {2} [Implementation] Same as the standard (1-10).	Y
22	dot1xAuthReAuthPeriod {dot1xAuthConfigEntry 12}	R/NW	[Standard] The current reAuthperiod constant value (in seconds) used by the re-authentication timer state machine. DEFVAL {3600} [Implementation] 0 or 1-65535. The default is 3600. A value of 0 indicates that the Switch does not autonomously send an EAPOL-Request/Identity for re-authentication.	Y
23	dot1xAuthReAuthEnabled {dot1xAuthConfigEntry 13}	R/NW	[Standard] The enable-or-disable control used by the re-authentication timer state machine. DEFVAL {false (2)} [Implementation] Same as the standard.	Y
24	dot1xAuthKeyTxEnabled {dot1xAuthConfigEntry 14}	R/NW	[Standard] The current keyTransmissionEnabled constant value used by the Authenticator PAE state machine. [Implementation] Fixed value of false (2).	Y
25	dot1xAuthStatsTable {dot1xPaeAuthenticator 2}	NA	[Standard] A table of statistics objects for the Authenticator PAE associated with each port. The table contains a list of ports that can be authenticated for access. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
26	dot1xAuthStatsEntry {dot1xAuthStatsTable 1}	NA	[Standard] Statistics for an Authenticator PAE. INDEX { dot1xPaePortNumber } [Implementation] Same as the standard.	Y
27	dot1xAuthEapolFramesRx {dot1xAuthStatsEntry 1}	R/O	[Standard] The number of all the valid EAPOL frames of each type received by the Authenticator. [Implementation] Same as the standard.	Y
28	dot1xAuthEapolFramesTx {dot1xAuthStatsEntry 2}	R/O	[Standard] The number of all the EAPOL frames of each type sent by the Authenticator. [Implementation] Same as the standard.	Y
29	dot1xAuthEapolStartFramesRx {dot1xAuthStatsEntry 3}	R/O	[Standard] The number of EAPOL Start frames received by the Authenticator. [Implementation] Same as the standard.	Y
30	dot1xAuthEapolLogoffFramesRx {dot1xAuthStatsEntry 4}	R/O	[Standard] The number of EAPOL Logoff frames received by the Authenticator. [Implementation] Same as the standard.	Y
31	dot1xAuthEapolRespIdFramesRx {dot1xAuthStatsEntry 5}	R/O	[Standard] The number of EAP Response/Identity frames received by the Authenticator. [Implementation] Same as the standard.	Y
32	dot1xAuthEapolRespFramesRx {dot1xAuthStatsEntry 6}	R/O	[Standard] The number of EAP Response frames received by the Authenticator, excluding the EAP Response/Identity frames. [Implementation] Same as the standard.	Y
33	dot1xAuthEapolReqIdFramesTx {dot1xAuthStatsEntry 7}	R/O	[Standard] The number of EAP Request/Identity frames sent by the Authenticator. [Implementation] Same as the standard.	Y
34	dot1xAuthEapolReqFramesTx {dot1xAuthStatsEntry 8}	R/O	[Standard] The number of EAP Request frames sent by the Authenticator, excluding the EAP Request/Identity frames. [Implementation] Same as the standard.	Y
35	dot1xAuthInvalidEapolFramesRx {dot1xAuthStatsEntry 9}	R/O	[Standard] The number of EAPOL frames that were received by the Authenticator, but whose frame type was not recognized. [Implementation] Same as the standard.	Y
36	dot1xAuthEapLengthErrorFramesRx {dot1xAuthStatsEntry 10}	R/O	[Standard] The number of EAPOL frames that were received by the Authenticator, but whose Packet Body Length was invalid. [Implementation] Same as the standard.	Y
37	dot1xAuthLastEapolFrameVersion {dot1xAuthStatsEntry 11}	R/O	[Standard] The protocol version number of the last EAPOL frame received by the Authenticator. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
38	dot1xAuthLastEapolFrameSource {dot1xAuthStatsEntry 12}	R/O	[Standard] The source MAC Address of the last EAPOL frame received by the Authenticator. [Implementation] Same as the standard.	Y
39	dot1xAuthDiagTable {dot1xPaeAuthenticator 3}	NA	[Standard] A table of diagnostic objects for the Authenticator PAE associated with each port. The table contains a list of ports that can be authenticated for access. [Implementation] Same as the standard.	Y
40	dot1xAuthDiagEntry {dot1xAuthDiagTable 1}	NA	[Standard] A list of diagnostic information about an Authenticator PAE. INDEX { dot1xPaePortNumber } [Implementation] Same as the standard.	Y
41	dot1xAuthEntersConnecting {dot1xAuthDiagEntry 1}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed to CONNECTING. [Implementation] Same as the standard.	Y
42	dot1xAuthEapLogoffsWhileConnecting {dot1xAuthDiagEntry 2}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from CONNECTING to DISCONNECTED because an EAPOL Logoff message was received. [Implementation] Same as the standard.	Y
43	dot1xAuthEntersAuthenticating {dot1xAuthDiagEntry 3}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from CONNECTING to AUTHENTICATING because an EAP Response/Identity message was received from a Supplicant. [Implementation] Same as the standard.	Y
44	dot1xAuthAuthSuccessWhileAuthenticating {dot1xAuthDiagEntry 4}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATING to AUTHENTICATED because the back-end authentication state machine indicated the Supplicant authentication was successful (authSuccess = TRUE). [Implementation] Same as the standard.	Y
45	dot1xAuthAuthTimeoutsWhileAuthenticating {dot1xAuthDiagEntry 5}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATING to ABORTING because the back-end authentication state machine indicated a authentication timeout (authTimeout = TRUE). [Implementation] Same as the standard.	Y
46	dot1xAuthAuthFailWhileAuthenticating {dot1xAuthDiagEntry 6}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATING to HELD because the back-end authentication state machine indicated there was an authentication failure (authFail = TRUE). [Implementation] Same as the standard.	Y
47	dot1xAuthAuthReauthsWhileAuthenticating {dot1xAuthDiagEntry 7}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATING to ABORTING because there was a re-authentication request (reAuthenticate = TRUE). [Implementation] Same as the standard.	Y
48	dot1xAuthAuthEapStartsWhileAuthenticating {dot1xAuthDiagEntry 8}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATING to ABORTING because an EAPOL Start message was received from a Supplicant. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
49	dot1xAuthAuthEapLogoffWhileAuthenticating {dot1xAuthDiagEntry 9}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATING to ABORTING because an EAPOL Logoff message was received from a Supplicant. [Implementation] Same as the standard.	Y
50	dot1xAuthAuthReauthsWhileAuthenticated {dot1xAuthDiagEntry 10}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATED to CONNECTING because there was a re-authentication request (reAuthenticate = TRUE). [Implementation] Same as the standard.	Y
51	dot1xAuthAuthEapStartsWhileAuthenticated {dot1xAuthDiagEntry 11}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATED to CONNECTING because an EAPOL Start message was received from a Supplicant. [Implementation] Same as the standard.	Y
52	dot1xAuthAuthEapLogoffWhileAuthenticated {dot1xAuthDiagEntry 12}	R/O	[Standard] The number of times the state of the Authenticator PAE state machine changed from AUTHENTICATED to DISCONNECTED because an EAPOL Logoff message was received from a Supplicant. [Implementation] Same as the standard.	Y
53	dot1xAuthBackendResponses {dot1xAuthDiagEntry 13}	R/O	[Standard] The number of times the back-end authentication state machine sent the first Access Request packet to the authentication server (by executing sendRespToServer when in a RESPONSE state). [Implementation] Same as the standard.	Y
54	dot1xAuthBackendAccessChallenges {dot1xAuthDiagEntry 14}	R/O	[Standard] The number of times the back-end authentication state machine received the first Access Challenge packet from the authentication server (that is, aReq was set to `TRUE`, causing the RESPONSE state to end). [Implementation] Same as the standard.	Y
55	dot1xAuthBackendOtherRequestsToSupplicant {dot1xAuthDiagEntry 15}	R/O	[Standard] The number of times the back-end authentication state machine sent an EAP Request (other than an Identity, Notification, Failure, or Success message) to a Supplicant (by executing txReq when in a REQUEST state). This implies that the Authenticator selects an EAP method. [Implementation] Same as the standard.	Y
56	dot1xAuthBackendNonNakResponsesFromSupplicant {dot1xAuthDiagEntry 16}	R/O	[Standard] The number of times the back-end authentication state machine received a response to the first EAP Request or a non-EAP NAK response from a Supplicant (that is, rxResp was set to `TRUE`, causing the state of the back-end state machine to change from REQUEST to RESPONSE). (The response is not EAP NAK.) This implies that the Supplicant can respond to the EAP method selected by the Authenticator. [Implementation] Same as the standard.	Y
57	dot1xAuthBackendAuthSuccesses {dot1xAuthDiagEntry 17}	R/O	[Standard] The number of times the back-end authentication state machine received an EAP Success message from the authentication server (that is, aSuccess was set to `TRUE` and the state of the back-end authentication state machine changed from RESPONSE to SUCCESS). This implies that the Supplicant was authenticated by the authentication server. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
58	dot1xAuthBackendAuthFails {dot1xAuthDiagEntry 18}	R/O	[Standard] The number of times the back-end authentication state machine received an EAP Failure message from the authentication server (that is, aFail was set to TRUE and the state of the back-end authentication state machine changed from RESPONSE to FAIL). This implies that the Supplicant was not authenticated by the authentication server. [Implementation] Same as the standard.	Y
59	dot1xAuthSessionStatsTable {dot1xPaeAuthenticator 4}	NA	[Standard] A table of session statistics objects for the Authenticator PAE associated with each port. The table contains a list of ports that can be authenticated for access. [Implementation] Same as the standard.	Y
60	dot1xAuthSessionStatsEntry {dot1xAuthSessionStats Table 1}	NA	[Standard] A list of session statistics for an Authenticator PAE. A set of counts collected for a session that is currently in progress, or a set of the last counts collected for the last valid session of a currently inactive port. INDEX { dot1xPaePortNumber } [Implementation] Almost the same as the standard.	Y
61	dot1xAuthSessionOctetsRx {dot1xAuthSessionStats Entry 1}	R/O	[Standard] The number of octets in the user data frames received on the port during the session. [Implementation] Fixed value of 0.	Y
62	dot1xAuthSessionOctetsTx {dot1xAuthSessionStats Entry 2}	R/O	[Standard] The number of octets in the user data frames sent on the port during the session. [Implementation] Fixed value of 0.	Y
63	dot1xAuthSessionFramesRx {dot1xAuthSessionStats Entry 3}	R/O	[Standard] The number of user data frames received on the port during the session. [Implementation] Fixed value of 0.	Y
64	dot1xAuthSessionFramesTx {dot1xAuthSessionStats Entry 4}	R/O	[Standard] The number of user data frames sent on the port during the session. [Implementation] Fixed value of 0.	Y
65	dot1xAuthSessionId {dot1xAuthSessionStats Entry 5}	R/O	[Standard] The unique identifier of the session. The identifier is a character string made up of three or more displayable ASCII characters. [Implementation] Same as the standard.	Y
66	dot1xAuthSessionAuthenticMethod {dot1xAuthSessionStats Entry 6}	R/O	[Standard] The authentication type used to establish the session (INTEGER): • remoteAuthServer (1) • localAuthServer (2) [Implementation] This is valid only when the session is established and is fixed to a value of remoteAuthServer (1). When the session is closed, this attribute becomes invalid and is set to 0.	Y
67	dot1xAuthSessionTime {dot1xAuthSessionStats Entry 7}	R/O	[Standard] The session hold time (in seconds). [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
68	dot1xAuthSessionTerminateCause {dot1xAuthSessionStatsEntry 8}	R/O	[Standard] The reason the session ended: • supplicantLogoff (1) • portFailure (2) • supplicantRestart (3) • reauthFailed (4) • authControlForceUnauth (5) • portReInit (6) • portAdminDisabled (7) • notTerminatedYet (999) [Implementation] Same as the standard. If no session has been established, this is set to 0, because there is no reason to end a session that does not exist.	Y
69	dot1xAuthSessionUserName {dot1xAuthSessionStatsEntry 9}	R/O	[Standard] A user name that identifies the Supplicant PAE. [Implementation] Implemented.	Y
70	dot1xSuppConfigTable {dot1xPaeSupplicant 1}	NA	[Standard] A table of configuration objects for the Supplicant PAE associated with each port. The table contains a list of ports that can be authenticated for access by a remote system. [Implementation] Not implemented.	N
71	dot1xSuppConfigEntry {dot1xSuppConfigTable 1}	NA	[Standard] A list of configuration information about a Supplicant PAE. INDEX { dot1xPaePortNumber } [Implementation] Not implemented.	N
72	dot1xSuppPaeState {dot1xSuppConfigEntry 1}	R/O	[Standard] The current state of the Supplicant PAE state machine: • disconnected (1) • logoff (2) • connecting (3) • authenticating (4) • authenticated (5) • acquired (6) • held (7) [Implementation] Not implemented.	N
73	dot1xSuppHeldPeriod {dot1xSuppConfigEntry 2}	R/W	[Standard] The current heldPeriod constant value (in seconds) used by the Supplicant PAE state machine. DEFVAL {60} [Implementation] Not implemented.	N
74	dot1xSuppAuthPeriod {dot1xSuppConfigEntry 3}	R/W	[Standard] The current authPeriod constant value (in seconds) used by the Supplicant PAE state machine. DEFVAL {30} [Implementation] Not implemented.	N
75	dot1xSuppStartPeriod {dot1xSuppConfigEntry 4}	R/W	[Standard] The current startPeriod constant value (in seconds) used by the Supplicant PAE state machine. DEFVAL {30} [Implementation] Not implemented.	N
76	dot1xSuppMaxStart {dot1xSuppConfigEntry 5}	R/W	[Standard] The current maxStart constant value (in seconds) used by the Supplicant PAE state machine. DEFVAL {3} [Implementation] Not implemented.	N

#	Object identifier	Access	Implementation specifications	Support?
77	dot1xSuppStatsTable {dot1xPaeSupplicant 2}	NA	[Standard] A table of statistics objects for the Supplicant PAE associated with each port. The table contains a list of ports that can be authenticated for access by a remote system. [Implementation] Not implemented.	N
78	dot1xSuppStatsEntry {dot1xSuppStatsTable 1}	NA	[Standard] A list of configuration information about a Supplicant PAE. INDEX { dot1xPaePortNumber } [Implementation] Not implemented.	N
79	dot1xSuppEapolFramesRx {dot1xSuppStatsEntry 1}	R/O	[Standard] The number of all the EAPOL frames of each type received by the Supplicant. [Implementation] Not implemented.	N
80	dot1xSuppEapolFramesTx {dot1xSuppStatsEntry 2}	R/O	[Standard] The number of all the EAPOL frames of each type sent by the Supplicant. [Implementation] Not implemented.	N
81	dot1xSuppEapolStartFramesTx {dot1xSuppStatsEntry 3}	R/O	[Standard] The number of EAPOL Start frames sent by the Supplicant. [Implementation] Not implemented.	N
82	dot1xSuppEapolLogoffFramesTx {dot1xSuppStatsEntry 4}	R/O	[Standard] The number of EAPOL Logoff frames sent by the Supplicant. [Implementation] Not implemented.	N
83	dot1xSuppEapolRespIdFramesTx {dot1xSuppStatsEntry 5}	R/O	[Standard] The number of EAP Response/Identity frames sent by the Supplicant. [Implementation] Not implemented.	N
84	dot1xSuppEapolRespFramesTx {dot1xSuppStatsEntry 6}	R/O	[Standard] The number of valid EAP Response frames sent by the Supplicant (excluding Response/Identity frames). [Implementation] Not implemented.	N
85	dot1xSuppEapolReqIdFramesRx {dot1xSuppStatsEntry 7}	R/O	[Standard] The number of EAP Request/Identity frames received by the Supplicant. [Implementation] Not implemented.	N
86	dot1xSuppEapolReqFramesRx {dot1xSuppStatsEntry 8}	R/O	[Standard] The number of EAP Request frames received by the Supplicant (excluding Request/Identity frames). [Implementation] Not implemented.	N
87	dot1xSuppInvalidEapolFramesRx {dot1xSuppStatsEntry 9}	R/O	[Standard] The number of EAPOL frames that were received by the Supplicant, but whose frame type was not recognized. [Implementation] Not implemented.	N
88	dot1xSuppEapLengthErrorFramesRx {dot1xSuppStatsEntry 10}	R/O	[Standard] The number of EAPOL frames that were received by the Supplicant, but whose Packet Body Length was invalid. [Implementation] Not implemented.	N

#	Object identifier	Access	Implementation specifications	Support?
89	dot1xSuppLastEapolFrameVersion {dot1xSuppStatsEntry 11}	R/O	[Standard] The protocol version number of the last EAPOL frame received by the Supplicant. [Implementation] Not implemented.	N
90	dot1xSuppLastEapolFrameSource {dot1xSuppStatsEntry 12}	R/O	[Standard] The source MAC address of the last EAPOL frame received by the Supplicant. [Implementation] Not implemented.	N

2.23 snmpModules group

2.23.1 snmpFrameworkMIB group (SNMP FRAMEWORK MIB)

Relevant standards for the snmpFrameworkMIB group are described in the following document:

- RFC 3411 (December 2002)

(1) ID

```
snmpFrameworkMIB MODULE-IDENTITY ::= {snmpModules 10}

snmpFrameworkMIBObjects OBJECT IDENTIFIER ::= {snmpFrameworkMIB 2}
Object ID value  1.3.6.1.6.3.10.2

snmpEngine              OBJECT IDENTIFIER ::= {snmpFrameworkMIBObjects 1}
Object ID value  1.3.6.1.6.3.10.2.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the snmpFrameworkMIB group.

Table 2-74: snmpFrameworkMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	snmpEngineID {snmpEngine 1}	R/O	[Standard] An ID for SNMP engine management. This ID is never set to all `0` or all `0xff`, or empty (0-byte length). [Implementation] This is set by using the `snmp-server engineID local` configuration command, or it is automatically generated by an agent. If the ID is set by using the `snmp-server engineID local` configuration command: 1st to 4th octets: A value obtained by bit OR of an enterprise code and `0x80000000`. 5th octet: Fixed value of `4`. 6th to 32nd octets: A character string of no more than 27 characters set by using the configuration command. If automatically generated by an agent: 1st to 4th octets: A value obtained by bit OR of an enterprise code and `0x80000000`. 5th octet: Fixed value of `128`. 6th to 9th octets: A random number. 10th to 13th octets: Current time.	Y
2	snmpEngineBoots {snmpEngine 2}	R/O	[Standard] The number of times re-initialization has occurred since snmpEngineID was last set. [Implementation] Same as the standard.	Y
3	snmpEngineTime {snmpEngine 3}	R/O	[Standard] The time that has elapsed (in seconds) since snmpEngineBoots was incremented. If the maximum is exceeded, the time is reset to `0`, and the snmpEngineBoots is incremented. [Implementation] Same as the standard.	Y
4	snmpEngineMaxMessageSize {snmpEngine 4}	R/O	[Standard] The maximum message size that can be sent and received by the SNMP engine. [Implementation] Fixed value of `2048`.	Y

2.23.2 snmpMPDMIB group (SNMP MPD MIB)

Relevant standards for the snmpMPDMIB group are described in the following document:

- RFC 3412 (December 2002)

(1) ID

```
snmpMPDMIB MODULE-IDENTITY ::= {snmpModules 11}

snmpMPDMIBObjects OBJECT IDENTIFIER ::= {snmpMPDMIB 2}
Object ID value  1.3.6.1.6.3.11.2

snmpMPDStats      OBJECT IDENTIFIER ::= {snmpMPDMIBObjects 1}
Object ID value  1.3.6.1.6.3.11.2.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the snmpMPDMIB group.

Table 2-75: snmpMPDMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	snmpUnknownSecurity Models {snmpMPDStats 1}	R/O	[Standard] The total number of packets that are received but discarded due to an unsupported security model. [Implementation] Same as the standard.	Y
2	snmpInvalidMsgs {snmpMPDStats 2}	R/O	[Standard] The total number of packets that are received but discarded due to an invalid message. [Implementation] Same as the standard.	Y
3	snmpUnknownPDUHandlers {snmpMPDStats 3}	R/O	[Standard] The total number of packets that are received but discarded because there was a PDU that could not be processed by an application. [Implementation] Same as the standard.	Y

2.23.3 snmpTargetMIB group (SNMP TARGET MIB)

Relevant standards for the snmpTargetMIB group are described in the following document:

- RFC 3413 (December 2002)

(1) ID

```
snmpTargetMIB MODULE-IDENTITY ::= {snmpModules 12}

snmpTargetObjects OBJECT IDENTIFIER ::= {snmpTargetMIB 1}
Object ID value  1.3.6.1.6.3.12.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the snmpTargetMIB group.

Table 2-76: snmpTargetMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	snmpTargetSpinLock {snmpTargetObjects 1}	R/NW	[Standard] Used for locking if multiple managers request the modification of the table entries in the SNMP-TARGET-MIB module. [Implementation] Same as the standard. `Read_Only`.	Y
2	snmpTargetAddrTable {snmpTargetObjects 2}	NA	[Standard] A table of transmission addresses used in SNMP message generation. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
3	snmpTargetAddrEntry {snmpTargetAddrTable 1}	NA	[Standard] An entry for a transmission address used in SNMP message generation. INDEX { IMPLIED snmpTargetAddrName } [Implementation] Same as the standard.	Y
4	snmpTargetAddrName {snmpTargetAddrEntry 1}	NA	[Standard] The name of the snmpTargetAddEntry object. [Implementation] Same as the standard. This corresponds to <*manager-address*> in the `snmp-server host` configuration command.	Y
5	snmpTargetAddrTDomain {snmpTargetAddrEntry 2}	R/NW	[Standard] The address transmission type of the snmpTargetAddrTAddress object. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*manager-address*> type in the `snmp-server host` configuration command.	Y
6	snmpTargetAddrTAddress {snmpTargetAddrEntry 3}	R/NW	[Standard] The transmission address. The format of this address is indicated by snmpTargetAddrTDomain. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*manager-address*> in the `snmp-server host` configuration command.	Y
7	snmpTargetAddrTimeout {snmpTargetAddrEntry 4}	R/NW	[Standard] The timeout value (in units of 10 milliseconds) for communication with the transmission address defined by this entry. Default=`1500`. [Implementation] Fixed value of `0`.	Y
8	snmpTargetAddrRetryCount {snmpTargetAddrEntry 5}	R/NW	[Standard] The default number of retries if there is no response to a sent message. Default=`3`. [Implementation] Fixed value of `0`.	Y
9	snmpTargetAddrTagList {snmpTargetAddrEntry 6}	R/NW	[Standard] A snmpNotifyTag list. The default value is blank. [Implementation] Fixed value of `TRAP`.	Y
10	snmpTargetAddrParams {snmpTargetAddrEntry 7}	R/NW	[Standard] A snmpTargetParamsTable entry. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*manager-address*> in the `snmp-server host` configuration command.	Y
11	snmpTargetAddrStorageType {snmpTargetAddrEntry 8}	R/NW	[Standard] The storage type for this entry. The default value is `nonVolatile`. [Implementation] Fixed value of readOnly (`5`).	Y
12	snmpTargetAddrRowStatus {snmpTargetAddrEntry 9}	R/NW	[Standard] Status of this entry: If a new entry is added, the value of this entry is notReady (`3`) until snmpTargetAddrTDomain, snmpTargetAddrTAddress, and snmpTargetAddrParams are set. However, if this object is active (`1`), snmpTargetAddrTDomain or snmpTargetAddrTAddress cannot be changed. [Implementation] Fixed value of active (`1`). This entry corresponds to the `snmp-server host` configuration command.	Y
13	snmpTargetParamsTable {snmpTargetObjects 3}	NA	[Standard] A table of SNMP target information used in SNMP message generation. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
14	snmpTargetParamsEntry {snmpTargetParamsTable 1}	NA	[Standard] An entry for the SNMP target information used in SNMP message generation. INDEX { IMPLIED snmpTargetParamsName } [Implementation] Same as the standard.	Y
15	snmpTargetParamsName {snmpTargetParamsEntry 1}	NA	[Standard] The name of the snmpTargetParamsEntry. [Implementation] Same as the standard. This corresponds to <*manager-address*> in the `snmp-server host` configuration command.	Y
16	snmpTargetParamsMPModel {snmpTargetParamsEntry 2}	R/NW	[Standard] The message processing model used in SNMP message generation. The IANA manages from 0 to 255. • 0: SNMPv1 • 1: SNMPv2C • 2: SNMPv2u, SNMPv2* • 3: SNMPv3 256 or higher is enterprise-unique. [Implementation] Fixed value of SNMPv3 (`3`).	Y
17	snmpTargetParamsSecurityModel {snmpTargetParamsEntry 3}	R/NW	[Standard] The securing model for SNMP message generation. The IANA manages from 1 to 255. • 0: No specified model • 1: SNMPv1 • 2: SNMPv2C • 3: User-Based Security Model (USM) 256 or higher is enterprise-unique. [Implementation] Fixed value of USM (`3`).	Y
18	snmpTargetParamsSecurityName {snmpTargetParamsEntry 4}	R/NW	[Standard] A security name indicating the method used in SNMP message generation. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*community-string*> in the `snmp-server host` configuration command.	Y
19	snmpTargetParamsSecurityLevel {snmpTargetParamsEntry 5}	R/NW	[Standard] The security level in SNMP message generation. • noAuthNoPriv (`1`): No authentication, no privacy • authNoPriv (`2`): Authentication, no privacy • authPriv (`3`): Authentication and privacy [Implementation] Same as the standard. `Read_Only`. This corresponds to `{noauth|auth|priv}` in the `snmp-server host` configuration command.	Y
20	snmpTargetParamsStorageType {snmpTargetParamsEntry 6}	R/NW	[Standard] The storage type for this entry. [Implementation] Fixed value of readOnly (`5`).	Y
21	snmpTargetParamsRowStatus {snmpTargetParamsEntry 7}	R/NW	[Standard] Status of this entry: If a new entry is added, the value of this entry is notReady (`3`) until snmpTargetParamsMPModel, snmpTargetParamsSecurityModel, snmpTargetParamsSecurityName, and snmpTargetParamsSecurityLevel are set. However, if this object is active (`1`), snmpTargetParamsMPModel, snmpTargetParamsSecurityModel, snmpTargetParamsSecurityName, or snmpTargetParamsSecurityLevel cannot be changed. [Implementation] Fixed value of active (`1`). This entry corresponds to the `snmp-server host` configuration command.	Y

#	Object identifier	Access	Implementation specifications	Support?
22	snmpUnavailableContexts {snmpTargetObjects 4}	R/O	[Standard] The total number of packets that are received but discarded due to an unusable context in the message. [Implementation] Same as the standard.	Y
23	snmpUnknownContexts {snmpTargetObjects 5}	R/O	[Standard] The total number of packets that are received but discarded due to an unreadable context in the message. [Implementation] Same as the standard.	Y

2.23.4 snmpNotificationMIB group (SNMP NOTIFICATION MIB)

Relevant standards for the snmpNotificationMIB group are described in the following document:

- RFC 3413 (December 2002)

(1) ID

```
snmpNotificationMIB MODULE-IDENTITY ::= {snmpModules 13}

snmpNotifyObjects OBJECT IDENTIFIER ::= {snmpNotificationMIB 1}
Object ID value  1.3.6.1.6.3.13.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the snmpNotificationMIB group.

Table 2-77: snmpNotificationMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	snmpNotifyTable {snmpNotifyObjects 1}	NA	[Standard] A table used to identify a managed target that receives a notification, and the type of the notification that is sent to the target. [Implementation] Same as the standard.	Y
2	snmpNotifyEntry {snmpNotifyTable 1}	NA	[Standard] An entry for a managed target that receives a notification, and the type of the notification that is sent to the target. INDEX { IMPLIED snmpNotifyName } [Implementation] Same as the standard.	Y
3	snmpNotifyName {snmpNotifyEntry 1}	NA	[Standard] The name of the snmpNotifyEntry. [Implementation] Fixed value of `TRAP`.	Y
4	snmpNotifyTag {snmpNotifyEntry 2}	R/NW	[Standard] A tag value used to identify the snmpTargetAddrTable entry. The default value is blank. [Implementation] Fixed value of `TRAP`.	Y
5	snmpNotifyType {snmpNotifyEntry 3}	R/NW	[Standard] The type of a notification. The default value is trap (`1`). • trap (`1`) • inform (`2`) [Implementation] Fixed value of trap (`1`).	Y
6	snmpNotifyStorageType {snmpNotifyEntry 4}	R/NW	[Standard] The storage type for this entry. The default value is `nonVolatile`. [Implementation] Fixed value of readOnly (`5`).	Y
7	snmpNotifyRowStatus {snmpNotifyEntry 5}	R/NW	[Standard] Status of this entry: [Implementation] Fixed value of active (`1`).	Y

#	Object identifier	Access	Implementation specifications	Support ?
8	snmpNotifyFilterProfileTable {snmpNotifyObjects 2}	NA	[Standard] A table used to associate a notification filter definition with a specific target parameter. [Implementation] Same as the standard.	Y
9	snmpNotifyFilterProfileEntry {snmpNotifyFilterProfileTable 1}	NA	[Standard] An entry for a filter definition used in notification generation. INDEX { IMPLIED snmpTargetParamsName } [Implementation] Same as the standard.	Y
10	snmpNotifyFilterProfileName {snmpNotifyFilterProfileEntry 1}	R/NW	[Standard] The name of the filter definition. This is associated with snmpTargetParamsTable. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*manager-address*> in the `snmp-server host` configuration command.	Y
11	snmpNotifyFilterProfileStorageType {snmpNotifyFilterProfileEntry 2}	R/NW	[Standard] The storage type for this entry. The default value is `nonVolatile`. [Implementation] Fixed value of readOnly (`5`).	Y
12	snmpNotifyFilterProfileRowStatus {snmpNotifyFilterProfileEntry 3}	R/NW	[Standard] Status of this entry: If a new entry is added, the value of this entry is notReady (`3`) until snmpNotifyFilterProfileName is set. [Implementation] Fixed value of active (`1`). This entry corresponds to the `snmp-server host` configuration command.	Y
13	snmpNotifyFilterTable {snmpNotifyObjects 3}	NA	[Standard] A table of filter definitions used to determine whether a managed target receives a notification. [Implementation] Same as the standard.	Y
14	snmpNotifyFilterEntry {snmpNotifyFilterTable 1}	NA	[Standard] An entry for a filter definition used to determine whether a managed target receives a notification. INDEX { snmpNotifyFilterProfileName, IMPLIED snmpNotifyFilterSubtree } [Implementation] Same as the standard.	Y
15	snmpNotifyFilterSubtree {snmpNotifyFilterEntry 1}	NA	[Standard] A MIB subtree which, when combined with the corresponding instance of snmpNotifyFilterMask, defines a family of subtrees to be included or excluded by the filter profile. [Implementation] Same as the standard. This corresponds to the trap send mode in the `snmp-server host` configuration command.	Y
16	snmpNotifyFilterMask {snmpNotifyFilterEntry 2}	R/NW	[Standard] A bit mask that, when combined with the corresponding instance of snmpNotifyFilterSubtree, defines a family of subtrees to be included or excluded by the filter profile. • '`1`': Exact match • '`0`': Wildcard If the length of this object is 0, this extended rule is padded with all `1`s. The filter subtree family becomes a subtree that is uniquely identified by the corresponding instance of snmpNotifyFilterSubtree. The default value is `''H`. [Implementation] Same as the standard. `Read_Only`. This corresponds to the trap send mode in the `snmp-server host` configuration command.	Y

#	Object identifier	Access	Implementation specifications	Support?
17	snmpNotifyFilterType {snmpNotifyFilterEntry 3}	R/NW	[Standard] Indicates whether the filter subtree family defined by this entry is included or excluded. The default value is `included`. • included (`1`) • excluded (`2`) [Implementation] Same as the standard. `Read_Only`. This corresponds to the trap send mode in the `snmp-server host` configuration command.	Y
18	snmpNotifyFilterStorageType {snmpNotifyFilterEntry 4}	R/NW	[Standard] The storage type for this entry. The default value is `nonVolatile`. [Implementation] Fixed value of readOnly (`5`).	Y
19	snmpNotifyFilterRowStatus {snmpNotifyFilterEntry 5}	R/NW	[Standard] Status of this entry: [Implementation] Fixed value of active (`1`). This corresponds to the trap send mode in the `snmp-server host` configuration command.	Y

2.23.5 snmpUsmMIB group (SNMP USER BASED SM MIB)

Relevant standards for the snmpUsmMIB group are described in the following document:

- RFC 3414 (December 2002)

(1) ID

```
snmpUsmMIB MODULE-IDENTITY ::= {snmpModules 15}

usmMIBObjects OBJECT IDENTIFIER ::= {snmpUsmMIB 1}
Object ID value  1.3.6.1.6.3.15.1

usmStats      OBJECT IDENTIFIER ::= {usmMIBObjects 1}
Object ID value  1.3.6.1.6.3.15.1.1

usmUser       OBJECT IDENTIFIER ::= {usmMIBObjects 2}
Object ID value  1.3.6.1.6.3.15.1.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the snmpUsmMIB group.

Table 2-78: snmpUsmMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	usmStatsUnsupportedSecLevels {usmStats 1}	R/O	[Standard] The total number of packets that are received but discarded due to an invalid security level. [Implementation] Same as the standard.	Y
2	usmStatsNotInTimeWindows {usmStats 2}	R/O	[Standard] The total number of packets that are received but discarded due to an out-of-range WindowTime. [Implementation] Same as the standard.	Y
3	usmStatsUnknownUserNames {usmStats 3}	R/O	[Standard] The total number of packets that are received but discarded due to an invalid user. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	usmStatsUnknownEngineIDs {usmStats 4}	R/O	[Standard] The total number of packets that are received but discarded due to a reference to an unknown snmpEngineID. [Implementation] Same as the standard.	Y
5	usmStatsWrongDigests {usmStats 5}	R/O	[Standard] The total number of packets that are received but discarded due to the absence of an expected digest value. [Implementation] Same as the standard.	Y
6	usmStatsDecryptionErrors {usmStats 6}	R/O	[Standard] The total number of packets that are received but discarded because they could not be decrypted. [Implementation] Same as the standard.	Y
7	usmUserSpinLock {usmUser 1}	R/NW	[Standard] Used for locking when changing a secret in the usmUserTable. [Implementation] Same as the standard. `Read_Only`.	Y
8	usmUserTable {usmUser 2}	NA	[Standard] A user table that is configured in the local configuration datastore (LCD) for the SNMP engine. [Implementation] Same as the standard.	Y
9	usmUserEntry {usmUserTable 1}	NA	[Standard] An entry in the user table that is configured by using the local configuration datastore (LCD) for the SNMP engine. INDEX { usmUserEngineID, usmUserName } [Implementation] Same as the standard.	Y
10	usmUserEngineID {usmUserEntry 1}	NA	[Standard] An ID for SNMP engine management. [Implementation] Same as the standard. This corresponds to the `snmp-server engineID local` configuration command.	Y
11	usmUserName {usmUserEntry 2}	NA	[Standard] A human-readable name that indicates the user. USM is dependent on this security ID. [Implementation] Same as the standard. This corresponds to <*user-name*> in the `snmp-server user` configuration command.	Y
12	usmUserSecurityName {usmUserEntry 3}	R/O	[Standard] A human-readable name, in a security model-independent format, that indicates the user. This name has the same value as usmUserName. [Implementation] Same as the standard. This corresponds to <*user-name*> in the `snmp-server user` configuration command.	Y
13	usmUserCloneFrom {usmUserEntry 4}	R/NW	[Standard] A pointer to a different entry that is used as a copy source to add a new entry. If this object is read, an object ID of `0.0` is returned. [Implementation] Same as the standard. `Read_Only`.	Y
14	usmUserAuthProtocol {usmUserEntry 5}	R/NW	[Standard] An authentication protocol for the SNMP engine indicated by usmUserEngineID. [Implementation] Same as the standard. `Read_Only`. This corresponds to the `auth` parameter {`md5`|`sha`} in the snmp-server user configuration command.	Y
15	usmUserAuthKeyChange {usmUserEntry 6}	R/NW	[Standard] An object that generates an authentication key for the SNMP engine indicated by usmUserEngineID. This is set if the requesting usmUserName is not the same as the usmUserName for this entry. If this object is read, a 0-length character string is returned. The default value is `''H`. [Implementation] Fixed value of blank.	Y

#	Object identifier	Access	Implementation specifications	Support?
16	usmUserOwnAuthKeyChange {usmUserEntry 7}	R/NW	[Standard] An object that generates an authentication key for the SNMP engine indicated by usmUserEngineID. This is set if the requesting usmUserName is the same as the usmUserName for this entry. If this object is read, a 0-length character string is returned. The default value is `''H`. [Implementation] Fixed value of blank.	Y
17	usmUserPrivProtocol {usmUserEntry 8}	R/NW	[Standard] A privacy protocol for the SNMP engine indicated by usmUserEngineID. The default value is `usmNoPrivProtocol`. [Implementation] Same as the standard. `Read_Only`. This corresponds to `des` of the `priv` parameter in the `snmp-server user` configuration command.	Y
18	usmUserPrivKeyChange {usmUserEntry 9}	R/NW	[Standard] An object that generates the encryption key indicated by the usmUserEngineID. This is set if the requesting usmUserName is not the same as the usmUserName for this entry. If this object is read, a 0-length character string is returned. The default value is `''H`. [Implementation] Fixed value of blank.	Y
19	usmUserOwnPrivKeyChange {usmUserEntry 10}	R/NW	[Standard] An object that generates the encryption key indicated by the usmUserEngineID. This is set if the requesting usmUserName is the same as the usmUserName for this entry. If this object is read, a 0-length character string is returned. The default value is `''H`. [Implementation] Fixed value of blank.	Y
20	usmUserPublic {usmUserEntry 11}	R/NW	[Standard] A value generated by changing a user authentication or encryption key. This can be later used to determine whether the key change is valid. The default value is `''H`. [Implementation] Fixed value of blank.	Y
21	usmUserStorageType {usmUserEntry 12}	R/NW	[Standard] The storage type for this entry. [Implementation] Fixed value of readOnly (`5`).	Y
22	usmUserStatus {usmUserEntry 13}	R/NW	[Standard] Status of this entry: [Implementation] Fixed value of active (`1`).	Y

2.23.6 snmpVacmMIB group (SNMP VIEW BASED ACM MIB)

Relevant standards for the snmpVacmMIB group are described in the following document:

- RFC 3415 (December 2002)

(1) ID

```
snmpVacmMIB MODULE-IDENTITY ::= {snmpModules 16}

vacmMIBObjects OBJECT IDENTIFIER ::= {snmpVacmMIB 1}
Object ID value  1.3.6.1.6.3.16.1

vacmMIBViews   OBJECT IDENTIFIER ::= {vacmMIBObjects 5}
Object ID value  1.3.6.1.6.3.16.1.5
```

(2) Implementation specifications

The following table shows the implementation specifications for the snmpVacmMIB group.

Table 2-79: snmpVacmMIB group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	vacmContextTable {vacmMIBObjects 1}	NA	[Standard] A table of locally available contexts. [Implementation] Same as the standard.	Y
2	vacmContextEntry {vacmContextTable 1}	NA	[Standard] A table entry for a locally available context. INDEX { vacmContextName } [Implementation] Same as the standard.	Y
3	vacmContextName {vacmContextEntry 1}	R/O	[Standard] A human-readable name that indicates a specific context in a specific SNMP entity. An empty contextName indicates the default context. [Implementation] The default context is fixed.	Y
4	vacmSecurityToGroupTable {vacmMIBObjects 2}	NA	[Standard] A table used to define an access control policy for an operator group. [Implementation] Same as the standard.	Y
5	vacmSecurityToGroupEntry {vacmSecurityToGroupTable 1}	NA	[Standard] An entry used to define an access control policy for an operator group. The entry indicates a groupName that consists of a security model and security name. INDEX { vacmSecurityModel, vacmSecurityName } [Implementation] Same as the standard.	Y
6	vacmSecurityModel {vacmSecurityToGroupEntry 1}	NA	[Standard] A security model for the vacmSecurityName referenced by this entry. A value of `0` is not allowed. The IANA manages from 1 to 255. • 0: No specified model • 1: SNMPv1 • 2: SNMPv2C • 3: User-Based Security Model (USM) 256 or higher is enterprise-unique. [Implementation] Fixed value of USM (`3`).	Y
7	vacmSecurityName {vacmSecurityToGroupEntry 2}	NA	[Standard] The security name for this entry. This entry is mapped to groupName. [Implementation] Same as the standard. This corresponds to <*user-name*> in the `snmp-server user` configuration command.	Y
8	vacmGroupName {vacmSecurityToGroupEntry 3}	R/NW	[Standard] The name of the group to which this entry belongs. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*group-name*> in the `snmp-server user` configuration command.	Y
9	vacmSecurityToGroupStorageType {vacmSecurityToGroupEntry 4}	R/NW	[Standard] The storage type for this entry. The default value is `nonVolatile`. [Implementation] Fixed value of readOnly (`5`).	Y
10	vacmSecurityToGroupStatus {vacmSecurityToGroupEntry 5}	R/NW	[Standard] Status of this entry: If a new entry is added, the value of this entry is notReady (`3`) until vacmGroupName is set. [Implementation] Fixed value of active (`1`). This corresponds to the `snmp-server user` configuration command.	Y

#	Object identifier	Access	Implementation specifications	Support?
11	vacmAccessTable {vacmMIBObjects 4}	NA	[Standard] A table of access permissions for groups. [Implementation] Same as the standard.	Y
12	vacmAccessEntry {vacmAccessTable 1}	NA	[Standard] An entry for access permissions for a group. INDEX { vacmGroupName, vacmAccessContextPrefix, vacmAccessSecurityModel, vacmAccessSecurityLevel } [Implementation] Same as the standard.	Y
13	vacmAccessContextPrefix {vacmAccessEntry 1}	NA	[Standard] A value that is compared with this entry to gain access permission. [Implementation] Fixed value of blank.	Y
14	vacmAccessSecurityModel {vacmAccessEntry 2}	NA	[Standard] A security model needed to gain access permission for this entry. The IANA manages from 1 to 255. • 0: No specified model • 1: SNMPv1 • 2: SNMPv2C • 3: User-Based Security Model (USM) 256 or higher is enterprise-unique. [Implementation] Fixed value of USM (`3`).	Y
15	vacmAccessSecurityLevel {vacmAccessEntry 3}	NA	[Standard] A security level needed to gain access permission for this entry. • noAuthNoPriv (`1`): No authentication, no privacy • authNoPriv (`2`): Authentication, no privacy • authPriv (`3`): Authentication and privacy [Implementation] Same as the standard. This corresponds to `{noauth|auth|priv}` in the `snmp-server group` configuration command.	Y
16	vacmAccessContextMatch {vacmAccessEntry 4}	R/NW	[Standard] • exact (`1`): Selects all the row entries whose contextName perfectly matches the vacmAccessContextPrefix. • prefix (`2`): Selects all the row entries whose contextName begins with the vacmAccessContextPrefix. The default value is `exact`. [Implementation] Fixed value of exact (`1`).	Y
17	vacmAccessReadViewName {vacmAccessEntry 5}	R/NW	[Standard] The vacmViewTreeFamilyViewName for a MIB view to which this entry authenticates read access. The default value is `''H`. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*view-name*> of the `read` parameter in the `snmp-server group` configuration command.	Y
18	vacmAccessWriteViewName {vacmAccessEntry 6}	R/NW	[Standard] The vacmViewTreeFamilyViewName for a MIB view to which this entry authenticates write access. The default value is `''H`. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*view-name*> of the `write` parameter in the `snmp-server group` configuration command.	Y

#	Object identifier	Access	Implementation specifications	Support?
19	vacmAccessNotifyViewName {vacmAccessEntry 7}	R/NW	[Standard] The vacmViewTreeFamilyViewName for a MIB view to which this entry authenticates notifications access. The default value is `''H`. [Implementation] Same as the standard. `Read_Only`. This corresponds to <*view-name*> of the `notify` parameter in the `snmp-server group` configuration command.	Y
20	vacmAccessStorageType {vacmAccessEntry 8}	R/NW	[Standard] The storage type for this entry. The default value is `nonVolatile`. [Implementation] Fixed value of readOnly (`5`).	Y
21	vacmAccessStatus {vacmAccessEntry 9}	R/NW	[Standard] Status of this entry: [Implementation] Fixed value of active (`1`). This corresponds to the `snmp-server group` configuration command.	Y
22	vacmViewSpinLock {vacmMIBViews 1}	R/NW	[Standard] An advisory lock used to allow an application for a cooperating SNMP command generator to coordinate its SET operation in view creation or modification. This is an advisory lock, and its use is not enforced. [Implementation] Same as the standard. `Read_Only`.	Y
23	vacmViewTreeFamilyTable {vacmMIBViews 2}	NA	[Standard] A locally held table of information about the subtree families for a MIB view. All the view subtrees (including those to be included or excluded) are defined in this table. [Implementation] Same as the standard.	Y
24	vacmViewTreeFamilyEntry {vacmViewTreeFamilyTable 1}	NA	[Standard] A locally held entry for information about a subtree family for a MIB view. INDEX { vacmViewTreeFamilyViewName, vacmViewTreeFamilySubtree } [Implementation] Same as the standard.	Y
25	vacmViewTreeFamilyViewName {vacmViewTreeFamilyEntry 1}	NA	[Standard] The human-readable name of a view subtree family. [Implementation] Same as the standard. This corresponds to <*view-name*> in the `snmp-server view` configuration command.	Y
26	vacmViewTreeFamilySubtree {vacmViewTreeFamilyEntry 2}	NA	[Standard] A MIB subtree that defines the view subtree family. [Implementation] Same as the standard. This corresponds to <*oid-tree*> in the `snmp-server view` configuration command.	Y
27	vacmViewTreeFamilyMask {vacmViewTreeFamilyEntry 3}	R/NW	[Standard] A mask value for a vacmViewTreeFamilySubtree. • `1`: An exact match must occur. • `0`: Indicates a wildcard. If the length of this object is `0`, a mask of all `1`s is used. [Implementation] Same as the standard. `Read_Only`. This corresponds to the wildcard specification (`*`) in <*oid-tree*> within the `snmp-server view` configuration command.	Y
28	vacmViewTreeFamilyType {vacmViewTreeFamilyEntry 4}	R/NW	[Standard] Indicates whether the view subtree family is included or excluded from the MIB view. The default value is `included`. • included (`1`) • excluded (`2`) [Implementation] Same as the standard. `Read_Only`. This corresponds to `{included|excluded}` in the `snmp-server view` configuration command.	Y

#	Object identifier	Access	Implementation specifications	Support?
29	vacmViewTreeFamilyStorageType {vacmViewTreeFamilyEntry 5}	R/NW	[Standard] The storage format for this entry. The default value is `nonVolatile`. [Implementation] Fixed value of readOnly (`5`).	Y
30	vacmViewTreeFamilyStatus {vacmViewTreeFamilyEntry 6}	R/NW	[Standard] Status of this entry: [Implementation] Fixed value of active (`1`). This corresponds to the `snmp-server view` configuration command.	Y

2.24 ieee8021CfmMib group

Relevant standards for the ieee8021CfmMib group are described in the following document:

- IEEE 8021-CFM-MIB (December 2007)

Notes

Regarding the ieee802dot1 and ieee802dot1mibs object IDs:

- If a GetNextRequest operation that specifies an object identifier in this MIB is performed from outside the Switch, the correct value might not be obtained.
- If a `snmp getnext`, `snmp walk`, or `snmp lookup` command is executed by specifying an object ID in this MIB, the correct command cannot be obtained.
- If a `snmp getnext`, `snmp walk`, or `snmp lookup` command is used to obtain a CFM MIB, execute the command from or below ieee8021CfmMib.

2.24.1 dot1agCfmStackTable

(1) ID

```
org             OBJECT IDENTIFIER ::= {iso 3}
ieee            OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds    OBJECT IDENTIFIER ::=
                       {standards-association-numbered-series-standards 802}
ieee802dot1     OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects    OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmStack      OBJECT IDENTIFIER ::= {dot1agMIBObjects 1}

dot1agCfmStackTable OBJECT IDENTIFIER ::= {dot1agCfmStack 1}
Object ID value  1.3.111.2.802.1.1.8.1.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmStackTable group.

Table 2-80: dot1agCfmStackTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support ?
1	dot1agCfmStackTable {dot1agCfmStack 1}	NA	[Standard] Interface information that is specified for an MP. [Implementation] Same as the standard.	Y
2	dot1agCfmStackEntry {dot1agCfmStackTable 1}	NA	[Standard] A stack table entry. INDEX { dot1agCfmStackifIndex, dot1agCfmStackVlanIdOrNone, dot1agCfmStackMdLevel, dot1agCfmStackDirection } [Implementation] Same as the standard.	Y
3	dot1agCfmStackifIndex {dot1agCfmStackEntry 1}	NA	[Standard] Indicates a port at the MEP. [Implementation] Same as the standard.	Y
4	dot1agCfmStackVlanIdOrNone {dot1agCfmStackEntry 2}	NA	[Standard] VLAN ID assigned to the MP. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
5	dot1agCfmStackMdLevel {dot1agCfmStackEntry 3}	NA	[Standard] The domain level of the MP. [Implementation] Same as the standard.	Y
6	dot1agCfmStackDirection {dot1agCfmStackEntry 4}	NA	[Standard] The direction of the MP. [Implementation] Same as the standard.	Y
7	dot1agCfmStackMdIndex {dot1agCfmStackEntry 5}	R/O	[Standard] The domain index in the dot1agCfmMdTable. [Implementation] Same as the standard.	Y
8	dot1agCfmStackMaIndex {dot1agCfmStackEntry 6}	R/O	[Standard] The MA index in the dot1agCfmMaNetTable and dot1agCfmMaCompTable. [Implementation] Same as the standard.	Y
9	dot1agCfmStackMepId {dot1agCfmStackEntry 7}	R/O	[Standard] The MEP ID. [Implementation] Same as the standard.	Y
10	dot1agCfmStackMacAddress {dot1agCfmStackEntry 8}	R/O	[Standard] The MAC address of the MP. [Implementation] Same as the standard.	Y

2.24.2 dot1agCfmVlanTable

(1) ID

```
org              OBJECT IDENTIFIER ::= {iso 3}
ieee             OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                 OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds     OBJECT IDENTIFIER ::=
                        {standards-association-numbered-series-standards 802}
ieee802dot1      OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects   OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmVlan      OBJECT IDENTIFIER ::= {dot1agMIBObjects 3}

dot1agCfmVlanTable OBJECT IDENTIFIER ::= {dot1agCfmVlan 1}
Object ID value  1.3.111.2.802.1.1.8.1.3.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmVlanTable group.

Table 2-81: dot1agCfmVlanTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmVlanTable {dot1agCfmVlan 1}	NA	[Standard] Defines a VLAN association. [Implementation] Same as the standard.	Y
2	dot1agCfmVlanEntry {dot1agCfmVlanTable 1}	NA	[Standard] A VLAN table entry. INDEX { dot1agCfmVlanComponentId, dot1agCfmVlanVid } [Implementation] Same as the standard.	Y
3	dot1agCfmVlanComponentId {dot1agCfmVlanEntry 1}	NA	[Standard] A component in the system to which the dot1agCfmVlanEntry information is to be applied. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
4	dot1agCfmVlanVid {dot1agCfmVlanEntry 2}	NA	[Standard] A VLAN in the MA VLAN group. This is not the primary VLAN. [Implementation] Same as the standard.	Y
5	dot1agCfmVlanPrimaryVid {dot1agCfmVlanEntry 3}	R/NC	[Standard] The primary VLAN ID. [Implementation] Same as the standard. `Read_Only`.	Y
6	dot1agCfmVlanRowStatus {dot1agCfmVlanEntry 4}	R/NC	[Standard] The table status. • active (`1`) • notInService (`2`) [Implementation] Same as the standard. `Read_Only`.	Y

2.24.3 dot1agCfmMd

(1) ID

```
org              OBJECT IDENTIFIER ::= {iso 3}
ieee             OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                 OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds     OBJECT IDENTIFIER ::=
                        {standards-association-numbered-series-standards 802}
ieee802dot1      OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}

dot1agCfmMd      OBJECT IDENTIFIER ::= {dot1agMIBObjects 5}
Object ID value  1.3.111.2.802.1.1.8.1.5

dot1agCfmMdTable OBJECT IDENTIFIER ::= {dot1agCfmMd 2}
Object ID value  1.3.111.2.802.1.1.8.1.5.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmMd group.

Table 2-82: dot1agCfmMd group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmMdTableNextIndex {dot1agCfmMd 1}	R/O	[Standard] An index used to generate a dot1agCfmMdTable. [Implementation] Fixed value of `0`.	Y
2	dot1agCfmMdTable {dot1agCfmMd 2}	NA	[Standard] A domain table. [Implementation] Same as the standard.	Y
3	dot1agCfmMdEntry {dot1agCfmMdTable 1}	NA	[Standard] An entry for a domain table. INDEX { dot1agCfmMdIndex } [Implementation] Same as the standard.	Y
4	dot1agCfmMdIndex {dot1agCfmMdEntry 1}	NA	[Standard] A domain table index. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
5	dot1agCfmMdFormat {dot1agCfmMdEntry 2}	R/NC	[Standard] Domain name type. • none (1) • dnsLikeName (2) • macAddressAndUint (3) • charString (4) [Implementation] Same as the standard. Read_Only.	Y
6	dot1agCfmMdName {dot1agCfmMdEntry 3}	R/NC	[Standard] Domain name. [Implementation] Same as the standard. Read_Only.	Y
7	dot1agCfmMdMdLevel {dot1agCfmMdEntry 4}	R/NC	[Standard] Domain level. [Implementation] Same as the standard. Read_Only.	Y
8	dot1agCfmMdMhfCreation {dot1agCfmMdEntry 5}	R/NC	[Standard] Indicates whether a MIP can be generated. • defMHFnone (1) • defMHFdefault (2) • defMHFexplicit (3) [Implementation] Fixed value of defMHFexplicit (3). Read_Only.	Y
9	dot1agCfmMdMhfIdPermission {dot1agCfmMdEntry 6}	R/NC	[Standard] A value contained in the Sender ID TLV. • sendIdNone (1) • sendIdChassis (2) • sendIdManage (3) • sendIdChassisManage (4) [Implementation] Fixed value of sendIdChassis (2). Read_Only.	Y
10	dot1agCfmMdMaNextIndex {dot1agCfmMdEntry 7}	R/O	[Standard] An index value used to generate dot1agCfmMaNetTable and dot1agCfmMaCompTable. [Implementation] Fixed value of 0.	Y
11	dot1agCfmMdRowStatus {dot1agCfmMdEntry 8}	R/NC	[Standard] The table status. • active (1) • notInService (2) [Implementation] Fixed value of active (1). Read_Only.	Y

2.24.4 dot1agCfmMaNetTable

(1) ID

```
org             OBJECT IDENTIFIER ::= {iso 3}
ieee            OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds    OBJECT IDENTIFIER ::=
                       {standards-association-numbered-series-standards 802}
ieee802dot1     OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects    OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmMa         OBJECT IDENTIFIER ::= {dot1agMIBObjects 6}

dot1agCfmMaNetTable OBJECT IDENTIFIER ::= {dot1agCfmMa 1}
Object ID value  1.3.111.2.802.1.1.8.1.6.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmMaNetTable group.

Table 2-83: dot1agCfmMaNetTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmMaNetTable {dot1agCfmMa 1}	NA	[Standard] An MA table. [Implementation] Same as the standard.	Y
2	dot1agCfmMaNetEntry {dot1agCfmMaNetTable 1}	NA	[Standard] An MA table entry. INDEX { dot1agCfmMdIndex, dot1agCfmMaIndex } [Implementation] Same as the standard.	Y
3	dot1agCfmMaIndex {dot1agCfmMaNetEntry 1}	NA	[Standard] The MA table index. [Implementation] Same as the standard.	Y
4	dot1agCfmMaNetFormat {dot1agCfmMaNetEntry 2}	R/NC	[Standard] The MA name type. • ieeeReserved (0) • primaryVid (1) • charString (2) • unsignedInt16 (3) • rfc2865VpnId (4) [Implementation] The Switch returns a value from 1 to 3. Read_Only.	Y
5	dot1agCfmMaNetName {dot1agCfmMaNetEntry 3}	R/NC	[Standard] An MA name. [Implementation] Same as the standard. Read_Only.	Y
6	dot1agCfmMaNetCcmInterval {dot1agCfmMaNetEntry 4}	R/NC	[Standard] The time interval between CCM transmissions. • intervalInvalid (0) • interval300Hz (1) • interval10ms (2) • interval100ms (3) • interval1s (4) • interval10s (5) • interval1min (6) • interval10min (7) [Implementation] The Switch returns a value from 4 to 7. Read_Only.	Y
7	dot1agCfmMaNetRowStatus {dot1agCfmMaNetEntry 5}	R/NC	[Standard] The table status. • active (1) • notInService (2) [Implementation] Fixed value of active (1). Read_Only.	Y

2.24.5 dot1agCfmMaCompTable

(1) ID

```
org             OBJECT IDENTIFIER ::= {iso 3}
ieee            OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds    OBJECT IDENTIFIER ::=
                       {standards-association-numbered-series-standards 802}
ieee802dot1     OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects     OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmMa          OBJECT IDENTIFIER ::= {dot1agMIBObjects 6}
```

```
dot1agCfmMaCompTable OBJECT IDENTIFIER ::= {dot1agCfmMa 2}
Object ID value  1.3.111.2.802.1.1.8.1.6.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmMaCompTable group.

Table 2-84: dot1agCfmMaCompTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmMaCompTable {dot1agCfmMa 2}	NA	[Standard] An MA table. [Implementation] Same as the standard.	Y
2	dot1agCfmMaCompEntry {dot1agCfmMaCompTable 1}	NA	[Standard] An MA table entry. INDEX { dot1agCfmMaComponentId, dot1agCfmMdIndex, dot1agCfmMaIndex } [Implementation] Same as the standard.	Y
3	dot1agCfmMaComponentId {dot1agCfmMaCompEntry 1}	NA	[Standard] A component in the system to which the dot1agCfmMaCompEntry information is to be applied. [Implementation] Same as the standard.	Y
4	dot1agCfmMaCompPrimaryVlanId {dot1agCfmMaCompEntry 2}	R/NC	[Standard] The primary VLAN ID. [Implementation] Same as the standard. `Read_Only`.	Y
5	dot1agCfmMaCompMhfCreation {dot1agCfmMaCompEntry 3}	R/NC	[Standard] The MIP generation condition in the MA. • defMHFnone (`1`) • defMHFdefault (`2`) • defMHFexplicit (`3`) • defMHFdefer (`4`) [Implementation] defMHFexplicit (`3`) for the Switch. `Read_Only`.	Y
6	dot1agCfmMaCompIdPermission {dot1agCfmMaCompEntry 4}	R/NC	[Standard] The Sender ID TLV. • sendIdNone (`1`) • sendIdChassis (`2`) • sendIdManage (`3`) • sendIdChassisManage (`4`) [Implementation] Fixed value of sendIdChassis (`2`). `Read_Only`.	Y
7	dot1agCfmMaCompNumberOfVids {dot1agCfmMaCompEntry 5}	R/NC	[Standard] The number of VLANs in the MA. [Implementation] Same as the standard. `Read_Only`.	Y
8	dot1agCfmMaCompRowStatus {dot1agCfmMaCompEntry 6}	R/NC	[Standard] The table status. • active (`1`) • notInService (`2`) [Implementation] Fixed value of active (`1`). `Read_Only`.	Y

2.24.6 dot1agCfmMaMepListTable

(1) ID

```
org                 OBJECT IDENTIFIER ::= {iso 3}
ieee                OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                    OBJECT IDENTIFIER ::= {ieee 2}
```

```
lan-man-stds    OBJECT IDENTIFIER ::=
                       {standards-association-numbered-series-standards 802}
ieee802dot1     OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects        OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmMa             OBJECT IDENTIFIER ::= {dot1agMIBObjects 6}

dot1agCfmMaMepListTable OBJECT IDENTIFIER ::= {dot1agCfmMa 3}
Object ID value  1.3.111.2.802.1.1.8.1.6.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmMaMepListTable group.

Table 2-85: dot1agCfmMaMepListTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmMaMepListTable {dot1agCfmMa 3}	NA	[Standard] A list of MEP ID that belong to a MA. [Implementation] Same as the standard.	Y
2	dot1agCfmMaMepListEntry {dot1agCfmMaMepListTable 1}	NA	[Standard] A MEP table entry. INDEX { dot1agCfmMdIndex, dot1agCfmMaIndex, dot1agCfmMaMepListIdentifier } [Implementation] Same as the standard.	Y
3	dot1agCfmMaMepListIdentifier {dot1agCfmMaMepListEntry 1}	NA	[Standard] The MEP ID. [Implementation] Same as the standard.	Y
4	dot1agCfmMaMepListRowStatus {dot1agCfmMaMepListEntry 2}	R/NC	[Standard] The table status. • active (1) • notInService (2) [Implementation] Same as the standard. `Read_Only`.	Y

2.24.7 dot1agCfmMepTable

(1) ID

```
org             OBJECT IDENTIFIER ::= {iso 3}
ieee            OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds    OBJECT IDENTIFIER ::=
                       {standards-association-numbered-series-standards 802}
ieee802dot1     OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects  OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmMep      OBJECT IDENTIFIER ::= {dot1agMIBObjects 7}

dot1agCfmMepTable OBJECT IDENTIFIER ::= {dot1agCfmMep 1}
Object ID value  1.3.111.2.802.1.1.8.1.7.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmMepTable group.

Table 2-86: dot1agCfmMepTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmMepTable {dot1agCfmMep 1}	NA	[Standard] A MEP table. [Implementation] Same as the standard.	Y
2	dot1agCfmMepEntry {dot1agCfmMepTable 1}	NA	[Standard] A MEP table entry. INDEX { dot1agCfmMdIndex, dot1agCfmMaIndex, dot1agCfmMepIdentifier } [Implementation] Same as the standard.	Y
3	dot1agCfmMepIdentifier {dot1agCfmMepEntry 1}	NA	[Standard] The MEP ID. [Implementation] Same as the standard.	Y
4	dot1agCfmMepIfIndex {dot1agCfmMepEntry 2}	R/NC	[Standard] The ifIndex of an interface for which the MEP is defined. [Implementation] Same as the standard. `Read_Only`.	Y
5	dot1agCfmMepDirection {dot1agCfmMepEntry 3}	R/NC	[Standard] The MEP direction. • down (`1`) • up (`2`) [Implementation] Same as the standard. `Read_Only`.	Y
6	dot1agCfmMepPrimaryVid {dot1agCfmMepEntry 4}	R/NC	[Standard] The primary VLAN ID of the MEP. [Implementation] Same as the standard. `Read_Only`.	Y
7	dot1agCfmMepActive {dot1agCfmMepEntry 5}	R/NC	[Standard] The MEP status. [Implementation] Same as the standard. `Read_Only`.	Y
8	dot1agCfmMepFngState {dot1agCfmMepEntry 6}	R/O	[Standard] The MEP fault status. • fngReset (`1`) • fngDefect (`2`) • fngReportDefect (`3`) • fngDefectReported (`4`) • fngDefectClearing (`5`) [Implementation] Same as the standard.	Y
9	dot1agCfmMepCciEnabled {dot1agCfmMepEntry 7}	R/NC	[Standard] A value of `true` indicates that a CCM is to be generated. [Implementation] Same as the standard. `Read_Only`.	Y
10	dot1agCfmMepCcmLtmPriority {dot1agCfmMepEntry 8}	R/NC	[Standard] The priority for CCMs and link trace messages. [Implementation] Same as the standard. `Read_Only`.	Y
11	dot1agCfmMepMacAddress {dot1agCfmMepEntry 9}	R/O	[Standard] The MAC address of the MEP. [Implementation] Same as the standard.	Y
12	dot1agCfmMepLowPrDef {dot1agCfmMepEntry 10}	R/NC	[Standard] The lowest error priority. • allDef (`1`) • macRemErrXcon (`2`) • remErrXcon (`3`) • errXcon (`4`) • xcon (`5`) • noXcon (`6`) [Implementation] Same as the standard. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
13	dot1agCfmMepFngAlarmTime {dot1agCfmMepEntry 11	R/NC	[Standard] The time an error occurred before an error alarm was issued. [Implementation] Same as the standard. `Read_Only`.	Y
14	dot1agCfmMepFngResetTime {dot1agCfmMepEntry 12}	R/NC	[Standard] The time an error occurred before the error alarm was reset. [Implementation] Same as the standard. `Read_Only`.	Y
15	dot1agCfmMepHighestPrDefect {dot1agCfmMepEntry 13}	R/O	[Standard] The highest error priority in the MEP. • none (`0`) • defRDICCM (`1`) • defMACstatus (`2`) • defRemoteCCM (`3`) • defErrorCCM (`4`) • defXconCCM (`5`) [Implementation] Same as the standard.	Y
16	dot1agCfmMepDefects {dot1agCfmMepEntry 14}	R/O	[Standard] The bit value that indicates each error. • bDefRDICCM (`0`) • bDefMACstatus (`1`) • bDefRemoteCCM (`2`) • bDefErrorCCM (`3`) • bDefXconCCM (`4`) [Implementation] Same as the standard.	Y
17	dot1agCfmMepErrorCcmLastFailure {dot1agCfmMepEntry 15}	R/O	[Standard] The last CCM received due to a DefErrorCCM error. [Implementation] Same as the standard. No more than 58 bytes of a CFM PDU.	Y
18	dot1agCfmMepXconCcmLastFailure {dot1agCfmMepEntry 16}	R/O	[Standard] The last CCM received due to a DefXconCCM error. [Implementation] Same as the standard. No more than 58 bytes of a CFM PDU.	Y
19	dot1agCfmMepCcmSequenceErrors {dot1agCfmMepEntry 17}	R/O	[Standard] The total number of out-of-sequence CCMs. [Implementation] Same as the standard.	Y
20	dot1agCfmMepCciSentCcms {dot1agCfmMepEntry 18}	R/O	[Standard] The total number of CC messages transmitted. [Implementation] Same as the standard.	Y
21	dot1agCfmMepNextLbmTransId {dot1agCfmMepEntry 19}	R/O	[Standard] The next sequence number in a loopback message. [Implementation] Same as the standard.	Y
22	dot1agCfmMepLbrIn {dot1agCfmMepEntry 20}	R/O	[Standard] The number of loopback replies received. [Implementation] Same as the standard.	Y
23	dot1agCfmMepLbrInOutOfOrder {dot1agCfmMepEntry 21}	R/O	[Standard] The number of out-of-order loopback replies received. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
24	dot1agCfmMepLbrBadMsdu {dot1agCfmMepEntry 22}	R/O	[Standard] The total number of loopback replies received that contain a mismatched `mac_service_data_unit` value. [Implementation] Same as the standard.	Y
25	dot1agCfmMepLtmNextSeqNumber {dot1agCfmMepEntry 23}	R/O	[Standard] The next forwarding ID in a link trace message. [Implementation] Same as the standard.	Y
26	dot1agCfmMepUnexpLtrIn {dot1agCfmMepEntry 24}	R/O	[Standard] The number of unexpected link trace replies received. [Implementation] Same as the standard.	Y
27	dot1agCfmMepLbrOut {dot1agCfmMepEntry 25}	R/O	[Standard] The number of transmitted loopback replies sent. [Implementation] Same as the standard.	Y
28	dot1agCfmMepTransmitLbmStatus {dot1agCfmMepEntry 26}	R/NC	[Standard] Indicates whether a loopback message is to be transmitted. [Implementation] Fixed value of `true`.	Y
29	dot1agCfmMepTransmitLbmDestMacAddress {dot1agCfmMepEntry 27}	R/NC	[Standard] The destination MAC address of the loopback message. This is valid when #31 is set to `false`. [Implementation] Same as the standard. `Read_Only`.	Y
30	dot1agCfmMepTransmitLbmDestMepId {dot1agCfmMepEntry 28}	R/NC	[Standard] The destination MEP ID of a loopback message. This is valid when #31 is set to `true`. [Implementation] Not supported because #31 is set to `false` in this system.	N
31	dot1agCfmMepTransmitLbmDestIsMepId {dot1agCfmMepEntry 29}	R/NC	[Standard] • `true`: A MEP ID is used for loopback transmission. • `false`: A MEP destination MAC address is used for loopback transmission. [Implementation] Fixed value of `false`. `Read_Only`.	Y
32	dot1agCfmMepTransmitLbmMessages {dot1agCfmMepEntry 30}	R/NC	[Standard] The number of loopback messages to be sent. [Implementation] Same as the standard. `Read_Only`.	Y
33	dot1agCfmMepTransmitLbmDataTlv {dot1agCfmMepEntry 31}	R/NC	[Standard] Data TLV data. [Implementation] Same as the standard. `Read_Only`.	Y
34	dot1agCfmMepTransmitLbmVlanPriority {dot1agCfmMepEntry 32}	R/NC	[Standard] The priority to be used in a VLAN tag. [Implementation] Same as the standard. `Read_Only`.	Y
35	dot1agCfmMepTransmitLbmVlanDropEnable {dot1agCfmMepEntry 33}	R/NC	[Standard] A Drop Enable bit value in a VLAN tag. [Implementation] Fixed value of `false`. `Read_Only`.	Y

#	Object identifier	Access	Implementation specifications	Support?
36	dot1agCfmMepTransmitLbmResultOK {dot1agCfmMepEntry 34}	R/O	[Standard] The operation result. [Implementation] Fixed value of `true`.	Y
37	dot1agCfmMepTransmitLbmSeqNumber {dot1agCfmMepEntry 35}	R/O	[Standard] The loopback transaction ID (dot1agCfmMepNextLbmTransId) of the first loopback message sent. [Implementation] The loopback transaction ID of the previous loopback message sent.	Y
38	dot1agCfmMepTransmitLtmStatus {dot1agCfmMepEntry 36}	R/O	[Standard] The transmission status of the link trace message. [Implementation] Same as the standard.	Y
39	dot1agCfmMepTransmitLtmFlags {dot1agCfmMepEntry 37}	R/NC	[Standard] The flag for the link trace message sent by the MEP. [Implementation] Fixed value of `0`. `Read_Only`.	Y
40	dot1agCfmMepTransmitLtmTargetMacAddress {dot1agCfmMepEntry 38}	R/NC	[Standard] The destination MAC address of the link trace message. This is valid when #42 is set to `false`. [Implementation] Same as the standard. `Read_Only`.	Y
41	dot1agCfmMepTransmitLtmTargetMepId {dot1agCfmMepEntry 39}	R/NC	[Standard] The destination MEP ID of the link trace message. This is valid when #42 is set to `true`. [Implementation] Not supported because #42 is set to `false` in this system.	N
42	dot1agCfmMepTransmitLtmTargetIsMepId {dot1agCfmMepEntry 40}	R/NC	[Standard] • `true`: Destination MEP ID • `false`: Destination MAC address [Implementation] Fixed value of `false`. `Read_Only`.	Y
43	dot1agCfmMepTransmitLtmTtl {dot1agCfmMepEntry 41}	R/NC	[Standard] The TTL in the link trace message. [Implementation] Same as the standard. `Read_Only`.	Y
44	dot1agCfmMepTransmitLtmResult {dot1agCfmMepEntry 42}	R/O	[Standard] The operation result. [Implementation] Fixed value of `true`.	Y
45	dot1agCfmMepTransmitLtmSeqNumber {dot1agCfmMepEntry 43}	R/O	[Standard] The ID of a link trace message that was sent. [Implementation] Same as the standard.	Y
46	dot1agCfmMepTransmitLtmEgressIdentifier {dot1agCfmMepEntry 44}	R/NC	[Standard] The link trace message transaction identifier of the link trace message to be sent. [Implementation] Same as the standard. `Read_Only`.	Y
47	dot1agCfmMepRowStatus {dot1agCfmMepEntry 45}	R/NC	[Standard] The table status. • active (`1`) • notInService (`2`) [Implementation] Same as the standard. `Read_Only`.	Y

2.24.8 dot1agCfmLtrTable

(1) ID

```
org             OBJECT IDENTIFIER ::= {iso 3}
ieee            OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds    OBJECT IDENTIFIER ::=
                       {standards-association-numbered-series-standards 802}
ieee802dot1     OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects  OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmMep      OBJECT IDENTIFIER ::= {dot1agMIBObjects 7}

dot1agCfmLtrTable OBJECT IDENTIFIER ::= {dot1agCfmMep 2}
Object ID value  1.3.111.2.802.1.1.8.1.7.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmLtrTable group.

Table 2-87: dot1agCfmLtrTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmLtrTable {dot1agCfmMep 2}	NA	[Standard] Link trace reply lists. [Implementation] Same as the standard.	Y
2	dot1agCfmLtrEntry {dot1agCfmLtrTable 1}	NA	[Standard] A table entry for a link trace reply list. INDEX { dot1agCfmMdIndex, dot1agCfmMaIndex, dot1agCfmMepIdentifier, dot1agCfmLtrSeqNumber, dot1agCfmLtrReceiveOrder } [Implementation] Same as the standard.	Y
3	dot1agCfmLtrSeqNumber {dot1agCfmLtrEntry 1}	NA	[Standard] The ID of a link trace reply list. [Implementation] Same as the standard.	Y
4	dot1agCfmLtrReceiveOrder {dot1agCfmLtrEntry 2}	NA	[Standard] An identifier used to distinguish between two or more link trace replies. [Implementation] Same as the standard.	Y
5	dot1agCfmLtrTtl {dot1agCfmLtrEntry 3}	R/O	[Standard] The TTL of the link trace reply. [Implementation] Same as the standard.	Y
6	dot1agCfmLtrForwarded {dot1agCfmLtrEntry 4}	R/O	[Standard] Indicates whether the reply was transmitted by an MP. [Implementation] Same as the standard.	Y
7	dot1agCfmLtrTerminalMep {dot1agCfmLtrEntry 5}	R/O	[Standard] Indicates whether the transmitted link trace reply reached the MEP in the MA. [Implementation] Same as the standard.	Y
8	dot1agCfmLtrLastEgressIdentifier {dot1agCfmLtrEntry 6}	R/O	[Standard] The last Egress ID. [Implementation] Same as the standard.	Y
9	dot1agCfmLtrNextEgressIdentifier {dot1agCfmLtrEntry 7}	R/O	[Standard] The next Egress ID. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
10	dot1agCfmLtrRelay {dot1agCfmLtrEntry 8}	R/O	[Standard] The value of the relay action field. • rlyHit (1) • rlyFdb (2) • rlyMpdb (3) [Implementation] Same as the standard.	Y
11	dot1agCfmLtrChassisIdSubtype {dot1agCfmLtrEntry 9}	R/O	[Standard] The value of the chassis format. • chassisComponent (1) • interfaceAlias (2) • portComponent (3) • macAddress (4) • networkAddress (5) • interfaceName (6) • local (7) [Implementation] Same as the standard.	Y
12	dot1agCfmLtrChassisId {dot1agCfmLtrEntry 10}	R/O	[Standard] The chassis ID of the Sender ID TLV. [Implementation] Same as the standard.	Y
13	dot1agCfmLtrManAddressDomain {dot1agCfmLtrEntry 11}	R/O	[Standard] The TDomain. [Implementation] Same as the standard.	Y
14	dot1agCfmLtrManAddress {dot1agCfmLtrEntry 12}	R/O	[Standard] The address of the SNMP Agent. [Implementation] Same as the standard. No more than 30 bytes.	Y
15	dot1agCfmLtrIngress {dot1agCfmLtrEntry 13}	R/O	[Standard] The return value in the Ingress Action field of the link trace reply. [Implementation] Same as the standard.	Y
16	dot1agCfmLtrIngressMac {dot1agCfmLtrEntry 14}	R/O	[Standard] The Ingress MAC address. [Implementation] Same as the standard.	Y
17	dot1agCfmLtrIngressPortIdSubtype {dot1agCfmLtrEntry 15}	R/O	[Standard] The format of the physical port. • interfaceAlias (1) • portComponent (2) • macAddress (3) • networkAddress (4) • interfaceName (5) • agentCircuitId (6) • local (7) [Implementation] Same as the standard.	Y
18	dot1agCfmLtrIngressPortId {dot1agCfmLtrEntry 16}	R/O	[Standard] The Port ID. [Implementation] Same as the standard.	Y
19	dot1agCfmLtrEgress {dot1agCfmLtrEntry 17}	R/O	[Standard] The Egress action field of the link trace reply. [Implementation] Same as the standard.	Y
20	dot1agCfmLtrEgressMac {dot1agCfmLtrEntry 18}	R/O	[Standard] The Egress MAC address. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
21	dot1agCfmLtrEgressPortIdSubtype {dot1agCfmLtrEntry 19}	R/O	[Standard] The format of the Egress Port ID. • interfaceAlias (1) • portComponent (2) • macAddress (3) • networkAddress (4) • interfaceName (5) • agentCircuitId (6) • local (7) [Implementation] Same as the standard.	Y
22	dot1agCfmLtrEgressPortId {dot1agCfmLtrEntry 20}	R/O	[Standard] The Egress Port ID. [Implementation] Same as the standard.	Y
23	dot1agCfmLtrOrganizationSpecificTlv {dot1agCfmLtrEntry 21}	R/O	[Standard] OUI of an Organization-Specific TLV. [Implementation] Same as the standard. No more than 30 bytes.	Y

2.24.9 dot1agCfmMepDbTable

(1) ID

```
org              OBJECT IDENTIFIER ::= {iso 3}
ieee             OBJECT IDENTIFIER ::= {org 111}
standards-association-numbered-series-standards
                 OBJECT IDENTIFIER ::= {ieee 2}
lan-man-stds     OBJECT IDENTIFIER ::=
                        {standards-association-numbered-series-standards 802}
ieee802dot1      OBJECT IDENTIFIER ::= {lan-man-stds 1}
ieee802dot1mibs OBJECT IDENTIFIER ::= {ieee802dot1 1}
ieee8021CfmMib  OBJECT IDENTIFIER ::= {ieee802dot1mibs 8}
dot1agMIBObjects    OBJECT IDENTIFIER ::= {ieee8021CfmMib 1}
dot1agCfmMep        OBJECT IDENTIFIER ::= {dot1agMIBObjects 7}

dot1agCfmMepDbTable OBJECT IDENTIFIER ::= {dot1agCfmMep 3}
Object ID value  1.3.111.2.802.1.1.8.1.7.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the dot1agCfmMepDbTable group.

Table 2-88: dot1agCfmMepDbTable group implementation specifications

#	Object identifier	Access	Implementation specifications	Support?
1	dot1agCfmMepDbTable {dot1agCfmMep 3}	NA	[Standard] A MEP database table. [Implementation] Same as the standard.	Y
2	dot1agCfmMepDbEntry {dot1agCfmMepDbTable 1}	NA	[Standard] A MEP database table entry. INDEX { dot1agCfmMdIndex, dot1agCfmMaIndex, dot1agCfmMepIdentifier, dot1agCfmMepDbRMepIdentifier } [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
3	dot1agCfmMepDbRMepIdentifier {dot1agCfmMepDbEntry 1}	NA	[Standard] The MEP ID of the remote MEP. [Implementation] Same as the standard.	Y
4	dot1agCfmMepDbRMepState {dot1agCfmMepDbEntry 2}	R/O	[Standard] The operation state of the remote MEP. • rMepIdle (1) • rMepStart (2) • rMepFailed (3) • rMepOk (4) [Implementation] Same as the standard.	Y
5	dot1agCfmMepDbRMepFailedOkTime {dot1agCfmMepDbEntry 3}	R/O	[Standard] The time that has elapsed since the remote MEP last changed to Fail or OK. [Implementation] Same as the standard.	Y
6	dot1agCfmMepDbMacAddress {dot1agCfmMepDbEntry 4}	R/O	[Standard] The MAC address of the remote MEP. [Implementation] Same as the standard.	Y
7	dot1agCfmMepDbRdi {dot1agCfmMepDbEntry 5}	R/O	[Standard] The RDI bit of the last CCM that was received. [Implementation] Same as the standard.	Y
8	dot1agCfmMepDbPortStatusTlv {dot1agCfmMepDbEntry 6}	R/O	[Standard] The TLV port state of the last CCM that was received from a remote MEP. • psNoPortStateTLV (0) • psBlocked (1) • psUp (2) [Implementation] Same as the standard.	Y
9	dot1agCfmMepDbInterfaceStatusTlv {dot1agCfmMepDbEntry 7}	R/O	[Standard] The TLV interface state of the last CCM that was received from a remote MEP. • isNoInterfaceStatusTLV (0) • isUp (1) • isDown (2) • isTesting (3) • isUnknown (4) • isDormant (5) • isNotPresent (6) • isLowerLayerDown (7) [Implementation] Same as the standard.	Y
10	dot1agCfmMepDbChassisIdSubtype {dot1agCfmMepDbEntry 8}	R/O	[Standard] The format of the chassis ID of the last CCM that was received. • chassisComponent (1) • interfaceAlias (2) • portComponent (3) • macAddress (4) • networkAddress (5) • interfaceName (6) • local (7) [Implementation] Same as the standard.	Y
11	dot1agCfmMepDbChassisId {dot1agCfmMepDbEntry 9}	R/O	[Standard] The chassis ID of the last CCM that was received. [Implementation] Same as the standard.	Y

#	Object identifier	Access	Implementation specifications	Support?
12	dot1agCfmMepDbManAddressDomain {dot1agCfmMepDbEntry 10}	R/O	[Standard] The TDomain. [Implementation] Same as the standard.	Y
13	dot1agCfmMepDbManAddress {dot1agCfmMepDbEntry 11}	R/O	[Standard] TAddress. [Implementation] Same as the standard. No more than 30 bytes.	Y

Chapter

3. Private MIBs

This chapter describes the implementation specifications for the private MIBs used by the Switch.

3.1 axsStats group (Statistics MIB)
3.2 axsGsrpMIB group (GSRP group information)
3.3 axsFdb group (MAC address table group MIB)
3.4 axsVlan group (VLAN information MIB)
3.5 axsOadp group (OADP information MIB)
3.6 axsFlow group (FLOW information MIB)
3.7 axsL2ldMIB group (L2 loop detection information MIB)
3.8 axsOspfMIB group (Multi-backbone OSPF information MIB) [OS-L3A]
3.9 axsOspfv3MIB group (Multi-backbone OSPFv3 information MIB) [OS-L3A]
3.10 axsUlr group (Uplink redundancy information MIB)
3.11 axsStatic group (Static routing information MIB)
3.12 axsTrackObjectMIB group (Track information MIB) [AX3640S] [OS-L3A]
3.13 axsPolicyBase group (Policy-based information MIB) [AX3640S] [OS-L3A]
3.14 axsBootManagement group (System boot information MIB)
3.15 axsLogin group (Login information MIB)
3.16 axslldp group (LLDP information MIB)
3.17 axsAxrpMIB group (Ring Protocol information)
3.18 ax3640sSwitch group (System device model information MIB) [AX3640S]
3.19 ax3640sDevice group (System device chassis information MIB) [AX3640S]
3.20 ax3640sManagementMIB group (Change device state and information) [AX3640S]
3.21 ax3630sSwitch group (System device model information MIB) [AX3630S]
3.22 ax3630sDevice group (System device chassis information MIB) [AX3630S]
3.23 ax3630sManagementMIB group (Change device state and information) [AX3630S]
3.24 icmp group (HP private MIB)
3.25 sFlow group (InMon private MIB)

3.1 axsStats group (Statistics MIB)

3.1.1 axsIfStats group

(1) ID

```
axsStats OBJECT IDENTIFIER ::= {axsMib 1}

axsIfStats OBJECT IDENTIFIER ::= {axsStats 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.1.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsIfStats group.

Table 3-1: axsIfStats group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsIfStatsTable {axsIfStats 1}	NOT-ACCESSIBLE	NA	Extended statistics table of the interface	Y#
2	axsIfStatsEntry {axsIfStatsTable 1}	NOT-ACCESSIBLE	NA	Extended statistics table entry of the interface. INDEX { axsIfStatsIndex }	Y
3	axsIfStatsIndex {axsIfStatsEntry 1}	NOT-ACCESSIBLE	NA	Interface index of the Switch. Same as for ifIndex.	Y
4	axsIfStatsName {axsIfStatsEntry 2}	DisplayString	R/O	Interface name. Same as ifDescr.	Y
5	axsIfStatsInMegaOctets {axsIfStatsEntry 3}	Counter	R/O	Total number (in millions) of octets received. Any fraction is truncated. Calculation of octet values is based on the range from the MAC header to the FCS field over the length of the frame.	Y
6	axsIfStatsInUcastMegaPkts {axsIfStatsEntry 4}	Counter	R/O	Number (in millions) of unicast packets received. Any fraction is truncated.	Y
7	axsIfStatsInMulticastMegaPkts {axsIfStatsEntry 5}	Counter	R/O	Number (in millions) of multicast packets received. Any fraction is truncated.	Y
8	axsIfStatsInBroadcastMegaPkts {axsIfStatsEntry 6}	Counter	R/O	Number (in millions) of broadcast packets received. Any fraction is truncated.	Y
9	axsIfStatsOutMegaOctets {axsIfStatsEntry 7}	Counter	R/O	Total (in millions) number of octets sent. Any fraction is truncated. Calculation of octet values is based on the range from the MAC header to the FCS field over the length of the frame.	Y
10	axsIfStatsOutUcastMegaPkts {axsIfStatsEntry 8}	Counter	R/O	For AX3640S series switches: Number of packets sent by unicast (in millions). Any fraction is truncated. **[AX3640S]** Fixed value of 0. **[AX3630S]**	Y **[AX3640S]** M **[AX3630S]**
11	axsIfStatsOutMulticastMegaPkts {axsIfStatsEntry 9}	Counter	R/O	Number (in millions) of packets sent in multicast routing. Any fraction is truncated.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
12	axsIfStatsOutBroadcastMegaPkts {axsIfStatsEntry 10}	Counter	R/O	Number (in millions) of packets sent in broadcast. Any fraction is truncated.	Y
13	axsIfStatsHighSpeed {axsIfStatsEntry 11}	Counter	R/O	Speed of the line (in Mbit/s). Any fraction is truncated. If the `bandwidth` configuration command is not defined, the speed of the relevant line is displayed. If it is defined, the defined value is displayed.	Y

#: Information pertains to the Ethernet interface.

3.1.2 axsQoS group

(1) axsEtherTxQoS group

(a) ID

```
axsStats OBJECT IDENTIFIER ::= {axsMib 1}

axsQoS OBJECT IDENTIFIER ::= {axsStats 6}

axsEtherTxQoS OBJECT IDENTIFIER ::= {axsQoS 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.1.6.1
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsEtherTxQoS group.

Table 3-2: axsEtherTxQoS group implementation specifications (QoS statistics of Ethernet interface)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsEtherTxQoSStatsTable {axsEtherTxQoS 1}	NOT-ACCESSIBLE	NA	Table information on the QoS statistics about the port output queue.	Y
2	axsEtherTxQoSStatsEntry {axsEtherTxQoSStatsTable 1}	NOT-ACCESSIBLE	NA	Entry for the QoS Statistics of each Ethernet interface. INDEX { axsEtherTxQoSStatsIndex }	Y
3	axsEtherTxQoSStatsIndex {axsEtherTxQoSStatsEntry 1}	NOT-ACCESSIBLE	NA	Shows the index value for identifying any entry in the table (ifIndex of the Ethernet interface). The value ranges from `1` to ifNumber.	Y
4	axsEtherTxQoSStatsMaxQnum {axsEtherTxQoSStatsEntry 2}	INTEGER	R/O	Shows the maximum number of queues of the port output queue for the relevant interface.	Y
5	axsEtherTxQoSStatsLimitQlen {axsEtherTxQoSStatsEntry 3}	INTEGER	R/O	Shows the limit length of the output priority queue of the port output queue for the relevant interface (the maximum queue length of all the queues of the relevant ports).	Y
6	axsEtherTxQoSStatsTotalOutFrames {axsEtherTxQoSStatsEntry 4}	Counter	R/O	Shows the total number of frames of the port output queue for the relevant interface. • Fixed value of `0`	M
7	axsEtherTxQoSStatsTotalOutBytesHigh {axsEtherTxQoSStatsEntry 5}	Counter	R/O	Shows the total number of bytes of the port output queue for the relevant interface (most significant 4 bytes). • Fixed value of `0`	M

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
8	axsEtherTxQoSStatsTotalOutBytesLow {axsEtherTxQoSStatsEntry 6}	Counter	R/O	Shows the total number of bytes of the port output queue for the relevant interface (least significant 4 bytes). • Fixed value of `0`	M
9	axsEtherTxQoSStatsTotalDiscardFrames {axsEtherTxQoSStatsEntry 7}	Counter	R/O	Shows the total number of discarded frames of the port output queue for the relevant interface. • Sum of `Tail_drop`, `HOL1` and `HOL2`. Use the `show qos queueing` command to display `Tail_drop`, `HOL1` and `HOL`.	Y
10	axsEtherTxQoSStatsQueueTable {axsEtherTxQoS 2}	NOT-ACCESSIBLE	NA	Table information of the QoS statistics for each output priority queue of the port output queue for the relevant interface.	Y
11	axsEtherTxQoSStatsQueueEntry {axsEtherTxQoSStatsQueueTable 1}	NOT-ACCESSIBLE	NA	Entry of the QoS statistics for each output priority queue of the port output queue for the relevant interface. INDEX { axsEtherTxQoSStatsQueueIndex, axsEtherTxQoSStatsQueueQueIndex }	Y
12	axsEtherTxQoSStatsQueueIndex {axsEtherTxQoSStatsQueueEntry 1}	NOT-ACCESSIBLE	NA	Shows the index value for identifying any entry in the table (ifIndex of the Ethernet interface). The value ranges from `1` to ifNumber.	Y
13	axsEtherTxQoSStatsQueueQueIndex {axsEtherTxQoSStatsQueueEntry 2}	NOT-ACCESSIBLE	NA	Shows the index value for identifying any entry in the table. The value ranges from `1` to axsEtherTxQoSStatsMaxQnum.	Y
14	axsEtherTxQoSStatsQueueQlen {axsEtherTxQoSStatsQueueEntry 3}	INTEGER	R/O	Shows the length of the output priority queue of the port output queue at the time of information collection.	Y
15	axsEtherTxQoSStatsQueueMaxQlen {axsEtherTxQoSStatsQueueEntry 4}	INTEGER	R/O	Shows the maximum length of the output priority queue of the port output queue for the relevant interface after the statistics are deleted or initialized. • Fixed value of `0`	M
16	axsEtherTxQoSStatsQueueDiscardFramesClass1 {axsEtherTxQoSStatsQueueEntry 5}	Counter64	R/O	Shows the number of discarded frames in the relevant output priority queue at queueing level 1 of the port output queue. • Fixed value of `0`	M
17	axsEtherTxQoSStatsQueueDiscardFramesClass2 {axsEtherTxQoSStatsQueueEntry 6}	Counter64	R/O	Shows the number of discarded frames in the relevant output priority queue at queueing level 2 of the port output queue. • Fixed value of `0`	M
18	axsEtherTxQoSStatsQueueDiscardFramesClass3 {axsEtherTxQoSStatsQueueEntry 7}	Counter64	R/O	Shows the number of discarded frames in the relevant output priority queue at queueing level 3 of the port output queue. • Fixed value of `0`	M
19	axsEtherTxQoSStatsQueueDiscardFramesClass4 {axsEtherTxQoSStatsQueueEntry 8}	Counter64	R/O	Shows the number of discarded frames in the relevant output priority queue at queueing level 4 of the port output queue. • Fixed value of `0`	M

(2) axsToCpuQos group

(a) ID

```
axsStats OBJECT IDENTIFIER ::= {axsMib 1}

axsQoS OBJECT IDENTIFIER ::= {axsStats 6}

axsToCpuQos OBJECT IDENTIFIER ::= {axsQoS 11}
Object ID value  1.3.6.1.4.1.21839.2.2.1.1.6.11
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsToCpuQos group.

Table 3-3: axsToCpuQos group implementation specifications (QoS statistics of the queues output to the CPU)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsToCpuQoSStatsTable {axsToCpuQoS 1}	NOT-ACCESSIBLE	NA	Table information on the QoS statistics for queues output to the CPU.	Y
2	axsToCpuQoSStatsEntry {axsToCpuQoSStatsTable 1}	NOT-ACCESSIBLE	NA	Entry of QoS statistics for queues output to the CPU. INDEX { axsToCpuQoSStatsIndex }	Y
3	axsToCpuQoSStatsIndex {axsToCpuQoSStatsEntry 1}	NOT-ACCESSIBLE	NA	Shows numbers in the portion containing queues output to the CPU that are to be acquired. • Fixed value of `1`	M
4	axsToCpuQoSStatsMaxQnum {axsToCpuQoSStatsEntry 2}	INTEGER	R/O	Shows the maximum number of queues of the queues output to the CPU.	Y
5	axsToCpuQoSStatsLimitQlen {axsToCpuQoSStatsEntry 3}	INTEGER	R/O	Shows the length limit of the output priority queue of the relevant queues among those output to the CPU (the maximum queue length of all the relevant queues).	Y
6	axsToCpuQoSStatsTotalOutFrames {axsToCpuQoSStatsEntry 4}	Counter	R/O	Shows the total number of frames of the queues output to the CPU. • Fixed value of `0`	M
7	axsToCpuQoSStatsTotalOutBytesHigh {axsToCpuQoSStatsEntry 5}	Counter	R/O	Shows the total number of bytes of the queues output to the CPU (most significant 4 bytes). Note that FCS is not included in the number of bytes. • Fixed value of `0`	M
8	axsToCpuQoSStatsTotalOutBytesLow {axsToCpuQoSStatsEntry 6}	Counter	R/O	Shows the total number of bytes of the queues output to the CPU (least significant 4 bytes). Note that FCS is not included in the number of bytes. • Fixed value of `0`	M
9	axsToCpuQoSStatsTotalDiscardFrames {axsToCpuQoSStatsEntry 7}	Counter	R/O	Shows the total number of discarded frames of the queues output to the CPU.	Y
10	axsToCpuQoSStatsQueueTable {axsToCpuQoS 2}	NOT-ACCESSIBLE	NA	Table information of the QoS statistics for each output priority queue of the queues output to the CPU.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
11	axsToCpuQoSStatsQueueEntry {axsToCpuQoSStatsQueueTable 1}	NOT-ACCESSIBLE	NA	Entry of the QoS statistics for each output priority queue of the queues output to the CPU. INDEX { axsToCpuQoSStatsQueueIndex, axsToCpuQoSStatsQueIndex }	Y
12	axsToCpuQoSStatsQueueIndex {axsToCpuQoSStatsQueueEntry 1}	NOT-ACCESSIBLE	NA	Shows numbers in the portion containing queues output to the CPU that are to be acquired. • Fixed value of 1	M
13	axsToCpuQoSStatsQueueQueIndex {axsToCpuQoSStatsQueueEntry 2}	NOT-ACCESSIBLE	NA	Shows the index value for identifying any entry in the table. The value ranges from 1 to axsToCpuQoSStatsMaxQnum.	Y
14	axsToCpuQoSStatsQueueQlen {axsToCpuQoSStatsQueueEntry 3}	INTEGER	R/O	Shows the length of the output priority queue of the queues output to the CPU at the time of information collection.	Y
15	axsToCpuQoSStatsQueueMaxQlen {axsToCpuQoSStatsQueueEntry 4}	INTEGER	R/O	Shows the maximum length of the output priority queue of the relevant queues within the queues output to the CPU after the statistics are deleted or initialized. • Fixed value of 0	M
16	axsToCpuQoSStatsQueueDiscardFramesClass1 {axsToCpuQoSStatsQueueEntry 5}	Counter64	R/O	Shows the number of discarded frames of the relevant output priority queue at queueing level 1 of the queues output to the CPU. • Fixed value of 0	M
17	axsToCpuQoSStatsQueueDiscardFramesClass2 {axsToCpuQoSStatsQueueEntry 6}	Counter64	R/O	Shows the number of discarded frames of the relevant output priority queue at queueing level 2 of the queues output to the CPU. • Fixed value of 0	M
18	axsToCpuQoSStatsQueueDiscardFramesClass3 {axsToCpuQoSStatsQueueEntry 7}	Counter64	R/O	Number of discarded frames in the relevant output priority queue at queueing level 3 of the queues output to the CPU. • Fixed value of 0	M
19	axsToCpuQoSStatsQueueDiscardFramesClass4 {axsToCpuQoSStatsQueueEntry 8}	Counter64	R/O	Number of discarded frames in the relevant output priority queue at queueing level 4 of the queues output to the CPU. • Fixed value of 0	M

3.1.3 axsDHCP group

(1) ID

```
axsStats OBJECT IDENTIFIER ::= {axsMib 1}

axsDHCP OBJECT IDENTIFIER ::= {axsStats 10}
Object ID value  1.3.6.1.4.1.21839.2.2.1.1.10
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsDHCP group.

Table 3-4: axsDHCP group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsDHCP {axsStats 10}	NOT-ACCESSIBLE	NA	Statistics about the DHCP server	Y
2	axsDHCPAddrValue {axsDHCP 1}	INTEGER	R/O	Number of assignable IP addresses	Y
3	axsDHCPFreeAddrValue {axsDHCP 2}	INTEGER	R/O	Number of free IP addresses	Y

3.2 axsGsrpMIB group (GSRP group information)

3.2.1 axsGsrpGroupTable group

(1) ID

```
axsGsrp OBJECT IDENTIFIER ::= {axsMib 4}

axsGsrpGroupTable OBJECT IDENTIFIER ::= {axsGsrp 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.4.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsGsrpGroupTable group.

Table 3-5: axsGsrpGroupTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsGsrpGroupTable {axsGsrp 1}	NOT-ACCESSIBLE	NA	Table containing GSRP group information	Y
2	axsGsrpGroupEntry {axsGsrpGroupTable 1}	NOT-ACCESSIBLE	NA	List of GSRP group information. INDEX { axsGsrpGroupId }	Y
3	axsGsrpGroupId {axsGsrpGroupEntry 1}	INTEGER	NA	GSRP group ID	Y
4	axsGsrpGroupRowStatus {axsGsrpGroupEntry 2}	RowStatus	R/O	Shows whether the entry is valid or invalid. Fixed value of Valid (1).	Y
5	axsGsrpMacAddress {axsGsrpGroupEntry 3}	MacAddress	R/O	MAC address of the Switch	Y
6	axsGsrpAdvertiseHoldTime {axsGsrpGroupEntry 4}	INTEGER	R/O	Retention time of advertise frames (in milliseconds)	Y
7	axsGsrpAdvertiseInterval {axsGsrpGroupEntry 5}	INTEGER	R/O	Interval for sending advertise frames (in milliseconds)	Y
8	axsGsrpSelectionPattern {axsGsrpGroupEntry 6}	INTEGER	R/O	Selection pattern of master and backup: • Ports-Priority-MAC (1) • Priority-Ports-MAC (2)	Y
9	axsGsrpLayer3Redundancy {axsGsrpGroupEntry 7}	INTEGER	R/O	Status of Layer 3 redundancy switching: • Off (1) • On (2)	Y

3.2.2 axsGsrpVlanGroupTable group

(1) ID

```
axsGsrp OBJECT IDENTIFIER ::= {axsMib 4}

axsGsrpVlanGroupTable OBJECT IDENTIFIER ::= {axsGsrp 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.4.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsGsrpVlanGroupTable group.

Table 3-6: axsGsrpVlanGroupTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsGsrpVlanGroupTable { axsGsrp 2}	NOT-ACCESSIBLE	NA	Table containing GSRP VLAN group information	Y
2	axsGsrpVlanGroupEntry {axsGsrpVlanGroupTable 1}	NOT-ACCESSIBLE	NA	List of GSRP VLAN group information. INDEX { axsGsrpGroupId, axsGsrpVlanGroupId }	Y
3	axsGsrpVlanGroupId {axsGsrpVlanGroupEntry 1}	INTEGER	NA	GSRP VLAN Group ID (from 1 to 64).	Y
4	axsGsrpVlanGroupRowStatus {axsGsrpVlanGroupEntry 2}	RowStatus	R/O	Shows whether the entry is valid or invalid. Fixed value of Valid (1).	Y
5	axsGsrpState {axsGsrpVlanGroupEntry 3}	INTEGER	R/O	Status of the GSRP group: • BackUp (1) • BackUp (Waiting) (2) • Master (3) • BackUp (No Neighbor) (4) • BackUp (Lock) (5)	Y
6	axsGsrpPriority {axsGsrpVlanGroupEntry 4}	INTEGER	R/O	Configured priority	Y
7	axsGsrpActivePorts {axsGsrpVlanGroupEntry 5}	INTEGER	R/O	Number of active ports	Y
8	axsGsrpTransitionToMasterCounts {axsGsrpVlanGroupEntry 6}	INTEGER	R/O	Number of transitions of state from backup to master	Y
9	axsGsrpTransitionFromMasterCounts {axsGsrpVlanGroupEntry 7}	INTEGER	R/O	Number of transitions of state from master to backup	Y
10	axsGsrpLastTransitionTime {axsGsrpVlanGroupEntry 8}	TimeStamp	R/O	Time of the last transition of state from master to backup or from backup to master	Y
11	axsGsrpVirtualMacAddress {axsGsrpVlanGroupEntry 9}	MacAddress	R/O	Virtual MAC address of the GSRP VLAN group	Y

3.2.3 axsGsrpNeighborGroupTable group

(1) ID

```
axsGsrp OBJECT IDENTIFIER ::= {axsMib 4}

axsGsrpNeighborGroupTable OBJECT IDENTIFIER ::= {axsGsrp 3}
Object ID value  1.3.6.1.4.1.21839.2.2.1.4.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsGsrpNeighborGroupTable group.

Table 3-7: axsGsrpNeighborGroupTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsGsrpNeighborGroupTable {axsGsrp 3}	NOT-ACCESSIBLE	NA	Table that contains the GSRP group information of a partner switch	Y
2	axsGsrpNeighborGroupEntry {axsGsrpNeighborGroupTable 1}	NOT-ACCESSIBLE	NA	List that contains the GSRP group information of a partner switch. INDEX { axsGsrpNeighborGroupId, axsGsrpNeighborMacAddress }	Y
3	axsGsrpNeighborGroupId {axsGsrpNeighborGroupEntry 1}	INTEGER	NA	GSRP group ID of the partner switch	Y
4	axsGsrpNeighborMacAddress {axsGsrpNeighborGroupEntry 2}	MacAddress	NA	MAC address of the partner switch	Y
5	axsGsrpNeighborAdvertiseHoldTime {axsGsrpNeighborGroupEntry 3}	INTEGER	R/O	Retention time of an advertise frame from the partner switch (in milliseconds)	Y
6	axsGsrpNeighborAdvertiseInterval {axsGsrpNeighborGroupEntry 4}	INTEGER	R/O	Output interval of advertise frames from the partner switch (in milliseconds)	Y
7	axsGsrpNeighborSelectionPattern {axsGsrpNeighborGroupEntry 5}	INTEGER	R/O	Selection pattern of master and backup in the partner switch: • Port-Priority-MAC (1) • Priority-Port-MAC (2)	Y

3.2.4 axsGsrpNeighborVlanGroupTable group

(1) ID

```
axsGsrp OBJECT IDENTIFIER ::= {axsMib 4}

axsGsrpNeighborVlanGroupTable OBJECT IDENTIFIER ::= {axsGsrp 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.4.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsGsrpNeighborVlanGroupTable group.

Table 3-8: axsGsrpNeighborVlanGroupTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsGsrpNeighborVlanGroupTable {axsGsrp 4}	NOT-ACCESSIBLE	NA	Table containing GSRP VLAN group information of the partner switch	Y
2	axsGsrpNeighborVlanGroupEntry {axsGsrpNeighborGroupTable 1}	NOT-ACCESSIBLE	NA	List of GSRP VLAN group information of the partner switch. INDEX { axsGsrpNeighborGroupId, axsGsrpNeighborVlanGroupId, axsGsrpNeighborMacAddress }	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
3	axsGsrpNeighborVlanGroupId {axsGsrpNeighborVlanGroupEntry 1}	INTEGER	NA	GSRP VLAN group ID (1-64) of the partner switch	Y
4	axsGsrpNeighborState {axsGsrpNeighborVlanGroupEntry 2}	INTEGER	R/O	Shows the state of the GSRP group of the partner switch: • BackUp (1) • BackUp (Waiting) (2) • Master (3) • BackUp (No Neighbor) (4) • BackUp (Lock) (5)	Y
5	axsGsrpNeighborPriority {axsGsrpNeighborVlanGroupEntry 3}	INTEGER	R/O	Configured priority of the partner switch	Y
6	axsGsrpNeighborActivePorts {axsGsrpNeighborVlanGroupEntry 4}	INTEGER	R/O	Number of active ports on the partner switch	Y

3.3 axsFdb group (MAC address table group MIB)

(1) ID

```
axsMib OBJECT IDENTIFIER ::= {axsEx 1}

axsFdb OBJECT IDENTIFIER ::= {axsMib 5}
Object ID value  1.3.6.1.4.1.21839.2.2.1.5
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsFdb group.

Table 3-9: axsFdb group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsFdbCounterTable {axsFdb 1}	NOT-ACCESSIBLE	NA	Table of the MAC address learning count	Y
2	axsFdbCounterEntry {axsFdbCounterTable 1}	NOT-ACCESSIBLE	NA	Entry of the table of the MAC address learning count. INDEX { axsFdbCounterNifIndex, axsFdbCounterLineIndex }	Y
3	axsFdbCounterNifIndex {axsFdbCounterEntry 1}	NOT-ACCESSIBLE	NA	Shows the position of slots with NIF inserted	Y
4	axsFdbCounterLineIndex {axsFdbCounterEntry 2}	NOT-ACCESSIBLE	NA	Shows the position of slots with LINE inserted	Y
5	axsFdbCounterCounts {axsFdbCounterEntry 3}	Counter32	R/O	Number of table entries of the MAC address learning count at this port	Y
6	axsFdbCounterType {axsFdbCounterEntry 4}	INTEGER	R/O	Setting of the learning limitation, and behavior of unlearnt frames in case of MAC address table count overflow when limitation is valid: • Unlimited (`0`) • Limited and Forward (`1`) • Limited and Discard (`2`) Returns a fixed value (`0`) in the Switch.	Y
7	axsFdbCounterLimits {axsFdbCounterEntry 5}	Counter32	R/O	Maximum number of table entries for the MAC address learning at this port • `0`: Learning is prohibited. • From 1 to 100000: Number specified via the `mac-address-table static` configuration command Returns a fixed value (`0`) in the Switch.	Y

3.4 axsVlan group (VLAN information MIB)

The port number used in this group is either the number that uniquely distinguishes the physical port number, the channel group number, or the virtual link ID, and it is calculated using the following relationships:

- Port number of a physical port

  Any physical port is uniquely detected.

  Port number: Physical port number

- Port number of a channel group

  Calculated from the channel group number in link aggregation as follows:

  Port number: 65 (fixed value) + channel group number

- Port number of a virtual link

  Calculated from the virtual link ID as follows:

  Port number: 193 (fixed value) + virtual link ID

  A port number of a virtual link is applied only to the axsVBStpPortTable group.

3.4.1 axsVlanBridge group (dot1dBase information)

(1) axsVBBaseTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeBase OBJECT IDENTIFIER ::= {axsVlanBridge 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.1
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBBaseTable group.

Table 3-10: axsVBBaseTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBBaseTable {axsVlanBridgeBase 1}	NOT-ACCESSIBLE	NA	Table of dot1dBase information for each VLAN	Y
2	axsVBBaseEntry {axsVBBaseTable 1}	NOT-ACCESSIBLE	NA	Entry of information on each VLAN ID in axsVBBaseTable. INDEX { axsVBBaseIndex }	Y
3	axsVBBaseIndex {axsVBBaseEntry 1}	VlanIndex	R/O	VLAN ID	Y
4	axsVBBaseBridgeAddress {axsVBBaseEntry 2}	MacAddress	R/O	MAC address of the VLAN. • When using MAC functionality for each VLAN: MAC address for each VLAN • When not using the above: MAC address of the Switch	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
5	axsVBBaseNumPorts {axsVBBaseEntry 3}	INTEGER	R/O	Number of ports assigned in the VLAN	Y
6	axsVBBaseType {axsVBBaseEntry 4}	INTEGER	R/O	Type of bridging the VLAN can execute: • unknown (1) • transparent-only (2) • sourceroute-only (3) • srt (4) Fixed value of transparent-only (2) in the Switch.	M
7	axsVBBaseVlanIfIndex {axsVBBaseEntry 5}	INTEGER	R/O	Value of ifIndex of the VLAN interface	Y
8	axsVBBaseVlanType {axsVBBaseEntry 6}	INTEGER	R/O	VLAN type: • port-based (1) • mac-based (2) • protocol-based (3)	Y
9	axsVBBaseVlanID {axsVBBaseEntry 7}	VlanIdOrZero	R/O	The VLAN ID value of the VLAN tag corresponding to the VLAN	Y
10	axsVBBaseAssociatedPrimaryVlan {axsVBBaseEntry 8}	VlanIdOrZero	R/O	Returns the VLAN ID of the primary VLAN paired with this VLAN when private VLAN functionality is active and this VLAN is set as a secondary VLAN. Returns 0 when private VLAN functionality is not active in this VLAN, this VLAN is not a secondary VLAN, or there is no primary VLAN paired with this VLAN. Returns a fixed value (0) in the Switch.	Y
11	axsVBBaseIfStatus {axsVBBaseEntry 9}	INTEGER	R/O	Interface state of the VLAN against the higher protocol: • Up (1) • Down (2)	Y
12	axsVBBaseLastChange {axsVBBaseEntry 10}	TimeTicks	R/O	Value of sysUpTime when the VLAN topology is changed.	Y
13	axsVBBasePrivateVlanType {axsVBBaseEntry 11}	INTEGER	R/O	Private VLAN type of VLAN. Returns normal (1) when private VLAN functionality is not active. • normal (1) • primary (2) • isolated (3) • community (4) Returns a fixed value (1) in the Switch.	Y

(2) axsVBBasePortTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeBase OBJECT IDENTIFIER ::= {axsVlanBridge 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.1
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBBasePortTable group.

Table 3-11: axsVBBasePortTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBBasePortTable {axsVlanBridgeBase 2}	NOT-ACCESSIBLE	NA	Table of dot1dBasePortTable for each VLAN.	Y
2	axsVBBasePortEntry {axsVBBasePortTable 1}	NOT-ACCESSIBLE	NA	Structural entry of axsVBBasePortTable. INDEX { axsVBBasePortIndex, axsVBBasePort }	Y
3	axsVBBasePortIndex {axsVBBasePortEntry 1}	VlanIndex	R/O	VLAN ID.	Y
4	axsVBBasePort {axsVBBasePortEntry 2}	INTEGER	R/O	Port number (1-65535) of the port assigned in the VLAN. Such port numbers are assigned to physical ports and channel groups.	Y
5	axsVBBasePortIfIndex {axsVBBasePortEntry 3}	INTEGER	R/O	Value of ifIndex for the port assigned in the VLAN	Y
6	axsVBBasePortCircuit {axsVBBasePortEntry 4}	OBJECT IDENTIFIER	R/O	ID to distinguish different ports in the VLAN that have the same axsVBBasePortIfIndex. Returns a fixed value (0.0) in the Switch.	M
7	axsVBBasePortDelayExceeded Discards {axsVBBasePortEntry 5}	Counter	R/O	Number of discarded frames due to a delay occurring in a VLAN port. Returns a fixed value (0) in the Switch.	M
8	axsVBBasePortMtuExceededDiscards {axsVBBasePortEntry 6}	Counter	R/O	Number of discarded frames due to a data overflow occurring in a VLAN port. Returns a fixed value (0) in the Switch.	M
9	axsVBBasePortState {axsVBBasePortEntry 7}	INTEGER	R/O	STP port state of a port assigned in the VLAN: • disable (1) • blocking (2) • listening (3) • learning (4) • forwarding (5) • broken (6) • fix-forwarding (7) Returns disable (1), blocking (2), listening (3), learning (4), forwarding (5), or fix-forwarding (7) in the Switch.	Y
10	axsVBBasePortTaggedState {axsVBBasePortEntry 8}	INTEGER	R/O	State of the VLAN tag configuration of the port set as a VLAN. • Without configuration (1) • With configuration (2)	Y
11	axsVBBasePortTranslatedTagID {axsVBBasePortEntry 9}	VlanIdOrZero	R/O	Translation ID (1-4094) of the VLAN assigned to this port when tag translation is active. Returns 0 when tag translation is not active.	Y

(3) axsVBStpTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeStp OBJECT IDENTIFIER ::= {axsVlanBridge 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.2
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBStpTable group.

Table 3-12: axsVBStpTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBStpTable {axsVlanBridgeStp 1}	NOT-ACCESSIBLE	NA	Table of dot1dStpTable for each VLAN. This table contains Spanning Tree information for each PVST+ VLAN.	Y
2	axsVBStpEntry {axsVBStpTable 1}	NOT-ACCESSIBLE	NA	Entry of axsVBStpTable. INDEX { axsVBStpIndex }	Y
3	axsVBStpIndex {axsVBStpEntry 1}	VlanIndex	R/O	VLAN ID.	Y
4	axsVBStpProtocolSpecification {axsVBStpEntry 2}	INTEGER	R/O	Type of protocol of a Spanning Tree Protocol for each VLAN: • unknown (1) • decLb100 (2) • ieee8021d (3) • ieee8021w (4) Returns ieee8021d (3) or ieee8021w (4) in the Switch.	Y
5	axsVBStpPriority {axsVBStpEntry 3}	INTEGER	R/O	Priority value of the Spanning Tree Protocol for each VLAN (0-65535).	Y
6	axsVBStpTimeSinceTopologyChange {axsVBStpEntry 4}	TimeTicks	R/O	Elapsed time since the change in the topology of the Spanning Tree Protocol for each VLAN (in units of 1/100 seconds)	Y
7	axsVBStpTopChanges {axsVBStpEntry 5}	Counter	R/O	Number of topology changes in the Spanning Tree Protocol for each VLAN	Y
8	axsVBStpDesignatedRoot {axsVBStpEntry 6}	BridgeId	R/O	Root bridge ID of a Spanning Tree Protocol for each VLAN	Y
9	axsVBStpRootCost {axsVBStpEntry 7}	INTEGER	R/O	Root path cost of a Spanning Tree Protocol for each VLAN	Y
10	axsVBStpRootPort {axsVBStpEntry 8}	INTEGER	R/O	Root port value of a Spanning Tree Protocol for each VLAN	Y
11	axsVBStpMaxAge {axsVBStpEntry 9}	Timeout	R/O	Maximum aging time of a Spanning Tree Protocol for each VLAN (in units of 1/100 seconds)	Y
12	axsVBStpHelloTime {axsVBStpEntry 10}	Timeout	R/O	Hello time of a Spanning Tree Protocol for each VLAN (in units of 1/100 seconds)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
13	axsVBStpHoldTime {axsVBStpEntry 11}	INTEGER	R/O	Hold time of a Spanning Tree Protocol for each VLAN (in units of 1/100 seconds)	Y
14	axsVBStpForwardDelay {axsVBStpEntry 12}	Timeout	R/O	Transfer delay time of a Spanning Tree Protocol for each VLAN (in units of 1/100 seconds)	Y
15	axsVBStpBridgeMaxAge {axsVBStpEntry 13}	Timeout	R/O	Maximum aging time of a Spanning Tree Protocol for each VLAN that is set up as a root bridge (range: `600-4000`, unit: 1/100 seconds)	Y
16	axsVBStpBridgeHelloTime {axsVBStpEntry 14}	Timeout	R/O	Hello time of a Spanning Tree Protocol for each VLAN that is set up as a root bridge (range: `100-1000`, unit: 1/100 seconds)	Y
17	axsVBStpBridgeForwardDelay {axsVBStpEntry 15}	Timeout	R/O	Transfer delay time of a Spanning Tree Protocol for each VLAN that is set up as a root bridge (range: `400-3000`, unit: 1/100 seconds)	Y

(4) axsVBStpPortTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeStp OBJECT IDENTIFIER ::= {axsVlanBridge 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.2
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBStpPortTable group.

Table 3-13: axsVBStpPortTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBStpPortTable {axsVlanBridgeStp 2}	NOT-ACCESSIBLE	NA	Table of dot1dStpPortTable for each VLAN. This table contains the information on Spanning Tree ports for each PVST+ VLAN.	Y
2	axsVBStpPortEntry {axsVBStpPortTable 1}	NOT-ACCESSIBLE	NA	Structural entry of axsVBStpPortTable. INDEX { axsVBStpPortIndex, axsVBStpPort }	Y
3	axsVBStpPortIndex {axsVBStpPortEntry 1}	VlanIndex	R/O	VLAN ID.	Y
4	axsVBStpPort {axsVBStpPortEntry 2}	INTEGER	R/O	Port number (`1-65535`) of the port corresponding to the structural entry. Such port numbers are assigned to physical ports, channel groups, and virtual links.	Y
5	axsVBStpPortPriority {axsVBStpPortEntry 3}	INTEGER	R/O	Priority of this port for each VLAN (`0-255`)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	axsVBStpPortState {axsVBStpPortEntry 4}	INTEGER	R/O	Current state of this port for each VLAN: • disabled (1) • blocking (2) • listening (3) • learning (4) • forwarding (5) • broken (6) Returns disabled (1), blocking (2), listening (3), learning (4), or forwarding (5) in the Switch.	Y
7	axsVBStpPortEnable {axsVBStpPortEntry 5}	INTEGER	R/O	Shows whether a Spanning Tree Protocol for each VLAN is enabled or disabled for this port: • enabled (1) • disabled (2)	Y
8	axsVBStpPortPathCost {axsVBStpPortEntry 6}	INTEGER	R/O	Path cost of this port for each VLAN (1-200000000)	Y
9	axsVBStpPortDesignatedRoot {axsVBStpPortEntry 7}	BridgeId	R/O	Root bridge ID for each VLAN included in the BPDU received by this port from the designated bridge	Y
10	axsVBStpPortDesignatedCost {axsVBStpPortEntry 8}	INTEGER	R/O	Path cost for each VLAN of the designated port connected to this port	Y
11	axsVBStpPortDesignatedBridge {axsVBStpPortEntry 9}	BridgeId	R/O	Bridge ID of the port for each VLAN regarded as a designated bridge for this port	Y
12	axsVBStpPortDesignatedPort {axsVBStpPortEntry 10 }	OCTET STRING (SIZE(2))	R/O	Port ID of the designated bridge for each VLAN connected to this port	Y
13	axsVBStpPortForwardTransitions {axsVBStpPortEntry 11}	Counter	R/O	Number of times this port has changed its state from learning to forwarding for each VLAN	Y

(5) axsVBTpTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeTp OBJECT IDENTIFIER ::= {axsVlanBridge 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.4
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBTpTable group.

Table 3-14: axsVBTpTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBTpTable {axsVlanBridgeTp 1}	NOT-ACCESSIBLE	NA	dot1dTp information table for each VLAN	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
2	axsVBTpEntry {axsVBTpTable 1}	NOT-ACCESSIBLE	NA	Structural entry of axsVBTpTable. INDEX { axsVBTpIndex }	Y
3	axsVBTpIndex {axsVBTpEntry 1}	VlanIndex	R/O	VLAN ID.	Y
4	axsVBTpLearnedEntryDiscards {axsVBTpEntry 2}	Counter	R/O	Number of entries discarded due to the absence of free space in the MAC address table. Returns a fixed value (0) in the Switch.	M
5	axsVBTpAgingTime {axsVBTpEntry 3}	INTEGER	R/O	Timeout period to age out dynamically learned MAC address entries (in seconds). • In aging mode: 10 to 1000000 • Not in aging mode: 0	N

(6) axsVBTpFdbTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeTp OBJECT IDENTIFIER ::= {axsVlanBridge 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.4
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBTpFdbTable group.

Table 3-15: axsVBTpFdbTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBTpFdbTable {axsVlanBridgeTp 2}	NOT-ACCESSIBLE	NA	dot1dTpFdbTable information table for each VLAN. This table gives no response to GetNextRequest, but responds with the next MIB object.	Y
2	axsVBTpFdbEntry {axsVBTpFdbTable 1}	NOT-ACCESSIBLE	NA	Structural entry of axsVBTpFdbTable. INDEX { axsVBTpFdbIndex, axsVBTpFdbAddress }	Y
3	axsVBTpFdbIndex {axsVBTpEntry 1}	VlanIndex	R/O	VLAN ID.	Y
4	axsVBTpFdbAddress {axsVBTpEntry 2}	MacAddress	R/O	Unicast MAC address in the entries in the MAC address table	Y
5	axsVBTpFdbPort {axsVBTpEntry 3}	INTEGER	R/O	Port number that received frames whose source address is the MAC address designated by axsVBTpFdbAddress. If 0, no port number is learned.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	axsVBTpFdbStatus {axsVBTpEntry 4}	INTEGER	R/O	State of the MAC address table: • other (1) • invalid (2) • learned (3) • self (4) • mgmt (5) Returns learned (3) for dynamic entries. Returns mgmt (5) for static entries.	Y

(7) axsVBTpPortTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeTp OBJECT IDENTIFIER ::= {axsVlanBridge 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.4
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBTpPortTable group.

Table 3-16: axsVBTpPortTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBTpPortTable {axsVlanBridgeTp 3}	NOT-ACCESSIBLE	NA	dot1dTpPortTable information table for each VLAN	Y
2	axsVBTpPortEntry {axsVBTpPortTable 1}	NOT-ACCESSIBLE	NA	Entry of axsVBTpPortTable information for each port. INDEX { axsVBTpPortIndex, axsVBTpPort }	Y
3	axsVBTpPortIndex {axsVBTpPortEntry 1}	VlanIndex	R/O	VLAN ID.	Y
4	axsVBTpPort {axsVBTpPortEntry 2}	INTEGER	R/O	Port number (1-65535) that indicates the port corresponding to the management information in this entry. Such port numbers are assigned to physical ports and channel groups.	Y
5	axsVBTpPortMaxInfo {axsVBTpPortEntry 3}	INTEGER	R/O	Maximum width of the INFO field of this port for each VLAN (excluding the MAC header and FCS)	Y
6	axsVBTpPortInFrames {axsVBTpPortEntry 4}	Counter	R/O	Number of frames received by this port for each VLAN. Returns a fixed value (0) in the Switch.	M
7	axsVBTpPortOutFrames {axsVBTpPortEntry 5}	Counter	R/O	Number of frames sent by this port for each VLAN. Returns a fixed value (0) in the Switch.	M

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
8	axsVBTpPortInDiscards {axsVBTpPortEntry 6}	Counter	R/O	Number of frames discarded in this port for each VLAN. Returns a fixed value (0) in the Switch.	M

(8) axsVBStaticTable group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1

axsVlanBridgeStatic OBJECT IDENTIFIER ::= {axsVlanBridge 5}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1.5
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVBStaticTable group.

Table 3-17: axsVBStaticTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVBStaticTable {axsVlanBridgeStatic 1}	NOT-ACCESSIBLE	NA	dot1dStaticTable information table for each VLAN. This table returns no information on GetNextRequest, but responds with the following MIB objects.	Y
2	axsVBStaticEntry {axsVBStaticTable 1}	NOT-ACCESSIBLE	NA	Structural entry of axsVBStaticTable. INDEX { axsVBStaticIndex, axsVBStaticAddress }	Y
3	axsVBStaticIndex {axsVBStaticEntry 1}	VlanIndex	R/O	VLAN ID.	Y
4	axsVBStaticAddress {axsVBStaticEntry 2}	MacAddress	R/O	MAC address for unicast, group, or broadcast	Y
5	axsVBStaticReceivePort {axsVBStaticEntry 3}	INTEGER	R/O	The receiving port number that this entry is applied to. 0 if applied to all receiving ports. Returns a fixed value (0) in the Switch.	Y
6	axsVBStaticAllowedToGoTo {axsVBStaticEntry 4}	OCTET STRING	R/O	Bitmap of a port that indicates the destination port of the forwarding of the frame whose destination is the MAC address included in this entry	Y
7	axsVBStaticStatus {axsVBStaticEntry 5}	INTEGER	R/O	State of this entry: • other (1) • invalid (2) • permanent (3) • deleteOnReset (4) • deleteOnTimeout (5) In the Switch, returns permanent (3) for static entries and deleteOnReset (4) for IGMP/MLD snooping entries.	Y

(9) axsVlanBridge (others) group

(a) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanBridge OBJECT IDENTIFIER ::= {axsVlan 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.1
```

(b) Implementation specifications

The following table shows the implementation specifications for the axsVlanBridge (others) group.

Table 3-18: axsVlanBridge (others) group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVlanBridgeMaxVlans {axsVlanBridge 101}	VlanIndex	R/O	Maximum value of the VLAN IDs in the Switch. Returns a fixed value (4094) in the Switch.	Y
2	axsVlanBridgeMaxSpans {axsVlanBridge 102}	VlanIndex	R/O	Maximum value of the VLAN IDs of the VLANs where Spanning Tree Protocols are operated in the Switch. Returns a fixed value (4094) in the Switch.	Y

3.4.2 axsVlanTagTranslation group (Tag translation information MIB)

(1) ID

```
axsVlan OBJECT IDENTIFIER ::= {axsMib 6}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6

axsVlanTagTranslation OBJECT IDENTIFIER ::= {axsVlan 10}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.10

axsVlanTagTranslationTable OBJECT IDENTIFIER ::= {axsVlanTagTranslation 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.6.10.1
```

(2) Implementation specifications

The following table lists the implementation specifications for axsVlanTagTranslation.

Table 3-19: axsVlanTagTranslation group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsVlanTagTranslationTable {axsVlanTagTranslation 1}	NOT-ACCESSIBLE	NA	Information table about tag translation	Y
2	axsVlanTagTranslationEntry {axsVlanTagTranslationTable 1}	NOT-ACCESSIBLE	NA	Entries in the information table about tag translation. INDEX { axsVlanTagTranslationVlanId, axsVlanTagTranslationTranslatedId }	Y
3	axsVlanTagTranslationVlanId {axsVlanTagTranslationEntry 1}	NOT-ACCESSIBLE	NA	VLAN ID (1-4094) to which tag translation is assigned.	Y
4	axsVlanTagTranslationTranslatedId {axsVlanTagTranslationEntry 2}	NOT-ACCESSIBLE	NA	Translated ID (1-4094) configured in the tag translation	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
5	axsVlanTagTranslationPorts {axsVlanTagTranslationEntry 3}	PortList	R/O	List of ports that assign the same translated IDs to the same VLANs via tag translation	Y

3.5 axsOadp group (OADP information MIB)

3.5.1 axsOadpGlobalInfo group

(1) ID

```
axsOadp OBJECT IDENTIFIER ::= {axsMib 7}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7

axsOadpMIBObjects OBJECT IDENTIFIER ::= {axsOadp 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7.1

axsOadpGlobalInfo OBJECT IDENTIFIER ::= {axsOadpMIBObjects 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsOadpGlobalInfo group.

Table 3-20: axsOadpGlobalInfo group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOadpGlobalActive {axsOadpGlobalInfo 1}	TruthValue	R/O	Active status of the OADP functionality. This status indicates whether the `oadp run` configuration command has been configured. • run (`1`) • run is not configured (`2`)	Y
2	axsOadpGlobalCdpActive {axsOadpGlobalInfo 2}	TruthValue	R/O	Active status of the CDP reception functionality. This status indicates whether the `oadp cdp-listener` configuration command has been configured. • cdp-listener (`1`) • cdp-listener is not configured (`2`)	Y
3	axsOadpGlobalMessageInterval {axsOadpGlobalInfo 3}	INTEGER (5..254)	R/O	Interval of OADP frames to be sent. The value configured by the `oadp interval-time` configuration command (in seconds).	Y
4	axsOadpGlobalHoldTime {axsOadpGlobalInfo 4}	INTEGER (10..255)	R/O	Period for the neighboring switch to hold OADP frames sent from the Switch. The value configured by the `oadp hold-time` configuration command (in seconds).	Y
5	axsOadpGlobalCacheLastChange {axsOadpGlobalInfo 5}	TimeTicks	R/O	Value of sysUpTime when the information of axsOadpNeighborTable is updated.	Y
6	axsOadpGlobalName {axsOadpGlobalInfo 6}	DisplayString (SIZE(0..255))	R/O	Device ID of the Switch	Y
7	axsOadpGlobalNameType {axsOadpGlobalInfo 7}	INTEGER	R/O	Type of axsOadpGlobalName: • other (`1`) • sysName (`2`) • serialNumber (`3`) • MACaddress (`4`)	Y

3.5.2 axsOadpPortInfo group

(1) ID

```
axsOadp OBJECT IDENTIFIER ::= {axsMib 7}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7

axsOadpMIBObjects OBJECT IDENTIFIER ::= {axsOadp 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7.1

axsOadpPortInfo OBJECT IDENTIFIER ::= {axsOadpMIBObjects 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7.1.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsOadpPortInfo group.

Table 3-21: axsOadpPortInfo group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOadpPortConfigTable {axsOadpPortInfo 1}	SEQUENCE OF OadpPortConfigEntry	NA	Table describing OADP port information	Y
2	axsOadpPortConfigEntry {axsOadpPortConfigTable 1}	OadpPortConfigEntry	NA	Entry in the table describing OADP port information (for each port). INDEX { axsOadpPortConfigIfIndex }	Y
3	axsOadpPortConfigIfIndex {axsOadpPortConfigEntry 1}	InterfaceIndex	R/O	Port identification index. Same as for ifIndex. This is assigned to any physical ports and channel groups that are assigned ifIndex.	Y
4	axsOadpPortConfigActive {axsOadpPortConfigEntry 2}	TruthValue	R/O	Specifies whether the state of the corresponding port is active: • enable (1) • disable (2)	Y

3.5.3 axsOadpNeighborInfo group

(1) ID

```
axsOadp OBJECT IDENTIFIER ::= {axsMib 7}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7

axsOadpMIBObjects OBJECT IDENTIFIER ::= {axsOadp 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7.1

axsOadpNeighborInfo OBJECT IDENTIFIER ::= {axsOadpMIBObjects 3}
Object ID value  1.3.6.1.4.1.21839.2.2.1.7.1.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsOadpNeighborInfo group.

Table 3-22: axsOadpNeighborInfo group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOadpNeighborTable {axsOadpNeighborInfo 1}	SEQUENCE OF OadpNeighborEntry	NA	Table describing neighboring OADP nodes	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
2	axsOadpNeighborEntry {axsOadpNeighborTable 1}	OadpNeighborEntry	NA	Entry in the table describing neighboring OADP nodes (for neighboring information). INDEX { axsOadpIfIndex, axsOadpTagID, axsOadpNeighborIndex, axsOadpNeighborTagID }	Y
3	axsOadpIfIndex {axsOadpNeighborEntry 1}	InterfaceIndex	R/O	ifIndex of a receiving interface	Y
4	axsOadpTagID {axsOadpNeighborEntry 2}	INTEGER (0..4095)	R/O	VLAN ID of the IEEE 802.1Q VLAN tag attached to the MAC frame	Y
5	axsOadpNeighborIndex {axsOadpNeighborEntry 3}	INTEGER	R/O	ID to uniquely identify any neighboring node (from `1` to 2^{31}`-1`)	Y
6	axsOadpNeighborTagID {axsOadpNeighborEntry 4}	INTEGER (0..4095)	R/O	Value of TagID TLV included in the OADP PDU sent from a neighboring node. `0` for CDP.	Y
7	axsOadpNeighborVendorType {axsOadpNeighborEntry 5}	INTEGER	R/O	Protocol type used to identify neighboring nodes: • other (`1`) • OADP (`2`) • CDP (`3`)	Y
8	axsOadpNeighborSNMPAgentAddressType {axsOadpNeighborEntry 6}	INTEGER	R/O	Type of the agent addresses for obtaining information in SNMP: • ipv4 (`1`) • ipv6 (`20`) • other-notSupported (`65535`)	Y
9	axsOadpNeighborSNMPAgentAddress {axsOadpNeighborEntry 7}	DisplayString	R/O	Agent address to obtain information in SNMP that is transformed to DisplayString. If there is no address information (axsOadpNeighborSNMPAgentAddressType is `other-notSupported`), it is `NULL`.	Y
10	axsOadpNeighborDescr {axsOadpNeighborEntry 8}	DisplayString (SIZE(0..255))	R/O	String equivalent to the sysDescr string of the neighboring node	Y
11	axsOadpNeighborDeviceID {axsOadpNeighborEntry 9}	DisplayString (SIZE(0..255))	R/O	Device ID of a neighboring node. In OADP it contains the string defined by axsOadpGlobalName.	Y
12	axsOadpNeighborSlotPort {axsOadpNeighborEntry 10}	DisplayString (SIZE(0..255))	R/O	String to uniquely identify the transmitting interface of a neighboring node (*<NIF number>/<Port number>*)	Y
13	axsOadpNeighborIfIndex {axsOadpNeighborEntry 11}	InterfaceIndex	R/O	ifIndex of the transmitting interface of a neighboring node. `0` for CDP.	Y
14	axsOadpNeighborIfSpeed {axsOadpNeighborEntry 12}	Gauge	R/O	ifSpeed of the transmitting interface of a neighboring node. `0` for CDP.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
15	axsOadpNeighborDeviceType {axsOadpNeighborEntry 13}	DisplayString (SIZE(0..255))	R/O	Device name of a neighboring node	Y
16	axsOadpNeighborService {axsOadpNeighborEntry 14}	OCTET STRING (SIZE(0..4))	R/O	Functionality supported by a neighboring node (logical addition) • Router (0x01) • Transparent Bridge (0x02) • Source-route Bridge (0x04) • Switch (0x08) • Host (0x10) • Not forward IGMP report (0x20) • Repeater (0x40)	Y
17	axsOadpNeighborVTPMgmtDomain {axsOadpNeighborEntry 15}	DisplayString (SIZE(0..32))	R/O	VTP Management Domain on the transmitting interface of a neighboring node	Y
18	axsOadpNeighborNativeVLAN {axsOadpNeighborEntry 16}	INTEGER (0..4095)	R/O	Native VLAN ID on the transmitting interface of a neighboring node	Y
19	axsOadpNeighborDuplex {axsOadpNeighborEntry 17}	INTEGER	R/O	Duplex information of the transmitting interface of a neighboring node: • unknown (1) • HALF (2) • FULL (3)	Y
20	axsOadpNeighborApplianceID {axsOadpNeighborEntry 18}	Gauge (0..255)	R/O	Appliance ID of a neighboring node	Y
21	axsOadpNeighborVlanID {axsOadpNeighborEntry 19}	Gauge (0..4095)	R/O	VLAN ID for VoIP of a neighboring node	Y
22	axsOadpNeighborPowerConsumption {axsOadpNeighborEntry 20}	Gauge	R/O	Power consumption of VoIP in a neighboring node (in milliwatts)	Y
23	axsOadpNeighborMTU {axsOadpNeighborEntry 21}	Gauge	R/O	MTU of the transmitting interface of a neighboring node	Y
24	axsOadpNeighborSysName {axsOadpNeighborEntry 22}	DisplayString (SIZE(0..255))	R/O	sysName of a neighboring node	Y
25	axsOadpNeighborSysObjectID {axsOadpNeighborEntry 23}	OBJECT IDENTIFIER	R/O	sysObjectID of a neighboring node	Y
26	axsOadpNeighborSecondarySNMPAgentAddressType {axsOadpNeighborEntry 24}	INTEGER	R/O	Type of agent secondary address for obtaining information in SNMP: • ipv4 (1) • ipv6 (20) • other-notSupported (65535)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
27	axsOadpNeighborSecondary SNMPAgentAddress {axsOadpNeighborEntry 25}	DisplayString	R/O	Agent secondary address to obtain information in SNMP that is transformed to DisplayString. If there is no address information (axsOadpNeighborSecondarySNMPAgent AddressType is other-notSupported), this is NULL.	Y
28	axsOadpNeighborPhysLocation {axsOadpNeighborEntry 26}	DisplayString (SIZE(0..255))	R/O	sysLocation of a neighboring node	Y
29	axsOadpNeighborCacheLastChange {axsOadpNeighborEntry 27}	TimeTicks	R/O	sysUpTime when axsOadpNeighborEntry about a neighboring node is updated	Y
30	axsOadpNeighborIfHighSpeed {axsOadpNeighborEntry 28}	Gauge	R/O	ifHighSpeed of the transmitting interface of a neighboring node. 0 for CDP.	Y

3.6 axsFlow group (FLOW information MIB)

3.6.1 axsAccessFilterStats group

(1) ID

```
axsFlow  OBJECT IDENTIFIER ::= {axsMib 8}

axsAccessFilterStats  OBJECT IDENTIFIER ::= {axsFlow 9}
Object ID value  1.3.6.1.4.1.21839.2.2.1.8.9
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsAccessFilterStats group.

Table 3-23: axsAccessFilterStats group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsAccessFilterStatsInTable {axsAccessFilterStats 1}	SEQUENCE OF AxsAccessFilterStatsInEntry	NA	Table information on the number of packets that match the flow detection condition and operation information defined in the inbound access list.	Y
2	axsAccessFilterStatsInEntry {axsAccessFilterStatsInTable 1}	AxsAccessFilterStatsInEntry	NA	Entry about the number of packets that match the flow detection condition and operation information defined in the inbound access list. INDEX { axsAccessFilterStatsInifIndex, axsAccessFilterStatsInifIndexType, axsAccessFilterStatsInListIndex, axsAccessFilterStatsInSequenceNumber }	Y
3	axsAccessFilterStatsInifIndex {axsAccessFilterStatsInEntry 1}	INTEGER	NA	Index value to distinguish the entries of this table (equal to ifIndex)	Y
4	axsAccessFilterStatsInifIndexType {axsAccessFilterStatsInEntry 2}	INTEGER	NA	Interface type: • For Ethernet interfaces only (1) • For VLAN interfaces only (2)	Y
5	axsAccessFilterStatsInListIndex {axsAccessFilterStatsInEntry 3}	Unsigned32	NA	Index value of the access list to distinguish the entries of this table	Y
6	axsAccessFilterStatsInSequenceNumber {axsAccessFilterStatsInEntry 4}	Unsigned32	NA	Sequence number of flow detection condition and operation information assigned to an access list ID	Y
7	axsAccessFilterStatsInListName {axsAccessFilterStatsInEntry 5}	DisplayString	R/O	Access list ID corresponding to an access list index.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
8	axsAccessFilterStatsInMatchedPackets {axsAccessFilterStatsInEntry 6}	Counter64	R/O	Number of packets that match the flow detection condition defined in the access list. If axsAccessFilterStatsInSequenceNumber is `4294967295`, it indicates the number of discarded packets that match the no flow detection condition for the access list.	Y#
9	axsAccessFilterStatsOutTable {axsAccessFilterStats 2}	SEQUENCE OF AxsAccessFilterStatsOutEntry	NA	Table information on the number of packets that match the flow detection condition or operation information defined in the outbound access list	Y **[AX3640S]** N **[AX3630S]**
10	axsAccessFilterStatsOutEntry {axsAccessFilterStatsOutTable 1}	AxsAccessFilterStatsOutEntry	NA	Entry about the number of packets that match the flow detection condition and operation information defined in the outbound access list. INDEX { axsAccessFilterStatsOutifIndex, axsAccessFilterStatsOutifIndexType, axsAccessFilterStatsOutListIndex, axsAccessFilterStatsOutSequenceNumber }	Y **[AX3640S]** N **[AX3630S]**
11	axsAccessFilterStatsOutifIndex {axsAccessFilterStatsOutEntry 1}	INTEGER	NA	Index value to distinguish the entries of this table (equal to ifIndex)	Y **[AX3640S]** N **[AX3630S]**
12	axsAccessFilterStatsOutifIndexType {axsAccessFilterStatsOutEntry 2}	INTEGER	NA	Interface type: • For Ethernet interfaces only (`1`) • For VLAN interfaces only (`2`)	Y **[AX3640S]** N **[AX3630S]**
13	axsAccessFilterStatsOutListIndex {axsAccessFilterStatsOutEntry 3}	Unsigned32	NA	Index value of the access list to distinguish the entries of this table	Y **[AX3640S]** N **[AX3630S]**
14	axsAccessFilterStatsOutSequenceNumber {axsAccessFilterStatsOutEntry 4}	Unsigned32	NA	Sequence number of flow detection condition and operation information assigned to an access list ID	Y **[AX3640S]** N **[AX3630S]**
15	axsAccessFilterStatsOutListName {axsAccessFilterStatsOutEntry 5}	DisplayString	R/O	Access list ID corresponding to an access list index.	Y **[AX3640S]** N **[AX3630S]**

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
16	axsAccessFilterStatsOutMatchedPackets {axsAccessFilterStatsOutEntry 6}	Counter64	R/O	Number of packets that match the flow detection condition defined in the access list. If axsAccessFilterStatsOutSequenceNumber is `4294967295`, it indicates the number of packets discarded without matching any flow detection conditions defined in the access list.	Y# **[AX3640S]** N **[AX3630S]**

#: Although SYNTAX is specified as `Counter64`, it returns to `0` when the value exceeds `4294967295`.

3.6.2 axsQosFlowStats group

(1) ID

```
axsFlow  OBJECT IDENTIFIER ::= {axsMib 8}

axsQosFlowStats  OBJECT IDENTIFIER ::= {axsFlow 11}
Object ID value  1.3.6.1.4.1.21839.2.2.1.8.11
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsQosFlowStats group.

Table 3-24: axsQosFlowStats group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsQosFlowStatsInTable {axsQosFlowStats 1}	SEQUENCE OF AxsQosFlowStatsInEntry	NA	Table information of the number of packets matched to the QoS flow detection and operation defined in the inbound QoS flow list.	Y
2	axsQosFlowStatsInEntry {axsQosFlowStatsInTable 1}	AxsQosFlowStatsInEntry	NA	Entry on the number of packets matched to the QoS flow detection and operation information defined in the inbound QoS flow list. INDEX { axsQosFlowStatsInifIndex, axsQosFlowStatsInifIndexType, axsQosFlowStatsInListIndex, axsQosFlowStatsInSequenceNumber }	Y
3	axsQosFlowStatsInifIndex {axsQosFlowStatsInEntry 1}	INTEGER	NA	Index value to distinguish the entries of this table (equal to ifIndex)	Y
4	axsQosFlowStatsInifIndexType {axsQosFlowStatsInEntry 2}	INTEGER	NA	Interface type: • For Ethernet interfaces only (`1`) • For VLAN interfaces only (`2`)	Y
5	axsQosFlowStatsInListIndex {axsQosFlowStatsInEntry 3}	Unsigned32	NA	Index value of the QoS flow list used to identify this table entry	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	axsQosFlowStatsInSequenceNumber {axsQosFlowStatsInEntry 4}	Unsigned32	NA	Sequence number of the flow detection condition and operation information defined as the name of the QoS flow list.	Y
7	axsQosFlowStatsInListName {axsQosFlowStatsInEntry 5}	DisplayString	R/O	QoS flow list name that corresponds to the index of the QoS flow list.	Y
8	axsQosFlowStatsInMatchedPackets {axsQosFlowStatsInEntry 6}	Counter64	R/O	Number of packets that match the flow detection condition of the QoS flow list. `0` if bandwidth monitoring is enabled.	Y#
9	axsQosFlowStatsInMatchedPacketsMinUnder {axsQosFlowStatsInEntry 7}	Counter64	R/O	Number of packets that match the flow detection condition of the QoS flow list and comply with minimum bandwidth monitoring. `0` if minimum bandwidth monitoring is disabled.	Y#
10	axsQosFlowStatsInMatchedPacketsMinOver {axsQosFlowStatsInEntry 8}	Counter64	R/O	Number of packets that match the flow detection condition of the QoS flow list and violate minimum bandwidth monitoring. `0` if minimum bandwidth monitoring is disabled.	Y#
11	axsQosFlowStatsInMatchedPacketsMaxUnder {axsQosFlowStatsInEntry 9}	Counter64	R/O	Number of packets that match the flow detection condition of the QoS flow list and comply with maximum bandwidth control. `0` if maximum bandwidth control is disabled.	Y#
12	axsQosFlowStatsInMatchedPacketsMaxOver {axsQosFlowStatsInEntry 10}	Counter64	R/O	Number of packets that match the flow detection condition of the QoS flow list and violate maximum bandwidth control. `0` if maximum bandwidth control is disabled.	Y#

#: Although SYNTAX is specified as `Counter64`, it returns to `0` when the value exceeds `4294967295`.

3.7 axsL2ldMIB group (L2 loop detection information MIB)

3.7.1 axsL2ldGlobalInfo group

(1) ID

```
axsL2ld OBJECT IDENTIFIER ::= {axsMib 10}

axsL2ldGlobalInfo OBJECT IDENTIFIER ::= {axsL2ld 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.10.1

axsL2ldVersion OBJECT IDENTIFIER ::= {axsL2ldGlobalInfo 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.10.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsL2ldGlobalInfo group.

Table 3-25: axsL2ldGlobalInfo group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsL2ldVersion {axsL2ldGlobalInfo 1}	INTEGER	R/O	Version of L2 loop detection. • Version 1 (1)	Y
2	axsL2ldLoopDetectionId {axsL2ldGlobalInfo 2}	INTEGER	R/O	ID of L2 loop detection. • Fixed value of 0	Y
3	axsL2ldIntervalTime {axsL2ldGlobalInfo 3}	INTEGER	R/O	Sending interval of L2 loop detection frames (in seconds)	Y
4	axsL2ldOutputRate {axsL2ldGlobalInfo 4}	INTEGER	R/O	Transmission rate of L2 loop detection frames (in packets per second)	Y
5	axsL2ldThreshold {axsL2ldGlobalInfo 5}	INTEGER	R/O	Number of detections until the port changes to the inactive state	Y
6	axsL2ldHoldTime {axsL2ldGlobalInfo 6}	INTEGER	R/O	Retention time for the number of detections (in seconds)	Y
7	axsL2ldAutoRestoreTime {axsL2ldGlobalInfo 7}	INTEGER	R/O	Period to switch an inactive port to an active port automatically (in seconds)	Y
8	axsL2ldConfigurationVlanPortCounts {axsL2ldGlobalInfo 8}	INTEGER	R/O	Number of VLAN ports that are directed to send L2 loop detection frames	Y
9	axsL2ldCapacityVlanPortCounts {axsL2ldGlobalInfo 9}	INTEGER	R/O	Number of VLAN ports that are able to send L2 loop detection frames at the defined transmission rate	Y

3.7.2 axsL2ldPortTable group

(1) ID

```
axsL2ld OBJECT IDENTIFIER ::= {axsMib 10}

axsL2ldPortTable OBJECT IDENTIFIER ::= {axsL2ld 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.10.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsL2ldPortTable group.

Table 3-26: axsL2ldPortTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsL2ldPortTable {axsL2ld 2}	NOT-ACCESSIBLE	NA	Table containing the port information about L2 loop detection	Y
2	axsL2ldPortEntry {axsL2ldPortTable 1}	NOT-ACCESSIBLE	NA	List of the port information about L2 loop detection. INDEX { axsL2ldPortIndex, axsL2ldPortIfIndex }	Y
3	axsL2ldPortIndex {axsL2ldPortEntry 1}	INTEGER	R/O	Fixed value of `1`.	Y
4	axsL2ldPortIfIndex {axsL2ldPortEntry 2}	INTEGER	R/O	ifIndex# of the port	Y
5	axsL2ldPortStatus {axsL2ldPortEntry 3}	INTEGER	R/O	State of the port: • Up (`1`): Up state • Down (`2`): Down state • Down (loop) (`3`): Down state due to L2 loop detection	Y
6	axsL2ldPortType {axsL2ldPortEntry 4}	INTEGER	R/O	Port type: • trap (`1`): detecting port • send-inact (`2`): detection-frame-sending and port-blocking port • send (`3`): detection-frame-sending port • uplink (`4`): Uplink port pair • exception (`5`): Out-of-scope port	Y
7	axsL2ldPortDetectCount {axsL2ldPortEntry 5}	INTEGER	R/O	Number of L2 loop detections. How many times the L2 loop detection frames are received within the retention time.	Y
8	axsL2ldPortAutoRestoringTimer {axsL2ldPortEntry 6}	INTEGER	R/O	Time to automatic recovery (in seconds). `0` if the port is active.	Y
9	axsL2ldPortSourcePortIfindex {axsL2ldPortEntry 7}	INTEGER	R/O	ifIndex# of the port that sent the last L2 loop detection frame received	Y
10	axsL2ldPortDestinationPortIfindex {axsL2ldPortEntry 8}	INTEGER	R/O	ifIndex# of the port that received the last L2 loop detection frame	Y
11	axsL2ldPortSourceVlan {axsL2ldPortEntry 9}	INTEGER	R/O	VLAN ID of the sender of the last L2 loop detection frame received	Y
12	axsL2ldPortHCInFrames {axsL2ldPortEntry 10}	Counter64	R/O	Number of L2 loop detection frames received	Y
13	axsL2ldPortHCOutFrames {axsL2ldPortEntry 11}	Counter64	R/O	Number of L2 loop detection frames sent	Y
14	axsL2ldPortHCInDiscards {axsL2ldPortEntry 12}	Counter64	R/O	Number of received L2 loop detection frames discarded	Y
15	axsL2ldPortInactiveCount {axsL2ldPortEntry 13}	INTEGER	R/O	Number of times the port changed to the inactive state	Y
16	axsL2ldPortLastInactiveTime {axsL2ldPortEntry 14}	TimeStamp	R/O	Start time of the last inactive state	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
17	axsL2ldPortLastInFramesTime {axsL2ldPortEntry 15}	TimeStamp	R/O	Time when the last L2 loop detection frame is received	Y

#: For a link aggregation port, ifIndex from link aggregation is used.

3.8 axsOspfMIB group (Multi-backbone OSPF information MIB) [OS-L3A]

3.8.1 axsOspfGeneralTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfGeneralTable OBJECT IDENTIFIER ::= {axsOspf 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.1
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfGeneralTable.

Table 3-27: axsOspfGeneralTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfGeneralTable {axsOspf 1}	NOT-ACCESSIBLE	NA	Table containing OSPF information	Y
2	axsOspfGeneralEntry {axsOspfGeneralTable 1}	NOT-ACCESSIBLE	NA	List of OSPF information. INDEX { axsOspfGeneralDomainNumber }	Y
3	axsOspfGeneralDomainNumber {axsOspfGeneralEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfRouterId {axsOspfGeneralEntry 2}	IpAddress	R/O	ID of the router	Y
5	axsOspfAdminStat {axsOspfGeneralEntry 3}	INTEGER	R/O	OSPF management state of the router: • enabled (1) • disabled (2)	Y
6	axsOspfVersionNumber {axsOspfGeneralEntry 4}	INTEGER	R/O	Version number of the OSPF protocol. Fixed value of 2.	Y
7	axsOspfAreaBdrRtrStatus {axsOspfGeneralEntry 5}	INTEGER	R/O	Indicates whether this router is an area border router: • true (1) • false (2)	Y
8	axsOspfASBdrRtrStatus {axsOspfGeneralEntry 6}	INTEGER	R/O	Indicates whether this router is an AS boundary router: • true (1) • false (2)	Y
9	axsOspfExternLsaCount {axsOspfGeneralEntry 7}	Gauge	R/O	Number of external link state advertisements (LSA) in the link state database (LSDB)	Y
10	axsOspfExternLsaCksumSum {axsOspfGeneralEntry 8}	INTEGER	R/O	Sum of LS checksum of the external LSA in the LSDB	Y
11	axsOspfTOSSupport {axsOspfGeneralEntry 9}	INTEGER	R/O	Flag to show whether the router supports TOS-based routing. Fixed value of false (2). • true (1) • false (2)	Y
12	axsOspfOriginateNewLsas {axsOspfGeneralEntry 10}	Counter	R/O	Number of newly generated LSAs	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
13	axsOspfRxNewLsas {axsOspfGeneralEntry 11}	Counter	R/O	Number of LSAs with new information received	Y
14	axsOspfExtLsdbLimit {axsOspfGeneralEntry 12}	INTEGER	R/O	Maximum number of entries of outside-AS LSAs that can be contained in the LSDB. No limit if `-1`. Fixed value of `-1`.	Y
15	axsOspfMulticastExtensions {axsOspfGeneralEntry 13}	INTEGER	R/O	Multicast forwarding algorithm of multicast-extended OSPF expressed in the form of a bitmap. 0 indicates that multicast forwarding is not supported. Fixed multicast forwarding is unsupported (`0`).	Y

3.8.2 axsOspfAreaTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfAreaTable OBJECT IDENTIFIER ::= {axsOspf 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.2
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfAreaTable.

Table 3-28: axsOspfAreaTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfAreaTable {axsOspf 2}	NOT-ACCESSIBLE	NA	Table containing information on each area where routers are connected	Y
2	axsOspfAreaEntry {axsOspfAreaTable 1}	NOT-ACCESSIBLE	NA	List of information on each area. INDEX { axsOspfAreaDomainNumber, axsOspfAreaId }	Y
3	axsOspfAreaDomainNumber {axsOspfAreaEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfAreaId {axsOspfAreaEntry 2}	IpAddress	R/O	Area ID	Y
5	axsOspfAuthType {axsOspfAreaEntry 3}	INTEGER	R/O	Authentication type used in the area: • None (`0`) • Simple password (`1`) • md5 (`2`)	Y
6	axsOspfImportAsExtern {axsOspfAreaEntry 4}	INTEGER	R/O	Flag indicating whether this router imports outside AS link state advertisements (LSA): • importExternal (`1`) • importNoExternal (`2`) • importNssa (`3`)	Y
7	axsOspfSpfRuns {axsOspfAreaEntry 5}	Counter	R/O	Number of times a route within the area is calculated using the link state database (LSDB) of this area	Y
8	axsOspfAreaBdrRtrCount {axsOspfAreaEntry 6}	Gauge	R/O	Sum of area border routers reachable in this area	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
9	axsOspfAsBdrRtrCount {axsOspfAreaEntry 7}	Gauge	R/O	Sum of AS boundary routers reachable in this area	Y
10	axsOspfAreaLsaCount {axsOspfAreaEntry 8}	Gauge	R/O	Number of LSAs in the LSDB of this area, excluding outside-AS LSAs	Y
11	axsOspfAreaLsaCksumSum {axsOspfAreaEntry 9}	INTEGER	R/O	Sum of the LS checksums of the LSAs in the LSDB of this area	Y
12	axsOspfAreaSummary {axsOspfAreaEntry 10}	INTEGER	R/O	Variable related to the import control of summary LSAs toward stub areas: • noAreaSummary (1) • sendAreaSummary (2)	Y
13	axsOspfAreaStatus {axsOspfAreaEntry 11}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y

3.8.3 axsOspfStubAreaTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfStubAreaTable OBJECT IDENTIFIER ::= {axsOspf 3}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.3
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfStubAreaTable.

Table 3-29: axsOspfStubAreaTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfStubAreaTable {axsOspf 3}	NOT-ACCESSIBLE	NA	Table of the advertisements to be sent to stub areas by area border routers	Y
2	axsOspfStubAreaEntry {axsOspfStubAreaTable 1}	NOT-ACCESSIBLE	NA	Information list of each stub area. INDEX { axsOspfStubDomainNumber, axsOspfStubAreaId, axsOspfStubTOS }	Y
3	axsOspfStubDomainNumber {axsOspfStubAreaEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfStubAreaId {axsOspfStubAreaEntry 2}	IpAddress	R/O	Stub area ID	Y
5	axsOspfStubTOS {axsOspfStubAreaEntry 3}	INTEGER	R/O	Service type in this stub area. Fixed value of 0.	Y
6	axsOspfStubMetric {axsOspfStubAreaEntry 4}	INTEGER	R/O	Metric corresponding to the service type in this stub area	Y
7	axsOspfStubStatus {axsOspfStubAreaEntry 5}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
8	axsOspfStubMetricType {axsOspfStubAreaEntry 6}	INTEGER	R/O	Type of metric advertised as the default route: • ospfMetric (1) • comparableCost (2) • nonComparable (3)	Y

3.8.4 axsOspfLsdbTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfLsdbTable OBJECT IDENTIFIER ::= {axsOspf 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.4
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfLsdbTable.

Table 3-30: axsOspfLsdbTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfLsdbTable {axsOspf 4}	NOT-ACCESSIBLE	NA	Table containing the information on the link state database (LSDB) of the OSPF process	Y
2	axsOspfLsdbEntry {axsOspfLsdbTable 1}	NOT-ACCESSIBLE	NA	List of link state advertisements (LSA). INDEX { axsOspfLsdbDomainNumber, axsOspfLsdbAreaId, axsOspfLsdbType, axsOspfLsdbLsid, axsOspfLsdbRouterId }	Y
3	axsOspfLsdbDomainNumber {axsOspfLsdbEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfLsdbAreaId {axsOspfLsdbEntry 2}	IpAddress	R/O	Area ID of the receiving area of this LSA	Y
5	axsOspfLsdbType {axsOspfLsdbEntry 3}	INTEGER	R/O	LSA type: • Router (1) • Network (2) • Summary (3) • AS summary (4) • AS external link (5) • Multicast (6) • NSSA external link (7)	Y
6	axsOspfLsdbLsid {axsOspfLsdbEntry 4}	IpAddress	R/O	ID to identify each routing domain	Y
7	axsOspfLsdbRouterId {axsOspfLsdbEntry 5}	IpAddress	R/O	ID of the router that generated the LSAs	Y
8	axsOspfLsdbSequence {axsOspfLsdbEntry 6}	INTEGER	R/O	LSA sequence number	Y
9	axsOspfLsdbAge {axsOspfLsdbEntry 7}	INTEGER	R/O	Elapsed time since this LSA was generated (in seconds)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
10	axsOspfLsdbChecksum {axsOspfLsdbEntry 8}	INTEGER	R/O	Checksum of this LSA	Y
11	axsOspfLsdbAdvertisement {axsOspfLsdbEntry 9}	OCTET STRING	R/O	The whole of the LSA, including headers	Y

3.8.5 axsOspfAreaRangeTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfAreaRangeTable OBJECT IDENTIFIER ::= {axsOspf 5}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.5
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfAreaRangeTable.

Table 3-31: axsOspfAreaRangeTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfAreaRangeTable {axsOspf 5}	NOT-ACCESSIBLE	NA	Table containing the information on the range of addresses in the area connected by routers	Y
2	axsOspfAreaRangeEntry {axsOspfAreaRangeTable 1}	NOT-ACCESSIBLE	NA	List of information on the range of addresses in the area connected by routers INDEX { axsOspfAreaRangeDomainNumber, axsOspfAreaRangeAreaId, axsOspfAreaRangeNet }	Y
3	axsOspfAreaRangeDomainNumber {axsOspfAreaRangeEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfAreaRangeAreaId {axsOspfAreaRangeEntry 2}	IpAddress	R/O	ID of the belonging area	Y
5	axsOspfAreaRangeNet {axsOspfAreaRangeEntry 3}	IpAddress	R/O	IP address of the net or subnet in this range	Y
6	axsOspfAreaRangeMask {axsOspfAreaRangeEntry 4}	IpAddress	R/O	Subnet mask to be applied to axsOspfAreaRangeNet	Y
7	axsOspfAreaRangeStatus {axsOspfAreaRangeEntry 5}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y
8	axsOspfAreaRangeEffect {axsOspfAreaRangeEntry 6}	INTEGER	R/O	Area range of advertisements: • Subnet advertised outside the area (1) • Subnet advertised not outside the area (2)	Y

3.8.6 axsOspfIfTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfIfTable OBJECT IDENTIFIER ::= {axsOspf 7}
```

```
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.7
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfIfTable.

Table 3-32: axsOspfIfTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfIfTable {axsOspf 7}	NOT-ACCESSIBLE	NA	Table containing the information on each interface to which the routers connect	Y
2	axsOspfIfEntry {axsOspfIfTable 1}	NOT-ACCESSIBLE	NA	List containing the information on each interface to which the routers connect. INDEX { axsOspfIfDomainNumber, axsOspfIfIpAddress, axsOspfAddressLessIf }	Y
3	axsOspfIfDomainNumber {axsOspfIfEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfIfIpAddress {axsOspfIfEntry 2}	IpAddress	R/O	IP address of this OSPF interface	Y
5	axsOspfAddressLessIf {axsOspfIfEntry 3}	INTEGER	R/O	Interface ID valid when this interface is the address interface	Y
6	axsOspfIfAreaId {axsOspfIfEntry 4}	IpAddress	R/O	ID of the area to which this interface is connecting	Y
7	axsOspfIfType {axsOspfIfEntry 5}	INTEGER	R/O	Interface type: • Broadcast (1) • Non-broadcast (2) • Point-Point (3) • Point-Multipoint (5)	Y
8	axsOspfIfAdminStat {axsOspfIfEntry 6}	INTEGER	R/O	Administration state of the interface: • enabled (1) • disabled (2)	Y
9	axsOspfIfRtrPriority {axsOspfIfEntry 7}	INTEGER	R/O	Priority of this interface	Y
10	axsOspfIfTransitDelay {axsOspfIfEntry 8}	INTEGER	R/O	Period needed to send link state update packets at this interface (in seconds)	Y
11	axsOspfIfRetransInterval {axsOspfIfEntry 9}	INTEGER	R/O	Interval of resending link state advertisements (LSA) (in seconds)	Y
12	axsOspfIfHelloInterval {axsOspfIfEntry 10}	INTEGER	R/O	Sending interval of Hello packet (in seconds)	Y
13	axsOspfIfRtrDeadInterval {axsOspfIfEntry 11}	INTEGER	R/O	Maximum acceptable receiving interval of Hello packets (in seconds)	Y
14	axsOspfIfPollInterval {axsOspfIfEntry 12}	INTEGER	R/O	Sending interval of Hello packet to inactive neighboring stations in the broadcasted multiple access network (in seconds)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
15	axsOspfIfState {axsOspfIfEntry 13}	INTEGER	R/O	Interface status: • down (1) • loopback (2) • waiting (3) • PtoP (4) • DR (5) • BDR (6) • other (7)	Y
16	axsOspfIfDesignatedRouter {axsOspfIfEntry 14}	IpAddress	R/O	IP address of the designated router	Y
17	axsOspfIfBackupDesignatedRouter {axsOspfIfEntry 15}	IpAddress	R/O	IP address of the backup designated router	Y
18	axsOspfIfEvents {axsOspfIfEntry 16}	Counter	R/O	Number of times the state was changed or an error occurred in this interface	Y
19	axsOspfIfAuthKey {axsOspfIfEntry 17}	OCTET STRING	R/O	Authentication key of this interface	Y
20	axsOspfIfStatus {axsOspfIfEntry 18}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y
21	axsOspfIfMulticastForwarding {axsOspfIfEntry 19}	INTEGER	R/O	Method of multicasting at this interface: Fixed value of blocked (1). • blocked (1) • multicast (2) • unicast (3)	Y

3.8.7 axsOspfIfMetricTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfIfMetricTable OBJECT IDENTIFIER ::= {axsOspf 8}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.8
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfIfMetricTable.

Table 3-33: axsOspfIfMetricTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfIfMetricTable {axsOspf 8}	NOT-ACCESSIBLE	NA	Table containing the service type metrics information for each interface	Y
2	axsOspfIfMetricEntry {axsOspfIfMetricTable 1}	NOT-ACCESSIBLE	NA	List of the service type metrics information for each interface. INDEX { axsOspfIfMetricDomainNumber, axsOspfIfMetricIpAddress, axsOspfIfMetricAddressLessIf, axsOspfIfMetricTOS }	Y
3	axsOspfIfMetricDomainNumber {axsOspfIfMetricEntry 1}	INTEGER	R/O	OSPF domain number	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
4	axsOspfIfMetricIpAddress {axsOspfIfMetricEntry 2}	IpAddress	R/O	IP address of this OSPF interface	Y
5	axsOspfIfMetricAddressLessIf {axsOspfIfMetricEntry 3}	INTEGER	R/O	Interface ID valid when this interface is an address interface	Y
6	axsOspfIfMetricTOS {axsOspfIfMetricEntry 4}	INTEGER	R/O	Service type of this interface Fixed value of 0.	Y
7	axsOspfIfMetricValue {axsOspfIfMetricEntry 5}	INTEGER	R/O	Metric of the service type of this interface	Y
8	axsOspfIfMetricStatus {axsOspfIfMetricEntry 6}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y

3.8.8 axsOspfVirtIfTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfVirtIfTable OBJECT IDENTIFIER ::= {axsOspf 9}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.9
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfVirtIfTable.

Table 3-34: axsOspfVirtIfTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfVirtIfTable {axsOspf 9}	NOT-ACCESSIBLE	NA	Table containing the information on each virtual interface to which the routers connect	Y
2	axsOspfVirtIfEntry {axsOspfVirtIfTable 1}	NOT-ACCESSIBLE	NA	List of information on each virtual interface. INDEX { axsOspfVirtIfDomainNumber, axsOspfVirtIfAreaId, axsOspfVirtIfNeighbor }	Y
3	axsOspfVirtIfDomainNumber {axsOspfVirtIfEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfVirtIfAreaId {axsOspfVirtIfEntry 2}	IpAddress	R/O	ID of the area this virtual link passes through	Y
5	axsOspfVirtIfNeighbor {axsOspfVirtIfEntry 3}	IpAddress	R/O	ID of the neighboring virtual router	Y
6	axsOspfVirtIfTransitDelay {axsOspfVirtIfEntry 4}	INTEGER	R/O	Period needed to send link state update packets at this interface (in seconds)	Y
7	axsOspfVirtIfRetransInterval {axsOspfVirtIfEntry 5}	INTEGER	R/O	Interval of resending link state advertisements (LSA) (in seconds)	Y
8	axsOspfVirtIfHelloInterval {axsOspfVirtIfEntry 6}	INTEGER	R/O	Sending interval of Hello packet (in seconds)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
9	axsOspfVirtIfRtrDeadInterval {axsOspfVirtIfEntry 7}	INTEGER	R/O	Maximum acceptable receiving interval of Hello packets (in seconds)	Y
10	axsOspfVirtIfState {axsOspfVirtIfEntry 8}	INTEGER	R/O	Interface status: • down (1) • PtoP (4)	Y
11	axsOspfVirtIfEvents {axsOspfVirtIfEntry 9}	Counter	R/O	Number of times the state changes or an error occurs in this interface	Y
12	axsOspfVirtIfAuthKey {axsOspfVirtIfEntry 10}	OCTET STRING	R/O	Authentication key of this interface	Y
13	axsOspfVirtIfStatus {axsOspfVirtIfEntry 11}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y

3.8.9 axsOspfNbrTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfNbrTable OBJECT IDENTIFIER ::= {axsOspf 10}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.10
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfNbrTable.

Table 3-35: axsOspfNbrTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfNbrTable {axsOspf 10}	NOT-ACCESSIBLE	NA	Table containing the information on non-virtual neighboring stations	Y
2	axsOspfNbrEntry {axsOspfNbrTable 1}	NOT-ACCESSIBLE	NA	List of information on each neighboring station. INDEX { axsOspfNbrDomainNumber, axsOspfNbrIpAddr, axsOspfNbrAddressLessIndex }	Y
3	axsOspfNbrDomainNumber {axsOspfNbrEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfNbrIpAddr {axsOspfNbrEntry 2}	IpAddress	R/O	IP address of the neighboring router	Y
5	axsOspfNbrAddressLessIndex {axsOspfNbrEntry 3}	INTEGER	R/O	Interface ID valid when the interface of the neighboring router is an address interface	Y
6	axsOspfNbrRtrId {axsOspfNbrEntry 4}	IpAddress	R/O	ID of the neighboring router	Y
7	axsOspfNbrOptions {axsOspfNbrEntry 5}	INTEGER	R/O	Capacity of execution options on the neighboring router: • Bit 0: Service-type-based routing • Bit 1: External area processing • Bit 2: IP multicast routing • Bit 3: NSSA-related areas	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
8	axsOspfNbrPriority {axsOspfNbrEntry 6}	INTEGER	R/O	Priority of the neighboring router	Y
9	axsOspfNbrState {axsOspfNbrEntry 7}	INTEGER	R/O	State indicating the relationship with the neighboring router: • down (1) • attempt (2) • init (3) • twoWay (4) • exchangeStart (5) • exchange (6) • loading (7) • full (8)	Y
10	axsOspfNbrEvents {axsOspfNbrEntry 8}	Counter	R/O	Number of times the state changed or an error occurred in relation to the neighboring router	Y
11	axsOspfNbrLsRetransQLen {axsOspfNbrEntry 9}	Gauge	R/O	Current length of the resending queue	Y
12	axsOspfNbmaNbrStatus {axsOspfNbrEntry 10}	INTEGER	R/O	Status of this entry. Fixed value of active (1). Accessible only when axsOspfIfType is nbma.	Y
13	axsOspfNbmaNbrPermanence {axsOspfNbrEntry 11}	INTEGER	R/O	Method of routing to the neighboring router: • dynamic (1) • permanent (2)	Y

3.8.10 axsOspfVirtNbrTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfVirtNbrTable OBJECT IDENTIFIER ::= {axsOspf 11}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.11
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfVirtNbrTable.

Table 3-36: axsOspfVirtNbrTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfVirtNbrTable {axsOspf 11}	NOT-ACCESSIBLE	NA	Table containing the information on neighboring virtual routers	Y
2	axsOspfVirtNbrEntry {axsOspfVirtNbrTable 1}	NOT-ACCESSIBLE	NA	List of information on each neighboring virtual router. INDEX { axsOspfVirtNbrDomainNumber, axsOspfVirtNbrArea, axsOspfVirtNbrRtrId }	Y
3	axsOspfVirtNbrDomainNumber {axsOspfVirtNbrEntry 1}	INTEGER	R/O	OSPF domain number	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
4	axsOspfVirtNbrArea {axsOspfVirtNbrEntry 2}	IpAddress	R/O	ID of the area on the router	Y
5	axsOspfVirtNbrRtrId {axsOspfVirtNbrEntry 3}	IpAddress	R/O	ID of the neighboring virtual router	Y
6	axsOspfVirtNbrIpAddr {axsOspfVirtNbrEntry 4}	IpAddress	R/O	IP address of the neighboring virtual router	Y
7	axsOspfVirtNbrOptions {axsOspfVirtNbrEntry 5}	INTEGER	R/O	Capacity of execution options for the neighboring virtual router: • Bit 1: Service-type-based routing • Bit 2: IP multicast routing	Y
8	axsOspfVirtNbrState {axsOspfVirtNbrEntry 6}	INTEGER	R/O	State indicating the relationship with this neighboring virtual router: • down (1) • attempt (2) • init (3) • twoWay (4) • exchangeStart (5) • exchange (6) • loading (7) • full (8)	Y
9	axsOspfVirtNbrEvents {axsOspfVirtNbrEntry 7}	Counter	R/O	Number of times the state of this virtual link was changed or an error occurred	Y
10	axsOspfVirtNbrLsRetransQLen {axsOspfVirtNbrEntry 8}	Gauge	R/O	Current length of the resending queue	Y

3.8.11 axsOspfExtLsdbTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfExtLsdbTable OBJECT IDENTIFIER ::= {axsOspf 12}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.12
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfExtLsdbTable.

Table 3-37: axsOspfExtLsdbTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfExtLsdbTable {axsOspf 12}	NOT-ACCESSIBLE	NA	Table of the link state database for OSPF processing	Y
2	axsOspfExtLsdbEntry {axsOspfExtLsdbTable 1}	NOT-ACCESSIBLE	NA	List of link state advertisements (LSA). INDEX { axsOspfExtLsdbDomainNumber, axsOspfExtLsdbType, axsOspfExtLsdbLsid, axsOspfExtLsdbRouterId }	Y
3	axsOspfExtLsdbDomainNumber {axsOspfExtLsdbEntry 1}	INTEGER	R/O	OSPF domain number	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
4	axsOspfExtLsdbType {axsOspfExtLsdbEntry 2}	INTEGER	R/O	LSA type: • asExternalLink (5)	Y
5	axsOspfExtLsdbLsid {axsOspfExtLsdbEntry 3}	IpAddress	R/O	Link status ID. A link status ID is a field containing either the router ID or the IP address.	Y
6	axsOspfExtLsdbRouterId {axsOspfExtLsdbEntry 4}	IpAddress	R/O	A 32-bit number to uniquely identify the source router in the autonomous system	Y
7	axsOspfExtLsdbSequence {axsOspfExtLsdbEntry 5}	INTEGER	R/O	LSA sequence number	Y
8	axsOspfExtLsdbAge {axsOspfExtLsdbEntry 6}	INTEGER	R/O	Elapsed time since the LSA was generated (in seconds)	Y
9	axsOspfExtLsdbChecksum {axsOspfExtLsdbEntry 7}	INTEGER	R/O	Checksum of the advertisements, excluding the Age field	Y
10	axsOspfExtLsdbAdvertisement {axsOspfExtLsdbEntry 8}	OCTET STRING	R/O	The whole of an LSA, including headers	Y

3.8.12 axsOspfAreaAggregateTable

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfAreaAggregateTable OBJECT IDENTIFIER ::= {axsOspf 14}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.14
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfAreaAggregateTable.

Table 3-38: axsOspfAreaAggregateTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfAreaAggregateTable {axsOspf 14}	NOT-ACCESSIBLE	NA	Table of IP addresses containing IP address-IP subnet mask pairs	Y
2	axsOspfAreaAggregateEntry {axsOspfAreaAggregateTable 1}	NOT-ACCESSIBLE	NA	List of IP addresses containing IP address-IP subnet mask pairs. INDEX {axsOspfAreaAggregateDomainNumber, axsOspfAreaAggregateAreaID, axsOspfAreaAggregateLsdbType, axsOspfAreaAggregateNet, axsOspfAreaAggregateMask }	Y
3	axsOspfAreaAggregateDomainNumber {axsOspfAreaAggregateEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfAreaAggregateAreaID {axsOspfAreaAggregateEntry 2}	IpAddress	R/O	Area where addresses are aggregated	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
5	axsOspfAreaAggregateLsdbType {axsOspfAreaAggregateEntry 3}	INTEGER	R/O	Type of address aggregation. This entry indicates the type of link state database (LSDB) applied to this address aggregation: • summaryLink (3) • nssaExternalLink (7)	Y
6	axsOspfAreaAggregateNet {axsOspfAreaAggregateEntry 4}	IpAddress	R/O	IP address of the network or the subnet	Y
7	axsOspfAreaAggregateMask {axsOspfAreaAggregateEntry 5}	IpAddress	R/O	Subnet mask related to the network or the subnet	Y
8	axsOspfAreaAggregateStatus {axsOspfAreaAggregateEntry 6}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y
9	axsOspfAreaAggregateEffect {axsOspfAreaAggregateEntry 7}	INTEGER	R/O	Indicates whether the subnet included in the range drives the advertisement of aggregated addresses to outside the area: • advertiseMatching (1) • doNotAdvertiseMatching (2)	Y

3.8.13 axsOspfTrap

(1) ID

```
axsOspf OBJECT IDENTIFIER ::= {axsMib 14}

axsOspfTrap OBJECT IDENTIFIER ::= {axsOspf 16}
Object ID value  1.3.6.1.4.1.21839.2.2.1.14.16
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsOspfTrap group.

Table 3-39: axsOspfTrap implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfTrapControlTable {axsOspfTrap 1}	NOT-ACCESSIBLE	NA	Information obtained on traps and informs.	Y
2	axsOspfTrapControlEntry {axsOspfTrapControlTable 1}	NOT-ACCESSIBLE	NA	List of information obtained on traps and informs. INDEX { axsOspfTrapDomainNumber }	Y
3	axsOspfTrapDomainNumber {axsOspfTrapControlEntry 1}	INTEGER	R/O	OSPF domain number	Y
4	axsOspfSetTrap {axsOspfTrapControlEntry 2}	OCTET STRING (SIZE(4))	R/O	Bitmap indicating the event to which traps and informs can be applied. Each bit indicates one of the objects of axsOspfTraps. Fixed value of 0x100fe. 2^1 bit (0x00000002): axsOspfVirtIfStateChange - 2^{16} bit (0x00010000): axsOspfIfStateChange	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
5	axsOspfConfigErrorType {axsOspfTrapControlEntry 3}	INTEGER	R/O	Last error event: • noError (0) • badVersion (1) • areaMismatch (2) • unknownNbmaNbr (3) • unknownVirtualNbr (4) • authTypeMismatch (5) • authFailure (6) • netMaskMismatch (7) • helloIntervalMismatch (8) • deadIntervalMismatch (9) • optionMismatch (10)	Y
6	axsOspfPacketType {axsOspfTrapControlEntry 4}	INTEGER	R/O	Type of the last error packet: • noError (0) • hello (1) • dbDescript (2) • lsReq (3) • lsUpdate (4) • lsAck (5)	Y
7	axsOspfPacketSrc {axsOspfTrapControlEntry 5}	IpAddress	R/O	Source address of the last error packet. If there is no error, the value becomes 0.0.0.0.	Y
8	axsOspfTraps {axsOspfTrap 2}	NOT-ACCESSIBLE	NA	Trap advertisement	Y

3.9 axsOspfv3MIB group (Multi-backbone OSPFv3 information MIB) [OS-L3A]

3.9.1 axsOspfv3GeneralTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3GeneralTable OBJECT IDENTIFIER ::= {axsOspfv3 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.1
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3GeneralTable.

Table 3-40: axsOspfv3GeneralTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3GeneralTable {axsOspfv3 1}	NOT-ACCESSIBLE	NA	Table containing OSPFv3 information	Y
2	axsOspfv3GeneralEntry {axsOspfv3GeneralTable 1}	NOT-ACCESSIBLE	NA	List of OSPFv3 information. INDEX { axsOspfv3GeneralDomainNumber }	Y
3	axsOspfv3GeneralDomainNumber {axsOspfv3GeneralEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3RouterId {axsOspfv3GeneralEntry 2}	IpAddress	R/O	ID of the router	Y
5	axsOspfv3AdminStat {axsOspfv3GeneralEntry 3}	INTEGER	R/O	State of OSPFv3 administration in the router: • enabled (1) • disabled (2)	Y
6	axsOspfv3VersionNumber {axsOspfv3GeneralEntry 4}	INTEGER	R/O	Version number of the OSPFv3 protocol. Fixed value of 3.	Y
7	axsOspfv3AreaBdrRtrStatus {axsOspfv3GeneralEntry 5}	INTEGER	R/O	Indicates whether this router is an area border router: • true (1) • false (2)	Y
8	axsOspfv3ASBdrRtrStatus {axsOspfv3GeneralEntry 6}	INTEGER	R/O	Indicates whether this router is an AS boundary router: • true (1) • false (2)	Y
9	axsOspfv3AsScopeLsaCount {axsOspfv3GeneralEntry 7}	Gauge	R/O	Number of external link state advertisements (LSA) in the link state database (LSDB)	Y
10	axsOspfv3AsScopeLsaCksumSum {axsOspfv3GeneralEntry 8}	INTEGER	R/O	Sum of LS checksums of AsScopeLSA in the LSDB	Y
11	axsOspfv3OriginateNewLsas {axsOspfv3GeneralEntry 9}	Counter	R/O	Number of newly generated LSAs	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
12	axsOspfv3RxNewLsas {axsOspfv3GeneralEntry 10}	Counter	R/O	Number of LSAs with new information received	Y
13	axsOspfv3ExtAreaLsdbLimit {axsOspfv3GeneralEntry 11}	INTEGER	R/O	Maximum number of entries of outside-AS LSAs that can be contained in the LSDB. No limit if `-1`. Fixed value of `-1`.	Y
14	axsOspfv3MulticastExtensions {axsOspfv3GeneralEntry 12}	INTEGER	R/O	Bitmap value of the multicast forwarding algorithm of multicast-extended OSPFv3. 0 indicates that multicast forwarding is not supported. Fixed multicast forwarding is unsupported (`0`).	Y
15	axsOspfv3DemandExtensions {axsOspfv3GeneralEntry 14}	INTEGER	R/O	Support for Demand routing on this router. Fixed value of false (`2`).	Y
16	axsOspfv3TrafficEngineeringSupport {axsOspfv3GeneralEntry 15}	INTEGER	R/O	Support for traffic engineering extensions on this router. Fixed value of false (`2`).	Y

3.9.2 axsOspfv3AreaTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3AreaTable OBJECT IDENTIFIER ::= {axsOspfv3 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.2
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3AreaTable.

Table 3-41: axsOspfv3AreaTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3AreaTable {axsOspfv3 2}	NOT-ACCESSIBLE	NA	Table containing information on each area where routers are connected	Y
2	axsOspfv3AreaEntry {axsOspfv3AreaTable 1}	NOT-ACCESSIBLE	NA	List of information on each area. INDEX { axsOspfv3AreaDomainNumber, axsOspfv3AreaId }	Y
3	axsOspfv3AreaDomainNumber {axsOspfv3AreaEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3AreaId {axsOspfv3AreaEntry 2}	IpAddress	R/O	Area ID	Y
5	axsOspfv3ImportAsExtern {axsOspfv3AreaEntry 3}	INTEGER	R/O	Flag indicating whether this router imports outside AS link state advertisements (LSA): • importExternal (`1`) • importNoExternal (`2`) • importNssa (`3`)	Y
6	axsOspfv3SpfRuns {axsOspfv3AreaEntry 4}	Counter	R/O	Number of times a route within the area is calculated using the link state database (LSDB) of this area	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	axsOspfv3AreaBdrRtrCount {axsOspfv3AreaEntry 5}	Gauge	R/O	Sum of area border routers reachable in this area	Y
8	axsOspfv3AsBdrRtrCount {axsOspfv3AreaEntry 6}	Gauge	R/O	Sum of AS boundary routers reachable in this area	Y
9	axsOspfv3AreaScopeLsaCount {axsOspfv3AreaEntry 7}	Gauge	R/O	Number of AreaScope LSAs in the LSDB of this area	Y
10	axsOspfv3AreaScopeLsaCksum Sum {axsOspfv3AreaEntry 8}	INTEGER	R/O	Sum of LS checksums of AreaScope LSAs in the LSDB of this area	Y
11	axsOspfv3AreaSummary {axsOspfv3AreaEntry 9}	INTEGER	R/O	Variable related to the import control of summary LSAs toward stub areas: • noAreaSummary (1) • sendAreaSummary (2)	Y
12	axsOspfv3AreaStatus {axsOspfv3AreaEntry 10}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y
13	axsOspfv3StubMetric {axsOspfv3AreaEntry 11}	INTEGER	R/O	Default root metric advertised to Stub or NSSA areas	Y

3.9.3 axsOspfv3AsLsdbTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3AsLsdbTable OBJECT IDENTIFIER ::= {axsOspfv3 3}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.3
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3AsLsdbTable.

Table 3-42: axsOspfv3AsLsdbTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3AsLsdbTable {axsOspfv3 3}	NOT-ACCESSIBLE	NA	Table containing the information on the AS Scope link state database about OSPFv3 processes	Y
2	axsOspfv3AsLsdbEntry {axsOspfv3AsLsdbTable 1}	NOT-ACCESSIBLE	NA	List of link state advertisements (LSA). INDEX { axsOspfv3AsLsdbDomainNumber, axsOspfv3AsLsdbType, axsOspfv3AsLsdbRouterId, axsOspfv3AsLsdbLsid }	Y
3	axsOspfv3AsLsdbDomainNumber {axsOspfv3AsLsdbEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3AsLsdbType {axsOspfv3AsLsdbEntry 2}	INTEGER	R/O	LSA type: • asExternal (0x4005)	Y
5	axsOspfv3AsLsdbRouterId {axsOspfv3AsLsdbEntry 3}	IpAddress	R/O	ID of the router that generated the LSAs	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	axsOspfv3AsLsdbLsid {axsOspfv3AsLsdbEntry 4}	IpAddress	R/O	ID to distinguish each LSA	Y
7	axsOspfv3AsLsdbSequence {axsOspfv3AsLsdbEntry 5}	INTEGER	R/O	LSA sequence number	Y
8	axsOspfv3AsLsdbAge {axsOspfv3AsLsdbEntry 6}	INTEGER	R/O	Elapsed time since this LSA was generated (in seconds)	Y
9	axsOspfv3AsLsdbChecksum {axsOspfv3AsLsdbEntry 7}	INTEGER	R/O	Checksum of this LSA	Y
10	axsOspfv3AsLsdbAdvertisement {axsOspfv3AsLsdbEntry 8}	OCTET STRING	R/O	The whole of the LSA, including headers	Y

3.9.4 axsOspfv3AreaLsdbTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3AreaLsdbTable OBJECT IDENTIFIER ::= {axsOspfv3 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.4
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3AreaLsdbTable.

Table 3-43: axsOspfv3AreaLsdbTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3AreaLsdbTable {axsOspfv3 4}	NOT-ACCESSIBLE	NA	Table containing the information on the AreaScope link state database about OSPFv3 processes	Y
2	axsOspfv3AreaLsdbEntry {axsOspfv3AreaLsdbTable 1}	NOT-ACCESSIBLE	NA	List of link state advertisements (LSA). INDEX { axsOspfv3AreaLsdbDomainNumber, axsOspfv3AreaLsdbAreaId, axsOspfv3AreaLsdbType, axsOspfv3AreaLsdbRouterId, axsOspfv3AreaLsdbLsid }	Y
3	axsOspfv3AreaLsdbDomainNumber {axsOspfv3AreaLsdbEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3AreaLsdbAreaId {axsOspfv3AreaLsdbEntry 2}	IpAddress	R/O	Area ID of the receiving area of this LSA	Y
5	axsOspfv3AreaLsdbType {axsOspfv3AreaLsdbEntry 3}	INTEGER	R/O	LSA type: • Router (8193=0x2001) • Network (8194=0x2002) • interAreaPrefix (8195=0x2003) • interAreaRouter (8196=0x2004) • Multicast (8198=0x2006) • NSSA external link (8199=0x2007) • intraAreaPrefix (8201=0x2009)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	axsOspfv3AreaLsdbRouterId {axsOspfv3AreaLsdbEntry 4}	IpAddress	R/O	ID of the router that generated the LSAs	Y
7	axsOspfv3AreaLsdbLsid {axsOspfv3AreaLsdbEntry 5}	IpAddress	R/O	ID to distinguish each LSA	Y
8	axsOspfv3AreaLsdbSequence {axsOspfv3AreaLsdbEntry 6}	INTEGER	R/O	LSA sequence number	Y
9	axsOspfv3AreaLsdbAge {axsOspfv3AreaLsdbEntry 7}	INTEGER	R/O	Elapsed time since this LSA was generated (in seconds)	Y
10	axsOspfv3AreaLsdbChecksum {axsOspfv3AreaLsdbEntry 8}	INTEGER	R/O	Checksum of this LSA	Y
11	axsOspfv3AreaLsdbAdvertisement {axsOspfv3AreaLsdbEntry 9}	OCTET STRING	R/O	The whole of the LSA, including headers	Y

3.9.5 axsOspfv3LinkLsdbTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3LinkLsdbTable OBJECT IDENTIFIER ::= {axsOspfv3 5}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.5
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3LinkLsdbTable.

Table 3-44: axsOspfv3LinkLsdbTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3LinkLsdbTable {axsOspfv3 5 }	NOT-ACCESSIBLE	NA	Table containing the information on the LinkScope link state database about OSPFv3 processes	Y
2	axsOspfv3LinkLsdbEntry {axsOspfv3LinkLsdbTable 1 }	NOT-ACCESSIBLE	NA	List of link state advertisements (LSA). INDEX { axsOspfv3LinkLsdbDomainNumber, axsOspfv3LinkLsdbIfIndex, axsOspfv3LinkLsdbType, axsOspfv3LinkLsdbRouterId, axsOspfv3LinkLsdbLsid }	Y
3	axsOspfv3LinkLsdbDomainNumber {axsOspfv3LinkLsdbEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3LinkLsdbIfIndex {axsOspfv3LinkLsdbEntry 2}	INTEGER	R/O	ID of the link that received the LSA	Y
5	axsOspfv3LinkLsdbType {axsOspfv3LinkLsdbEntry 3}	INTEGER	R/O	LSA type: • Link (`0x0008`)	Y
6	axsOspfv3LinkLsdbRouterId {axsOspfv3LinkLsdbEntry 4}	IpAddress	R/O	ID of the router that generated the LSAs	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	axsOspfv3LinkLsdbLsid {axsOspfv3LinkLsdbEntry 5}	IpAddress	R/O	ID to distinguish each LSA	Y
8	axsOspfv3LinkLsdbSequence {axsOspfv3LinkLsdbEntry 6}	INTEGER	R/O	LSA sequence number	Y
9	axsOspfv3LinkLsdbAge {axsOspfv3LinkLsdbEntry 7}	INTEGER	R/O	Elapsed time since this LSA was generated (in seconds)	Y
10	axsOspfv3LinkLsdbChecksum {axsOspfv3LinkLsdbEntry 8}	INTEGER	R/O	Checksum of this LSA	Y
11	axsOspfv3LinkLsdbAdvertisement {axsOspfv3LinkLsdbEntry 9}	OCTET STRING	R/O	The whole of the LSA, including headers	Y

3.9.6 axsOspfv3IfTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3IfTable OBJECT IDENTIFIER ::= {axsOspfv3 7}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.7
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3IfTable.

Table 3-45: axsOspfv3IfTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3IfTable {axsOspfv3 7}	NOT-ACCESSIBLE	NA	Table containing the information on each interface to which the routers connect	Y
2	axsOspfv3IfEntry {axsOspfv3IfTable 1}	NOT-ACCESSIBLE	NA	List containing the information on each interface to which the routers connect. INDEX { axsOspfv3IfDomainNumber, axsOspfv3IfIndex }	Y
3	axsOspfv3IfDomainNumber {axsOspfv3IfEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3IfIndex {axsOspfv3IfEntry 2}	INTEGER	R/O	Interface index of this OSPFv3 interface	Y
5	axsOspfv3IfAreaId {axsOspfv3IfEntry 3}	IpAddress	R/O	ID of the area to which this interface is connecting	Y
6	axsOspfv3IfType {axsOspfv3IfEntry 4}	INTEGER	R/O	Interface type: • Broadcast (1) • Non-broadcast (2) • Point-Point (3) • Point-Multipoint (5)	Y
7	axsOspfv3IfAdminStat {axsOspfv3IfEntry 5}	INTEGER	R/O	Administration state of the interface: • enabled (1) • disabled (2)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
8	axsOspfv3IfRtrPriority {axsOspfv3IfEntry 6}	INTEGER	R/O	Priority of this interface	Y
9	axsOspfv3IfTransitDelay {axsOspfv3IfEntry 7}	INTEGER	R/O	Period needed to send link state update packets at this interface (in seconds)	Y
10	axsOspfv3IfRetransInterval {axsOspfv3IfEntry 8}	INTEGER	R/O	Interval of resending link state advertisements (LSA) (in seconds)	Y
11	axsOspfv3IfHelloInterval {axsOspfv3IfEntry 9}	INTEGER	R/O	Sending interval of Hello packet (in seconds)	Y
12	axsOspfv3IfRtrDeadInterval {axsOspfv3IfEntry 10}	INTEGER	R/O	Maximum acceptable receiving interval of Hello packets (in seconds)	Y
13	axsOspfv3IfPollInterval {axsOspfv3IfEntry 11}	INTEGER	R/O	Sending interval of Hello packet to inactive neighboring stations in the broadcasted multiple access network (in seconds)	Y
14	axsOspfv3IfState {axsOspfv3IfEntry 12}	INTEGER	R/O	Interface status: • down (1) • loopback (2) • waiting (3) • PtoP (4) • DR (5) • BDR (6) • other (7)	Y
15	axsOspfv3IfDesignatedRouter {axsOspfv3IfEntry 13}	IpAddress	R/O	ID of the designated router	Y
16	axsOspfv3IfBackupDesignatedRouter {axsOspfv3IfEntry 15}	IpAddress	R/O	ID of the backup designated router	Y
17	axsOspfv3IfEvents {axsOspfv3IfEntry 16}	Counter	R/O	Number of times the state was changed or an error occurred in this interface	Y
18	axsOspfv3IfStatus {axsOspfv3IfEntry 18}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y
19	axsOspfv3IfMulticastForwarding {axsOspfv3IfEntry 19}	INTEGER	R/O	Method of multicasting at this interface: Fixed value of blocked (1). • blocked (1) • multicast (2) • unicast (3)	Y
20	axsOspfv3IfDemand {axsOspfv3IfEntry 20}	INTEGER	R/O	Indicated whether the procedure for Demand OSPFv3 is executed in this interface: Fixed value of false (2). • true (1) • false (2)	Y
21	axsOspfv3IfMetricValue {axsOspfv3IfEntry 21}	INTEGER	R/O	Metric of this interface	Y
22	axsOspfv3IfLinkScopeLsaCount {axsOspfv3IfEntry 22}	INTEGER	R/O	Number of LinkScope link state advertisements (LSA) in the link state database (LSDB)	Y
23	axsOspfv3IfLinkLsaCksumSum {axsOspfv3IfEntry 23}	INTEGER	R/O	Sum of LS checksums of the LinkScope LSAs in the LSDB	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
24	axsOspfv3IfInstId {axsOspfv3IfEntry 24}	INTEGER	R/O	Instance ID of this OSPFv3 interface	Y

3.9.7 axsOspfv3VirtIfTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3VirtIfTable OBJECT IDENTIFIER ::= {axsOspfv3 8}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.8
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3VirtIfTable.

Table 3-46: axsOspfv3VirtIfTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3VirtIfTable {axsOspfv3 8}	NOT-ACCESSIBLE	NA	Table containing the information on each virtual interface to which the routers connect	Y
2	axsOspfv3VirtIfEntry {axsOspfv3VirtIfTable 1}	NOT-ACCESSIBLE	NA	List of information on each virtual interface. INDEX { axsOspfv3VirtIfDomainNumber, axsOspfv3VirtIfAreaId, axsOspfv3VirtIfNeighbor }	Y
3	axsOspfv3VirtIfDomainNumber {axsOspfv3VirtIfEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3VirtIfAreaId {axsOspfv3VirtIfEntry 2}	IpAddress	R/O	ID of the area this virtual link passes through	Y
5	axsOspfv3VirtIfNeighbor {axsOspfv3VirtIfEntry 3}	IpAddress	R/O	ID of the neighboring virtual router	Y
6	axsOspfv3VirtIfIndex {axsOspfv3VirtIfEntry 4}	INTEGER	R/O	Interface index of this interface	Y
7	axsOspfv3VirtIfTransitDelay {axsOspfv3VirtIfEntry 5}	INTEGER	R/O	Period needed to send link state update packets at this interface (in seconds)	Y
8	axsOspfv3VirtIfRetransInterval {axsOspfv3VirtIfEntry 6}	INTEGER	R/O	Interval of resending link state advertisements (LSA) (in seconds)	Y
9	axsOspfv3VirtIfHelloInterval {axsOspfv3VirtIfEntry 7}	INTEGER	R/O	Sending interval of Hello packet (in seconds)	Y
10	axsOspfv3VirtIfRtrDeadInterval {axsOspfv3VirtIfEntry 8}	INTEGER	R/O	Maximum acceptable receiving interval of Hello packets (in seconds)	Y
11	axsOspfv3VirtIfState {axsOspfv3VirtIfEntry 9}	INTEGER	R/O	Interface status: • down (1) • PtoP (4)	Y
12	axsOspfv3VirtIfEvents {axsOspfv3VirtIfEntry 10}	Counter	R/O	Number of times the state was changed or an error occurred in this interface	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
13	axsOspfv3VirtIfStatus {axsOspfv3VirtIfEntry 11}	INTEGER	R/O	Status of this entry. Fixed value of active (1).	Y
14	axsOspfv3VirtIfLinkScopeLsaCount {axsOspfv3VirtIfEntry 12}	INTEGER	R/O	Number of LinkScope link state advertisements (LSA) in the link state database (LSDB)	Y
15	axsOspfv3VirtIfLinkLsaCksumSum {axsOspfv3VirtIfEntry 13}	INTEGER	R/O	Sum of LS checksums of the LinkScope LSAs in the LSDB	Y

3.9.8 axsOspfv3NbrTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3NbrTable OBJECT IDENTIFIER ::= {axsOspfv3 9}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.9
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3NbrTable.

Table 3-47: axsOspfv3NbrTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3NbrTable {axsOspfv3 9}	NOT-ACCESSIBLE	NA	Table containing the information on non-virtual neighboring stations	Y
2	axsOspfv3NbrEntry {axsOspfv3NbrTable 1}	NOT-ACCESSIBLE	NA	List of information on each neighboring station. INDEX { axsOspfv3NbrDomainNumber, axsOspfv3NbrIfIndex, axsOspfv3NbrIpv6Addr }	Y
3	axsOspfv3NbrDomainNumber {axsOspfv3NbrEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3NbrIfIndex {axsOspfv3NbrEntry 2}	INTEGER	R/O	Local-link ID of the link to which the neighboring router is connecting	Y
5	axsOspfv3NbrIpv6Addr {axsOspfv3NbrEntry 3}	Ipv6Address	R/O	IPv6 address of the neighboring router	Y
6	axsOspfv3NbrRtrId {axsOspfv3NbrEntry 4}	IpAddress	R/O	ID of the neighboring router	Y
7	axsOspfv3NbrOptions {axsOspfv3NbrEntry 5}	INTEGER	R/O	Option fields of the neighboring router	Y
8	axsOspfv3NbrPriority {axsOspfv3NbrEntry 6}	INTEGER	R/O	Priority of the neighboring router	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
9	axsOspfv3NbrState {axsOspfv3NbrEntry 7}	INTEGER	R/O	State indicating the relationship with the neighboring router: • down (1) • attempt (2) • init (3) • twoWay (4) • exchangeStart (5) • exchange (6) • loading (7) • full (8)	Y
10	axsOspfv3NbrEvents {axsOspfv3NbrEntry 8}	Counter	R/O	Number of times the state was changed or an error occurred in relation to the neighboring router	Y
11	axsOspfv3NbrLsRetransQLen {axsOspfv3NbrEntry 9}	Gauge	R/O	Current length of the resending queue	Y
12	axsOspfv3NbrHelloSuppressed {axsOspfv3NbrEntry 12}	INTEGER	R/O	Indicates whether Hello is suppressed by the neighbor	Y
13	axsOspfv3NbrIfId {axsOspfv3NbrEntry 13}	INTEGER	R/O	Interface ID that the neighbor is advertising to this link by using a Hello packet	Y

3.9.9 axsOspfv3VirtNbrTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3VirtNbrTable OBJECT IDENTIFIER ::= {axsOspfv3 10}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.10
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3VirtNbrTable.

Table 3-48: axsOspfv3VirtNbrTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3VirtNbrTable {axsOspfv3 10}	NOT-ACCESSIBLE	NA	Table containing the information on neighboring virtual routers	Y
2	axsOspfv3VirtNbrEntry {axsOspfVirtv3NbrTable 1}	NOT-ACCESSIBLE	NA	List of information on each neighboring virtual router. INDEX { axsOspfv3VirtNbrDomainNumber, axsOspfv3VirtNbrArea, axsOspfv3VirtNbrRtrId }	Y
3	axsOspfv3VirtNbrDomainNumber {axsOspfv3VirtNbrEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3VirtNbrArea {axsOspfv3VirtNbrEntry 2}	IpAddress	R/O	ID of the area on the router	Y
5	axsOspfv3VirtNbrRtrId {axsOspfv3VirtNbrEntry 3}	IpAddress	R/O	ID of the neighboring virtual router	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	axsOspfv3VirtNbrIfIndex {axsOspfv3VirtNbrEntry 4}	INTEGER	R/O	Local-link ID of the link to which the neighboring router is connecting	Y
7	axsOspfv3VirtNbrIpv6Addr {axsOspfv3VirtNbrEntry 5}	Ipv6Address	R/O	IPv6 address of the neighboring virtual router	Y
8	axsOspfv3VirtNbrOptions {axsOspfv3VirtNbrEntry 6}	INTEGER	R/O	Option fields of the neighboring virtual router	Y
9	axsOspfv3VirtNbrState {axsOspfv3VirtNbrEntry 7}	INTEGER	R/O	State indicating the relationship with this neighboring virtual router: • down (1) • attempt (2) • init (3) • twoWay (4) • exchangeStart (5) • exchange (6) • loading (7) • full (8)	Y
10	axsOspfv3VirtNbrEvents {axsOspfv3VirtNbrEntry 8}	Counter	R/O	Number of times the state of this virtual link was changed or an error occurred	Y
11	axsOspfv3VirtNbrLsRetransQLen {axsOspfv3VirtNbrEntry 9}	Gauge	R/O	Current length of the resending queue	Y
12	axsOspfv3VirtNbrHelloSuppressed {axsOspfv3VirtNbrEntry 10}	INTEGER	R/O	Indicates whether Hello is suppressed by the neighbor	Y
13	axsOspfv3VirtNbrIfId {axsOspfv3VirtNbrEntry 11}	INTEGER	R/O	InterfaceID that the neighbor is advertising to this link with a Hello packet	Y

3.9.10 axsOspfv3AreaAggregateTable

(1) ID

```
axsOspfv3 OBJECT IDENTIFIER ::= {axsMib 15}

axsOspfv3AreaAggregateTable OBJECT IDENTIFIER ::= {axsOspfv3 11}
Object ID value  1.3.6.1.4.1.21839.2.2.1.15.11
```

(2) Implementation specifications

The following table lists the implementation specifications for axsOspfv3AreaAggregateTable.

Table 3-49: axsOspfv3AreaAggregateTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsOspfv3AreaAggregateTable {axsOspfv3 11}	NOT-ACCESSIBLE	NA	Table of IPv6 prefixes as pairs of prefix and prefix length	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
2	axsOspfv3AreaAggregateEntry {axsOspfv3AreaAggregateTable 1}	NOT-ACCESSIBLE	NA	List of IPv6 prefixes as pairs of prefix and prefix length. INDEX { axsOspfv3AreaAggregateDomainNumber, axsOspfv3AreaAggregateAreaID, axsOspfv3AreaAggregateAreaLsdbType, axsOspfv3AreaAggregateIndex }	Y
3	axsOspfv3AreaAggregateDomainNumber {axsOspfv3AreaAggregateEntry 1}	INTEGER	R/O	OSPFv3 domain number	Y
4	axsOspfv3AreaAggregateAreaID {axsOspfv3AreaAggregateEntry 2}	IpAddress	R/O	Area where addresses are aggregated	Y
5	axsOspfv3AreaAggregateAreaLsdbType {axsOspfv3AreaAggregateEntry 3}	INTEGER	R/O	Type of address aggregation. This entry indicates the type of link state database (LSDB) applied to this address aggregation: • interAreaPrefixLsa (`0x2003`) • nssaExternalLink (`0x2007`)	Y
6	axsOspfv3AreaAggregateIndex {axsOspfv3AreaAggregateEntry 4}	INTEGER	R/O	ID of the aggregate table	Y
7	axsOspfv3AreaAggregatePrefix {axsOspfv3AreaAggregateEntry 5}	Ipv6Address	R/O	IPv6 prefix	Y
8	axsOspfv3AreaAggregatePrefixLen {axsOspfv3AreaAggregateEntry 6}	INTEGER	R/O	IPv6 prefix length	Y
9	axsOspfv3AreaAggregateStatus {axsOspfv3AreaAggregateEntry 7}	INTEGER	R/O	Status of this entry. Fixed value of active (`1`).	Y
10	axsOspfv3AreaAggregateEffect {axsOspfv3AreaAggregateEntry 8}	INTEGER	R/O	Indicates whether the subnet included in the range drives the advertisement of aggregated addresses to outside the area: • advertiseMatching (`1`) • doNotAdvertiseMatching (`2`)	Y

3.10 axsUlr group (Uplink redundancy information MIB)

3.10.1 axsUlrGlobalInfo group

(1) ID

```
axsUlr OBJECT IDENTIFIER ::= {axsMib 20}

axsUlrGlobalInfo OBJECT IDENTIFIER ::= {axsUlr 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.20.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsUlrGlobalInfo group.

Table 3-50: axsUlrGlobalInfo group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsUlrID {axsUlrGlobalInfo 2}	MacAddress	R/O	System ID of the switch	Y
2	axsUlrConfigurationPortCounts {axsUlrGlobalInfo 3}	INTEGER	R/O	Summed number of primary ports and secondary ports	Y
3	axsUlrStartupActivePortSelection {axsUlrGlobalInfo 4}	INTEGER	R/O	Setting of the functionality to fix the active port at Switch startup: • Off (1): No • On (2): Yes	Y

3.10.2 axsUlrPortTable group

(1) ID

```
axsUlr OBJECT IDENTIFIER ::= {axsMib 20}

axsUlrPortTable Group OBJECT IDENTIFIER ::= {axsUlr 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.20.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsUlrPortTable group.

Table 3-51: axsUlrPortTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsUlrPortTable {axsUlr 2}	NOT-ACCESSIBLE	NA	Table containing information on uplink redundancy ports	Y
2	axsUlrPortEntry {axsUlrPortTable 1}	NOT-ACCESSIBLE	NA	List of the information on uplink redundancy ports INDEX { axsUlrPortIfIndex }	Y
3	axsUlrPortIfIndex {axsUlrPortEntry 1}	INTEGER	R/O	ifIndex of a port or channel group	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
4	axsUlrPortType {axsUlrPortEntry 2}	INTEGER	R/O	Port type: • Primary (1): Primary port • Secondary (2): Secondary port	Y
5	axsUlrPairedPortIfIndex {axsUlrPortEntry 3}	INTEGER	R/O	ifIndex of the paired port or channel group	Y
6	axsUlrPortStatus {axsUlrPortEntry 4}	INTEGER	R/O	State of the port: • Forwarding (1): Forwarding • Down (2): Port or channel group is down • Blocking (3): Blocking	Y
7	axsUlrPairedPortStatus {axsUlrPortEntry 5}	INTEGER	R/O	State of the paired port: • Forwarding (1): Forwarding • Down (2): Port or channel group is down • Blocking (3): Blocking	Y
8	axsUlrAutoChangeToPrimary {axsUlrPortEntry 6}	INTEGER	R/O	Automatic switchback setting: • Off (1): No • On (2): Yes	Y
9	axsUlrAutoChangeToPrimaryDelay {axsUlrPortEntry 7}	INTEGER	R/O	Period for automatic switchback (in seconds).	Y
10	axsUlrAutoChangeToPrimaryRest {axsUlrPortEntry 8}	INTEGER	R/O	Remaining time of automatic switchback (in seconds).	Y
11	axsUlrStartupActivePortSelectionStatus {axsUlrPortEntry 9}	INTEGER	R/O	Operating state of the functionality to fix the active port at Switch startup: • Off (1): Turned off • On (2): Operating	Y
12	axsUlrFlushTransmit {axsUlrPortEntry 10}	INTEGER	R/O	Transmission setting for flush control frames: • Off (1): No • On (2): Yes	Y
13	axsUlrFlushVlan {axsUlrPortEntry 11}	INTEGER	R/O	VLAN ID of the VLAN sending flush control frames: • Not defined (0) • VLAN ID used as sender	Y
14	axsUlrMacAddressUpdateTransmit {axsUlrPortEntry 12}	INTEGER	R/O	Number of MAC address update frames sent	Y
15	axsUlrLastActivePortDecisionTime {axsUlrPortEntry 13}	TimeStamp	R/O	Last decision time for defining the active port	Y
16	axsUlrLastFlushTransmitTime {axsUlrPortEntry 14}	TimeStamp	R/O	Last transmission time of flush control frames	Y
17	axsUlrLastMacUpdateTransmitTime {axsUlrPortEntry 15}	TimeStamp	R/O	Last transmission time of MAC address update frames	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
18	axsUlrLastChangeFactor {axsUlrPortEntry 16}	INTEGER	R/O	Factor for defining the last active port: • command (1) • configure (2) • primary down (3) • primary up (4) • secondary down (5) • secondary up (6) • preemption (7)	Y
19	axsUlrFlushTransmitTotalPackets {axsUlrPortEntry 17}	INTEGER	R/O	Number of flush control frames sent	Y
20	axsUlrMacAddressUpdateTransmitTotalPackets {axsUlrPortEntry 18}	INTEGER	R/O	Number of MAC address update frames sent	Y
21	axsUlrMacAddressUpdateTransmitOverFlow {axsUlrPortEntry 19}	INTEGER	R/O	Number of overflows of MAC address update frames	Y
22	axsUlrActiveDecisionCount {axsUlrPortEntry 20}	INTEGER	R/O	Number of times an active port is defined on an uplink port (including the target port)	Y

3.11 axsStatic group (Static routing information MIB)

The axsStatic group is the MIB group which gathers the objects used as axsStaticGatewayStateChange trap variables. Data cannot be acquired by any means other than traps for objects.

3.11.1 axsStaticTable group

(1) ID

```
axsStatic OBJECT IDENTIFIER ::= {axsMib 38}

axsStaticTable Objects OBJECT IDENTIFIER ::= {axsStatic 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.38.1
```

(2) Implementation specifications

The following table lists the implementation specifications for axsStaticTable.

Table 3-52: axsStaticTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsStaticTable {axsStatic 1}	NOT-ACCESSIBLE	NA	Table containing static information.	Y
2	axsStaticGatewayEntry {axsStaticTable 1}	NOT-ACCESSIBLE	NA	The list of static information. INDEX { axsStaticGatewayAddr }	Y
3	axsStaticGatewayAddr {axsStaticGatewayEntry 1}	IpAddress	AN	The IP address of the gateway.	Y
4	axsStaticGatewayState {axsStaticGatewayEntry 2}	INTEGER	AN	State of the gateway: • reachable (1) • unreachable (2)	Y

3.11.2 axsStaticIpv6Table group

(1) ID

```
axsStatic OBJECT IDENTIFIER ::= {axsMib 38}

axsStaticIpv6Table Objects OBJECT IDENTIFIER ::= {axsStatic 3}
Object ID value  1.3.6.1.4.1.21839.2.2.1.38.3
```

(2) Implementation specifications

The following table lists the implementation specifications for axsStaticIpv6Table.

Table 3-53: axsStaticIpv6Table implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsStaticIpv6Table {axsStatic 3}	NOT-ACCESSIBLE	NA	Table containing IPv6 static information.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
2	axsStaticIpv6GatewayEntry {axsStaticIpv6Table 1}	NOT-ACCESSIBLE	NA	The list of IPv6 static information. INDEX { axsStaticIpv6Ifindex, axsStaticIpv6GatewayAddr }	Y
3	axsStaticIpv6Ifindex {axsStaticIpv6GatewayEntry 1}	INTEGER	AN	The interface index of the gateway. • The `noresolv` parameter specified in the configuration: interface index number • The `noresolv` parameter not specified in the configuration: value fixed at `0`	Y
4	axsStaticIpv6GatewayAddr {axsStaticIpv6GatewayEntry 2}	Ipv6Address	AN	The IPv6 address of the gateway.	Y
5	axsStaticIpv6GatewayState {axsStaticIpv6GatewayEntry 3}	INTEGER	AN	State of the gateway: • reachable (`1`) • unreachable (`2`)	Y

3.12 axsTrackObjectMIB group (Track information MIB) [AX3640S] [OS-L3A]

3.12.1 axsTrackObjectGeneralGroup

(1) ID

```
axsTrackObject OBJECT IDENTIFIER ::= {axsMib 41}

axsTrackObjectGeneralGroup OBJECT IDENTIFIER ::= {axsTrackObject 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.41.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsTrackObjectGeneralGroup.

Table 3-54: axsTrackObjectGeneralGroup implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsTrackObjectGeneralLastChange {axsTrackObjectGeneralGroup 1}	TimeTicks	R/O	Update time of an object whose value was last changed among the readable objects under axsTrackObject. sysUpTime format.	Y

3.12.2 axsTrackObjectTable

(1) ID

```
axsTrackObject OBJECT IDENTIFIER ::= {axsMib 41}

axsTrackObjectTable OBJECT IDENTIFIER ::= {axsTrackObject 3}
Object ID value  1.3.6.1.4.1.21839.2.2.1.41.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsTrackObjectTable.

Table 3-55: axsTrackObjectTable implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsTrackObjectTable {axsTrackObject 3}	SEQUENCE OF AxsTrackObjectEntry	NA	Table of track information	Y
2	axsTrackObjectEntry {axsTrackObjectTable 1}	AxsTrackObjectEntry	NA	Track information. INDEX {axsTrackObjectId}	Y
3	axsTrackObjectId {axsTrackObjectEntry 1}	INTEGER	R/O	Track number that indicates the ID of the track	Y
4	axsTrackObjectState {axsTrackObjectEntry 2}	INTEGER	R/O	State of the track: • Up (1) • Down (2)	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
5	axsTrackObjectOperation {axsTrackObjectEntry 3}	INTEGER	R/O	Operating state of the track: • Active (1) • Transit (2) • Disabled (3) • Init (4)	Y
6	axsTrackObjectType {axsTrackObjectEntry 4}	INTEGER	R/O	Track type: • IPv4 ICMP (1)	Y
7	axsTrackObjectNetIndex {axsTrackObjectEntry 5}	INTEGER	R/O	Fixed value of 0.	Y

3.13 axsPolicyBase group (Policy-based information MIB) [AX3640S] [OS-L3A]

This group is a MIB group used for traps that are related to changes in routing information for policy-based routing.

3.13.1 axsPolicyBaseRouting group

(1) ID

```
axsPolicyBase OBJECT IDENTIFIER ::= {axsMIB 45}

axsPolicyBaseRouting OBJECT IDENTIFIER ::= {axsPolicyBase 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.45.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsPolicyBaseRouting group.

Table 3-56: axsPolicyBaseRouting group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsPolicyBaseRoutingChangeListNumber {axsPolicyBaseRouting 1}	Unsigned32	NA	List number whose priority was changed by policy-based routing	Y
2	axsPolicyBaseRoutingChangeSequenceNumber {axsPolicyBaseRouting 2}	Unsigned32	NA	Priority of the selected route in the list number of the policy-based routing Default behavior: 0	Y

3.14 axsBootManagement group (System boot information MIB)

(1) ID

```
axsBootManagement OBJECT IDENTIFIER ::= {axsMib 51}
Object ID value  1.3.6.1.4.1.21839.2.2.1.51
```

(2) Implementation specifications

The following table lists the implementation specifications for axsBootManagement.

Table 3-57: axsBootManagement implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsBootReason {axsBootManagement 1}	INTEGER	R/O	Reason for system startup: • power-on (1): Startup due to power-on • reload (2): Startup due to a command • system-fault (3): Startup due to a fault • system-stall (4): Startup due to a WDT timeout • reset (5): Startup due to a hardware reset • fail-over (6): Startup due to a SWAP • default-restart (7): Startup due to a default restart Returns power-on (1), reload (2), system-fault (3), reset (5), or default-restart (7).	Y

3.15 axsLogin group (Login information MIB)

(1) ID

```
axsLogin OBJECT IDENTIFIER ::= {axsMib 52}
Object ID value  1.3.6.1.4.1.21839.2.2.1.52
```

(2) Implementation specifications

The following table lists the implementation specifications for axsLogin.

Table 3-58: axsLogin implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsLoginName {axsLogin 1}	DisplayString	NA	Login user name	Y
2	axsLoginTime {axsLogin 2}	DisplayString	NA	Indicates the user login time (year, month, day, hour, minute, second, and time zone) with a 26-byte string. *YYYY/MM/DD hh:mm:ss XXXXXX* • *YYYY*: dominical year • *MM*: month (01-12) • *DD*: day (01-31) • *hh*: hour (00-23) • *mm*: minute (00-59) • *ss*: second (00-59) • *XXXXXX*: time zone A 1-byte space is inserted between *DD* and *hh*, and between *ss* and *XXXXXX*. Ex.2004/10/09 10:23:10 JST	Y
3	axsLogoutTime {axsLogin 3}	DisplayString	NA	Indicates the user logout time (year, month, day, hour, minute, second, and time zone) with a 26-byte string. *YYYY/MM/DD hh:mm:ss XXXXXX* • *YYYY*: dominical year • *MM*: month (01-12) • *DD*: day (01-31) • *hh*: hour (00-23) • *mm*: minute (00-59) • *ss*: second (00-59) • *XXXXXX*: time zone A 1-byte space is inserted between *DD* and *hh*, and between *ss* and *XXXXXX*. Ex.2004/10/09 10:23:10 JST	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
4	axsLoginFailureTime {axsLogin 4}	DisplayString	NA	Indicates the time of a failed log in (year, month, day, hour, minute, second, and time zone) with a 26-byte string. *YYYY*/*MM*/*DD hh*:*mm*:*ss XXXXXX* • *YYYY*: dominical year • *MM*: month (`01-12`) • *DD*: day (`01-31`) • *hh*: hour (`00-23`) • *mm*: minute (`00-59`) • *ss*: second (`00-59`) • *XXXXXX*: time zone A 1-byte space is inserted between *DD* and *hh*, and between *ss* and *XXXXXX*. Ex.2004/10/09 10:23:10 JST	Y
5	axsLoginLocation {axsLogin 5}	DisplayString	NA	Connection type of the login user, indicated by either of the following formats: • For console: console • For any other: *XXXX*`(`*YYYY*`)` - *XXXX*: IP address - *YYYY*: Application (`telnet`, `ftp`) Example: `"console"`, `"192.168.1.1(telnet)"`, `"2001:02C0:0001:0100:0000:0000:0000:0053(telnet)"`	Y
6	axsLoginLine {axsLogin 6}	DisplayString	NA	Terminal ID of the login user, indicated by either of the following connection types: • For console: console • For any other: *XXXX*`(`*YYYY*`)` - *XXXX*: Terminal - *YYYY*: Application (`telnet`, `ftp`) Example: `console`, `ttyp1(telnet)`	Y
7	axsLogoutStatus {axsLogin 7}	INTEGER	NA	Reason for logout: • error (`1`): Any other reason than the following (Example: System out due to an internal error) • success (`2`): Logged out by using a command • timeout (`3`): Auto-logout • disconnect (`4`): Disconnection • force (`5`): Forced by another user Returns a fixed value (`2`) in the Switch.	Y

3.16 axslldp group (LLDP information MIB)

3.16.1 axslldpConfiguration group

(1) ID

```
axslldp OBJECT IDENTIFIER ::= {axsMib 100}

axslldpConfiguration OBJECT IDENTIFIER ::= {axslldp 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.1

axslldpMessageTxInterval OBJECT IDENTIFIER ::= {axslldpConfiguration 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axslldpConfiguration group.

Table 3-59: axslldpConfiguration group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axslldpMessageTxInterval {axslldpConfiguration 1}	Integer32 (5..32768)	R/NW	[Standard] Sending interval of the LDPDU. Defined by the `lldp interval-time` configuration command (in seconds). The default value is 30 (unit: seconds). [Implementation] Same as the standard.	Y
2	axslldpMessageTxHoldMultiplier {axslldpConfiguration 2}	Integer32 (2..10)	R/NW	[Standard] Factor of the period for which the neighboring switch holds LLDP frames sent from the Switch. Actual retention time is the product of the value of axslldpMessageTxInterval and this MIB value. Defined by the `lldp hold-count` configuration command. The default value is `4`. [Implementation] Same as the standard.	Y
3	axslldpReinitDelay {axslldpConfiguration 3}	Integer32 (1..10)	R/W	[Standard] Delay time for reinitialization since the time the port state changed to `disable` (in seconds). The default value is 1 (unit: seconds). [Implementation] Not supported.	N
4	axslldpTxDelay {axslldpConfiguration 4}	Integer32 (1..8192)	R/W	[Standard] Delay time until LDPDU is sent after the value of an object of the axslldpLocalSystemData group is changed (in seconds). A recommended value can be calculated using the following expression: axslldpTxDelay = max (1, (0.25 X axslldpMessageTxInterval)) The default value is 8 (unit: seconds). [Implementation] Not supported.	N
5	axslldpPortConfigTable {axslldpConfiguration 6}	SEQUENCE OF axslldpPortConfigEntry	NA	[Standard] Table related to LDPDU transmission. [Implementation] Same as the standard.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	axslldpPortConfigEntry {axslldpPortConfigTable 1}	axslldpPortConfigEntry	NA	[Standard] Entry (for each port) related to LDPDU transmission. INDEX { axslldpPortConfigPortNum } [Implementation] Same as the standard.	Y
7	axslldpPortConfigPortNum {axslldpPortConfigEntry 2}	Integer32	NA	[Standard] ID to identify ports. Same as for ifIndex. [Implementation] Same as the standard.	Y
8	axslldpPortConfigAdminStatus {axslldpPortConfigEntry 3}	INTEGER	R/NW	[Standard] Port status of the Switch related to LDPDU transmission and reception. • txOnly (1) • rxOnly (2) • txAndRx (3) • disabled (4) [Implementation] Only txAndRx (3) and disabled (4) are available.	Y
9	axslldpPortConfigTLVsTxEnable {axslldpPortConfigEntry 4}	BITS	R/NW	[Standard] TLV available for transmission related to the corresponding port. • portDesc (4) • sysName (5) • sysDesc (6) • sysCap (7) [Implementation] Fixed value of 0x0e (logical addition of portDesc (4), sysName (5) and sysDesc (6)).	Y
10	axslldpPortConfigRowStatus {axslldpPortConfigEntry 5}	RowStatus	R/O	[Standard] Status of this entry: • active (1): if axslldpPortConfigAdminStatus is txAndRx • notReady (3): if axslldpPortConfigAdminStatus is disabled [Implementation] Same as the standard.	Y
11	axslldpConfigManAddrTable {axslldpConfiguration 7}	SEQUENCE OF axslldpConfigManAddrEntry	NA	[Standard] Table related to the ports that send the management address of the Switch. [Implementation] Not supported.	N
12	axslldpConfigManAddrEntry {axslldpConfigManAddrTable 1}	axslldpConfigManAddrEntry	NA	[Standard] Entry constituting the aggregate of ports that send the management address of the Switch. [Implementation] Not supported.	N
13	axslldpConfigManAddrPortsTxEnable {axslldpConfigManAddrEntry 1}	OCTET STRING (SIZE(48))	R/W	[Standard] Bitmap constituting the aggregate of ports that send the management address of the Switch. [Implementation] Not supported.	N

3.16.2 axslldpStats group

(1) ID

```
axslldp OBJECT IDENTIFIER ::= {axsMib 100}

axslldpStats OBJECT IDENTIFIER ::= {axslldp 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.2
```

```
axslldpStatsTable OBJECT IDENTIFIER ::= {axslldpStats 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.2.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axslldpStats group.

Table 3-60: axslldpStats group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axslldpStatsTable {axslldpStats 1}	SEQUENCE OF axslldpStatsEntry	NA	[Standard] Table of LLDP statistics. [Implementation] Same as the standard.	Y
2	axslldpStatsEntry {axslldpStatsTable 1}	axslldpStatsEntry	NA	[Standard] Entry (for each port) related to LLDP statistics. INDEX { axslldpStatsPortNum } [Implementation] Same as the standard.	Y
3	axslldpStatsPortNum {axslldpStatsEntry 2}	Integer32	NA	[Standard] ID to identify ports. Same as for ifIndex. [Implementation] Same as the standard. The item is assigned to any port activated with the `lldp enable` configuration command.	Y
4	axslldpStatsOperStatus {axslldpStatsEntry 3}	INTEGER	R/O	[Standard] Status of the port: • portUp (`1`) • portDown (`2`) [Implementation] Same as the standard.	Y
5	axslldpStatsFramesInErrors {axslldpStatsEntry 4}	Counter32	R/O	[Standard] Number of invalid LDPDUs received by the corresponding port. [Implementation] Same as the standard.	Y
6	axslldpStatsFramesInTotal {axslldpStatsEntry 5}	Counter32	R/O	[Standard] Total number of LDPDUs received by the corresponding port. [Implementation] Same as the standard.	Y
7	axslldpStatsFramesOutTotal {axslldpStatsEntry 6}	Counter32	R/O	[Standard] Total number of LDPDUs sent from the corresponding port. [Implementation] Same as the standard.	Y
8	axslldpStatsTLVsInErrors {axslldpStatsEntry 7}	Counter32	R/O	[Standard] Number of invalid TLVs received by the corresponding port. [Implementation] Same as the standard.	Y
9	axslldpStatsTLVsDiscardedTotal {axslldpStatsEntry 8}	Counter32	R/O	[Standard] Total number of TLVs discarded related to the corresponding port. [Implementation] Same as the standard.	Y
10	axslldpStatsCounterDiscontinuityTime {axslldpStatsEntry 9}	TimeStamp	R/O	[Standard] Time when the continuity of the statistics counter is lost related to the corresponding port. [Implementation] Not supported.	N

3.16.3 axslldpLocalSystemData group

(1) ID

```
axslldp OBJECT IDENTIFIER ::= {axsMib 100}

axslldpLocalSystemData OBJECT IDENTIFIER ::= {axslldp 3}
```

```
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.3

axslldpLocChassisType ::= {axslldpLocalSystemData 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.3.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axslldpLocalSystemData group.

Table 3-61: axslldpLocalSystemData group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axslldpLocChassisType {axslldpLocalSystemData 1}	INTEGER	R/O	[Standard] Type of chassis for the Switch: • entPhysicalAlias (1) • ifAlias (2) • portEntPhysicalAlias (3) • backplaneEntPhysicalAlias (4) • macAddress (5) • networkAddress (6) [Implementation] Fixed value of macAddress (5).	Y
2	axslldpLocChassisId {axslldpLocalSystemData 2}	OCTET STRING (SIZE(1..255))	R/O	[Standard] Chassis ID (string) of the Switch. [Implementation] MAC address of the switch.	Y
3	axslldpLocSysName {axslldpLocalSystemData 3}	OCTET STRING (SIZE(0..255))	R/O	[Standard] System name (string) of the Switch. Same as sysName in the system group. [Implementation] Same as the standard.	Y
4	axslldpLocSysDesc {axslldpLocalSystemData 4}	DisplayString (SIZE(0..255))	R/O	[Standard] System information (string) for the Switch. Same as sysDesc in the system group. [Implementation] Same as the standard.	Y
5	axslldpLocSysCapSupported {axslldpLocalSystemData 5}	BITS	R/O	[Standard] Bitmap expression for the list of functions supported by the switch: • repeater (0) • bridge (1) • accessPoint (2) • router (3) • telephone (4) • wirelessStation (5) • stationOnly (6) [Implementation] Not supported.	N
6	axslldpLocSysCapEnabled {axslldpLocalSystemData 6}	BITS	R/O	[Standard] Bitmap expression for the list of functions running on the switch: • repeater (0) • bridge (1) • accessPoint (2) • router (3) • telephone (4) • wirelessStation (5) • stationOnly (6) [Implementation] Not supported.	N

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	axslldpLocPortTable {axslldpLocalSystemData 7}	SEQUENCE OF axslldpLocPortEntry	NA	[Standard] Table related to the ports on the Switch. [Implementation] Same as the standard.	Y
8	axslldpLocPortEntry {axslldpLocPortTable 1}	axslldpLocPortEntry	NA	[Standard] Entry related to each port of the Switch. INDEX { axslldpLocPortNum } [Implementation] Same as the standard.	Y
9	axslldpLocPortNum {axslldpLocPortEntry 1}	Integer32	NA	[Standard] ID to identify ports. Same as for ifIndex. [Implementation] Same as the standard. The item is assigned to any port activated with the `lldp enable` configuration command.	Y
10	axslldpLocPortType {axslldpLocPortEntry 2}	INTEGER	R/O	[Standard] Port type of the corresponding port on the Switch: • ifAlias (1) • portEntPhysicalAlias (2) • backplaneEntPhysicalAlias (3) • macAddress (4) • networkAddress (5) • local (6) [Implementation] Fixed value of macAddress (4).	Y
11	axslldpLocPortId {axslldpLocPortEntry 3}	OCTET STRING (SIZE(1..255))	R/O	[Standard] Port ID of the corresponding port on the Switch (string). [Implementation] MAC address of the port.	Y
12	axslldpLocPortDesc {axslldpLocPortEntry 4}	OCTET STRING (SIZE(0..255))	R/O	[Standard] Port information of the corresponding port on the Switch (string). Same as ifDescr for a port. [Implementation] Same as the standard.	Y
13	axslldpLocManAddrTable {axslldpLocalSystemData 8}	SEQUENCE OF axslldpLocManAddrEntry	NA	[Standard] Table related to the management address of the switch. [Implementation] Not supported.	N
14	axslldpLocManAddrEntry {axslldpLocManAddrTable 1}	axslldpLocManAddrEntry	NA	[Standard] Information on the management address for each chassis. INDEX { axslldpLocManAddrType, axslldpLocManAddr } [Implementation] Not supported.	N
15	axslldpLocManAddrType {axslldpLocManAddrEntry 1}	AddressFamilyNumbers	NA	[Standard] Type of management address. [Implementation] Not supported.	N
16	axslldpLocManAddr {axslldpLocManAddrEntry 2}	OCTET STRING (SIZE (1..31))	NA	[Standard] Management address of the switch. [Implementation] Not supported.	N

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
17	axslldpLocManAddrIfSubtype {axslldpLocManAddrEntry 3}	INTEGER	R/O	[Standard] Type of interface number: • unknown (1) • ifIndex (2) • systemPortNumber (3) [Implementation] Not supported.	N
18	axslldpLocManAddrIfId {axslldpLocManAddrEntry 4}	OCTET STRING (SIZE(4))	R/O	[Standard] Interface number corresponding to the management address. [Implementation] Not supported.	N
19	axslldpLocManAddrOID {axslldpLocManAddrEntry 5}	OBJECT IDENTIFIER	R/O	[Standard] Object ID of the hardware or protocol related to the management address. [Implementation] Not supported.	N

3.16.4 axslldpRemoteSystemData group

(1) ID

```
axslldp OBJECT IDENTIFIER ::= {axsMib 100}

axslldpRemoteSystemData OBJECT IDENTIFIER ::= {axslldp 4}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.4

axslldpRemTable ::= {axslldpRemoteSystemData 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.4.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axslldpRemoteSystemData group.

Table 3-62: axslldpRemoteSystemData group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axslldpRemTable {axslldpRemoteSystemData 1}	SEQUENCE OF axslldpRemEntry	NA	[Standard] Table describing the neighboring switch. [Implementation] Same as the standard.	Y
2	axslldpRemEntry {axslldpRemTable 1}	axslldpRemEntry	NA	[Standard] Entry describing the neighboring switch. INDEX { axslldpRemTimeMark, axslldpRemLocalPortNum, axslldpRemIndex } [Implementation] INDEX { axslldpRemLocalPortNum, axslldpRemIndex }#	Y
3	axslldpRemTimeMark {axslldpRemEntry 1}	TimeFilter	NA	[Standard] Elapsed time since the information describing the corresponding neighboring switch was obtained. [Implementation] Not supported.	N

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
4	axslldpRemLocalPortNum {axslldpRemEntry 2}	Integer32	NA	[Standard] ID of the port on the Switch through which the information describing the corresponding neighboring switch is obtained. Same as for ifIndex. [Implementation] Same as the standard. The item is assigned to any port activated with the `lldp enable` configuration command.	Y
5	axslldpRemIndex {axslldpRemEntry 3}	Integer32 (1..2147483647)	NA	[Standard] Index related to the neighboring switch. [Implementation] Same as the standard.	Y
6	axslldpRemRemoteChassisType {axslldpRemEntry 4}	INTEGER	R/O	[Standard] Chassis type of the neighboring switch: • entPhysicalAlias (`1`) • ifAlias (`2`) • portEntPhysicalAlias (`3`) • backplaneEntPhysicalAlias (`4`) • macAddress (`5`) • networkAddress (`6`) [Implementation] Same as the standard.	Y
7	axslldpRemRemoteChassis {axslldpRemEntry 5}	OCTET STRING (SIZE(1..255))	R/O	[Standard] Chassis ID of the neighboring switch (string). [Implementation] Same as the standard.	Y
8	axslldpRemRemotePortType {axslldpRemEntry 6}	INTEGER	R/O	[Standard] Port type of the corresponding port on the neighboring switch: • ifAlias (`1`) • portEntPhysicalAlias (`2`) • backplaneEntPhysicalAlias (`3`) • macAddress (`4`) • networkAddress (`5`) • local (`6`) [Implementation] Same as the standard.	Y
9	axslldpRemRemotePort {axslldpRemEntry 7}	OCTET STRING (SIZE(1..255))	R/O	[Standard] Port ID (string) of the corresponding port on the neighboring switch. [Implementation] Same as the standard.	Y
10	axslldpRemPortDesc {axslldpRemEntry 8}	OCTET STRING (SIZE(0..255))	R/O	[Standard] Information (string) on the corresponding port on the neighboring switch. [Implementation] Same as the standard.	Y
11	axslldpRemSysName {axslldpRemEntry 9}	OCTET STRING (SIZE(0..255))	R/O	[Standard] System name (string) of the neighboring switch. [Implementation] Same as the standard.	Y
12	axslldpRemSysDesc {axslldpRemEntry 10}	OCTET STRING (SIZE(0..255))	R/O	[Standard] System (string) information about the neighboring switch. [Implementation] Same as the standard.	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
13	axslldpRemSysCapSupported {axslldpRemEntry 11}	BITS	R/O	[Standard] Bitmap expression for the list of functions supported by the neighboring switch: • repeater (0) • bridge (1) • accessPoint (2) • router (3) • telephone (4) • wirelessStation (5) • stationOnly (6) [Implementation] Not supported.	N
14	axslldpRemSysCapEnabled {axslldpRemEntry 12}	BITS	R/O	[Standard] Bitmap expression for the list of functions running on the neighboring switch: • repeater (0) • bridge (1) • accessPoint (2) • router (3) • telephone (4) • wirelessStation (5) • stationOnly (6) [Implementation] Not supported.	N
15	axslldpRemManAddrTable {axslldpRemoteSystemsData 2}	SEQUENCE OF axslldpRemManAddrEntry	NA	[Standard] Table related to the management addresses of the neighboring switches learned by the switch. [Implementation] Not supported.	N
16	axslldpRemManAddrEntry {axslldpRemManAddrTable 1}	axslldpRemManAddrEntry	NA	[Standard] Table of the management addresses of the neighboring switch. INDEX { axslldpRemTimeMark, axslldpRemLocalPortNum, axslldpRemIndex, axslldpRemManAddrType, axslldpRemManAddr } [Implementation] Not supported.	N
17	axslldpRemManAddrType {axslldpRemManAddrEntry 1}	AddressFamilyNumbers	NA	[Standard] Type of management address. [Implementation] Not supported.	N
18	axslldpRemManAddr {axslldpRemManAddrEntry 2}	OCTET STRING (SIZE (1..31))	NA	[Standard] Management address of the neighboring switch. [Implementation] Not supported.	N
19	axslldpRemManAddrIfSubtype {axslldpRemManAddrEntry 3}	INTEGER	R/O	[Standard] Type of interface number: • unknown (1) • ifIndex (2) • systemPortNumber (3) [Implementation] Not supported.	N
20	axslldpRemManAddrIfId {axslldpRemManAddrEntry 4}	OCTET STRING (SIZE(4))	R/O	[Standard] Interface number corresponding to the management address of the neighboring switch. [Implementation] Not supported.	N

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
21	axslldpRemManAddrOID {axslldpRemManAddrEntry 5}	OBJECT IDENTIFIER	R/O	[Standard] Object ID of the hardware or the protocol related to the administration address of the neighboring switch. [Implementation] Not supported.	N
22	axslldpRemOrgDefInfoTable {axslldpRemoteSystemsData 3}	SEQUENCE OF axslldpRemOrgDefInfoEntry	NA	[Standard] Table related to the manufacturer-specific TLVs on the neighboring switch. [Implementation] Same as the standard.	N
23	axslldpRemOrgDefInfoEntry {axslldpRemOrgDefTable 1}	axslldpRemOrgDefInfoEntry	NA	[Standard] Entry related to the manufacturer-specific TLVs on the neighboring switch. INDEX { axslldpRemTimeMark, axslldpRemLocalPortNum, axslldpRemIndex, axslldpRemOrgDefOUI, axslldpRemOrgDefSubtype, axslldpRemOrgDefIndex } [Implementation] Not supported.	N
24	axslldpRemOrgDefInfoOUI {axslldpRemOrgDefEntry 1}	OCTET STRING (SIZE(3))	NA	[Standard] OUI about the manufacturer-specific TLV on the neighboring switch. [Implementation] Not supported.	N
25	axslldpRemOrgDefInfoSubtype {axslldpRemOrgDefEntry 2}	Integer32 (1..255)	NA	[Standard] Subtype of the manufacturer-specific TLV on the neighboring switch. [Implementation] Not supported.	N
26	axslldpRemOrgDefInfoIndex {axslldpRemOrgDefEntry 3}	Integer32 (1..2147483647)	NA	[Standard] ID of the manufacturer-specific TLV on the neighboring switch. [Implementation] Not supported.	N
27	axslldpRemOrgDefInfo {axslldpRemOrgDefEntry 4}	OCTET STRING (SIZE(0..507))	R/O	[Standard] Information on the manufacturer-specific TLV on the neighboring switch. [Implementation] Not supported.	N

#: axslldpRemTimeMark, which is included in the standard, is excluded because it is not supported.

3.16.5 axslldpRemoteOriginInfoData group

(1) ID

```
axslldp OBJECT IDENTIFIER ::= {axsMib 100}

axslldpRemoteOriginInfoData OBJECT IDENTIFIER ::= {axslldp 20}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.20

axslldpRemOriginInfoTable OBJECT IDENTIFIER ::= {axslldpRemoteOriginInfoData 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.100.20.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axslldpRemoteOriginInfoData group.

Table 3-63: axslldpRemoteOriginInfoData group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axslldpRemOriginInfoTable {axslldpRemoteOriginInfoData 1}	SEQUENCE OF axslldpRemOriginInfoTable	NA	Table related to ALAXALA TLVs in the neighboring switch	Y
2	axslldpRemOriginInfoEntry {axslldpRemOriginInfoTable 1}	axslldpRemOriginInfoEntry	NA	Entry about the neighboring switch. INDEX { axslldpRemOriginInfoPortNum, axslldpRemOriginInfoIndex }	Y
3	axslldpRemOriginInfoPortNum {axslldpRemOriginInfoEntry 1}	Integer32	NA	Port identification index of the port on the Switch that received information on the neighboring switch. Same as for ifIndex.	Y
4	axslldpRemOriginInfoIndex {axslldpRemOriginInfoEntry 2}	INTEGER	NA	Index for the neighboring switch	Y
5	axslldpRemOriginInfoLowerVlanList {axslldpRemOriginInfoEntry 3}	OCTET STRING (SIZE(256))	R/O	Bitmap expression for valid VLAN IDs out of VLANs 1-2047 at the corresponding port on the neighboring switch (the first bit (2^7th bit of the zeroth byte) specifies the existence of an untagged definition, and the subsequent bits specify the validity of VLANs 1-2047). • bit is `0`: The VLAN is invalid. • bit is `1`: The VLAN is valid.	Y
6	axslldpRemOriginInfoHigherVlanList {axslldpRemOriginInfoEntry 4}	OCTET STRING (SIZE(256))	R/O	Bitmap expression for valid VLAN IDs out of VLANs 2048-4095 on the corresponding port of the neighboring switch (validity of VLANs 2048-4095 is indicated by the sequence beginning from the first bit (2^7th bit of the zeroth byte)). • bit is `0`: The VLAN is invalid. • bit is `1`: The VLAN is valid.	Y
7	axslldpRemOriginInfoIPv4Address {axslldpRemOriginInfoEntry 5}	OCTET STRING (SIZE(0..15))	R/O	Only if untagged is defined in axslldpRemOriginInfoLowerVlanList: IPv4 address assigned to the corresponding port of the neighboring switch (string) Otherwise: IPv4 address assigned to the VLAN that has the smallest VLAN ID among the valid VLANs on the corresponding port of the neighboring switch (string)	Y
8	axslldpRemOriginInfoIPv4PortType {axslldpRemOriginInfoEntry 6}	INTEGER	R/O	Port type of the corresponding port on the neighboring switch: • Bridge port (`0`): Port included either in a port without an IP address definition or in a VLAN that has an assigned IP address • Router port (`1`): Any port other than that described above	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
9	axslldpRemOriginInfoIPv4VlanId {axslldpRemOriginInfoEntry 7}	INTEGER	R/O	If axslldpRemOriginInfoIPv4PortType is a bridge port: The smallest VLAN ID among the IDs of VLANs that have an assigned IPv4 address If axslldpRemOriginInfoIPv4PortType is a router port: Fixed value of `0`.	Y
10	axslldpRemOriginInfoIPv6Address {axslldpRemOriginInfoEntry 8}	OCTET STRING (SIZE(0..45))	R/O	Only if untagged is defined in axslldpRemOriginInfoLowerVlanList: IPv6 address (string) assigned to the corresponding port on the neighboring switch Otherwise: IPv6 address (string) assigned to the VLAN that has the smallest VLAN ID among the valid VLANs on the corresponding port of the neighboring switch	Y
11	axslldpRemOriginInfoIPv6PortType {axslldpRemOriginInfoEntry 9}	INTEGER	R/O	Port type of the corresponding port on the neighboring switch: • Bridge port (`0`): Port included either in a port without an IP address definition or in a VLAN that has an assigned IP address • Router port (`1`): Any port other than that described above	Y
12	axslldpRemOriginInfoIPv6VlanId {axslldpRemOriginInfoEntry 10}	INTEGER	R/O	If axslldpRemOriginInfoIPv6PortType is a bridge port: Smallest VLAN ID among the IDs of VLANs that have an assigned IPv6 address If axslldpRemOriginInfoIPv6PortType is a router port: Fixed value of `0`.	Y

3.17 axsAxrpMIB group (Ring Protocol information)

3.17.1 axsAxrpGroupTable group

(1) ID

```
axsAxrp OBJECT IDENTIFIER ::= {axsMib 200}

axsAxrpGroupTable OBJECT IDENTIFIER ::= {axsAxrp 1}
Object ID value  1.3.6.1.4.1.21839.2.2.1.200.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsAxrpGroupTable group.

Table 3-64: axsAxrpGroupTable group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsAxrpGroupTable {axsAxrp 1}	NOT-ACCESSIBLE	NA	Table containing information on the Ring Protocol group	Y
2	axsAxrpGroupEntry {axsAxrpGroupTable 1}	NOT-ACCESSIBLE	NA	List of information on the Ring Protocol group. INDEX { axsAxrpGroupRingId }	Y
3	axsAxrpGroupRingId {axsAxrpGroupEntry 1}	INTEGER	NA	Ring ID (1-65535)	Y
4	axsAxrpGroupRowStatus {axsAxrpGroupEntry 2}	RowStatus	R/O	Validity of this entry. Fixed value of Valid (1).	Y
5	axsAxrpGroupMode {axsAxrpGroupEntry 3}	INTEGER	R/O	Mode of each Ring ID: • no config (1): Configuration command mode is not set up • master (2): Master node • transit (3): Transit node	Y
6	axsAxrpGroupRingAttribute {axsAxrpGroupEntry 4}	INTEGER	R/O	In a multi-ring configuration, the attribute of the Switch in the ring without shared link monitoring: • no config (1): No attribute • rift-ring (2): Node contained in a ring without shared link monitoring • rift-ring-edge 1 (3): Node1, which is the endmost node on the shared link non-monitoring ring • rift-ring-edge 2 (4): Node2, which is the endmost node on the shared link non-monitoring ring	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	axsAxrpGroupMonitoringState {axsAxrpGroupEntry 5}	INTEGER	R/O	Operational and monitoring state of the ring: • init (1): Initializing • disable (2): Disabled • fault monitoring (3): Under fault monitoring • recovery monitoring (4): Under recovery monitoring • flush monitoring (5): Under monitoring of flush control frames • not operating (6): Not operable • preempt delay (8): Path switchback is suppressed • recovery re-monitoring (9): Under recovery monitoring (when path switchback suppression is released)	Y
8	axsAxrpGroupRingport1 {axsAxrpGroupEntry 6}	INTEGER	R/O	ifIndex of ring port 1 (with the smaller ifIndex)#	Y
9	axsAxrpGroupRingport1Shared {axsAxrpGroupEntry 7}	INTEGER	R/O	State of sharing of ring port 1:# • no config (1) • shared-edge (2) • shared (3)	Y
10	axsAxrpGroupRingport2 {axsAxrpGroupEntry 8}	INTEGER	R/O	ifIndex of ring port 2 (with the larger ifIndex)#	Y
11	axsAxrpGroupRingport2Shared {axsAxrpGroupEntry 9}	INTEGER	R/O	State of sharing of ring port 2:# • no config (1) • shared-edge (2) • shared (3)	Y
12	axsAxrpGroupTransitionToFaultCounts {axsAxrpGroupEntry 10}	Counter	R/O	Number of transitions from the fault monitoring state to the recovery monitoring state	Y
13	axsAxrpGroupTransitionToNormalCounts {axsAxrpGroupEntry 11}	Counter	R/O	Number of transitions from the recovery monitoring state to the fault monitoring state	Y
14	axsAxrpGroupLastTransitionTime {axsAxrpGroupEntry 12}	TimeStamp	R/O	Time of the most recent transition from recovery monitoring to fault monitoring, or from fault monitoring to recovery monitoring	Y
15	axsAxrpGroupMultiFaultDetectionState {axsAxrpGroupEntry 22}	INTEGER	R/O	Multi-fault monitoring of the Ring Protocol: • not monitoring (1) • normal (2) • fault (3)	Y

#: MIB information for ring port 1 or ring port 2 cannot be obtained unless the ring port is configured. Configure the ring port to obtain the MIB information.

3.17.2 axsAxrpVlanGroupTable group

(1) ID

```
axsAxrp OBJECT IDENTIFIER ::= {axsMib 200}
```

```
axsAxrpVlanGroupTable OBJECT IDENTIFIER ::= {axsAxrp 2}
Object ID value  1.3.6.1.4.1.21839.2.2.1.200.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the axsAxrpVlanGroupTable group.

Table 3-65: axsAxrpVlanGroup group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	axsAxrpVlanGroupTable {axsAxrp 2}	NOT-ACCESSIBLE	NA	Table containing information on the Ring Protocol VLAN groups	Y
2	axsAxrpVlanGroupEntry {axsAxrpVlanGroupTable 1}	NOT-ACCESSIBLE	NA	List of ring port information on the VLAN groups. INDEX { axsAxrpVlanGroupRingId, axsAxrpVlanGroupId }	Y
3	axsAxrpVlanGroupRingId {axsAxrpVlanGroupEntry 1}	INTEGER	NA	Ring ID (1-65535)	Y
4	axsAxrpVlanGroupId {axsAxrpVlanGroupEntry 2}	INTEGER	NA	VLAN group ID	Y
5	axsAxrpVlanGroupRingport1 {axsAxrpVlanGroupEntry 3}	INTEGER	R/O	ifIndex of ring port 1 (with the smaller ifIndex)#	Y
6	axsAxrpVlanGroupRingport1Role {axsAxrpVlanGroupEntry 4}	INTEGER	R/O	Role of ring port 1:# • primary (1): Primary port of the master node • secondary (2): Secondary port of the master node • other (3)	Y
7	axsAxrpVlanGroupRingport1OperState {axsAxrpVlanGroupEntry 5}	INTEGER	R/O	Current state of ring port 1:# • forwarding (1) • blocking (2) • other (3) • down (4)	Y
8	axsAxrpVlanGroupRingport2 {axsAxrpVlanGroupEntry 6}	INTEGER	R/O	ifIndex of ring port 2 (with the larger ifIndex)#	Y
9	axsAxrpVlanGroupRingport2Role {axsAxrpVlanGroupEntry 7}	INTEGER	R/O	Role of ring port 2:# • primary (1): Primary port of the master node • secondary (2): Secondary port of the master node • other (3)	Y
10	axsAxrpVlanGroupRingport2OperState {axsAxrpVlanGroupEntry 8}	INTEGER	R/O	Current state of ring port 2:# • forwarding (1) • blocking (2) • other (3) • down (4)	Y

#: MIB information for ring port 1 or ring port 2 cannot be obtained unless the ring port is configured. Configure the ring port to obtain the MIB information.

3.18 ax3640sSwitch group (System device model information MIB) [AX3640S]

(1) ID

```
ax3640sMib       OBJECT IDENTIFIER ::= {axsEx 11}

ax3640sSwitch    OBJECT IDENTIFIER ::= {ax3640sMib 1}
Object ID value  1.3.6.1.4.1.21839.2.2.11.1

ax3640sSoftware  OBJECT IDENTIFIER ::= {ax3640sSwitch 2}
Object ID value  1.3.6.1.4.1.21839.2.2.11.1.2

ax3640sSystemMsg OBJECT IDENTIFIER ::= {ax3640sSwitch 3}
Object ID value  1.3.6.1.4.1.21839.2.2.11.1.3

ax3640sSnmpAgent OBJECT IDENTIFIER ::= {ax3640sSwitch 4}
Object ID value  1.3.6.1.4.1.21839.2.2.11.1.4

ax3640sLicense   OBJECT IDENTIFIER ::= {ax3640sSwitch 6}
Object ID value  1.3.6.1.4.1.21839.2.2.11.1.6
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sSwitch group.

Table 3-66: ax3640sSwitch group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sModelType {ax3640sSwitch 1}	INTEGER	R/O	System device model information (numeric value): • AX3640S-24T (1000) • AX3640S-24TW (1001) • AX3640S-24T2XW (1002) • AX3640S-24SW (1003) • AX3640S-24S2XW (1004) • AX3640S-48TW (1005) • AX3640S-48T2XW (1006)	Y
2	ax3640sSoftwareName {ax3640sSoftware 1}	DisplayString	R/O	Name of the software in operation. Returns a response of 0-length when no software name exists.	Y
3	ax3640sSoftwareAbbreviation {ax3640sSoftware 2}	DisplayString	R/O	Abbreviation of the software in operation.	Y
4	ax3640sSoftwareVersion {ax3640sSoftware 3}	DisplayString	R/O	Version of the software in operation.	Y
5	ax3640sSystemMsgText {ax3640sSystemMsg 1}	DisplayString	R/O	Latest log information in the operational log (string). The latest entry information in the system message log (maximum of 256 characters). For details about log formats, see *1.2.3 Format of operation logs* in the manual *Message and Log Reference For Version 11.10*.	Y
6	ax3640sSystemMsgType {ax3640sSystemMsg 2}	OCTET STRING	R/O	Indicates the event type in one byte: • An event occurred (01). • An event is recovered (02).	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	ax3640sSystemMsgTimeStamp {ax3640sSystemMsg 3}	DisplayString	R/O	Time an event occurred (month, day, hour, minute, and second), expressed as a 14-byte string in the following format: *MM/DD hh:mm:ss* • *MM*: month (01-12) • *DD*: day (01-31) • *hh*: hour (00-23) • *mm*: minute (00-59) • *ss*: second (00-59) A 1-byte space is inserted between *DD* and *hh*.	Y
8	ax3640sSystemMsgLevel {ax3640sSystemMsg 4}	OCTET STRING	R/O	Level of the latest system message log expressed as a 1-byte number. • Fatal fault (9) • Severe fault (8) • Software failure (7) • NIF fault (6) • Network failure (4) • Warning (3) • Reserved (2) • Reserved (1)	Y
9	ax3640sSystemMsgEventPoint {ax3640sSystemMsg 5}	DisplayString	R/O	String of no more than 8 bytes indicating the fault point reported in the system message. For details about event points, see *1.2.5(3) Event location* in the manual *Message and Log Reference For Version 11.10*.	Y
10	ax3640sSystemMsgEventInterfaceID {ax3640sSystemMsg 6}	DisplayString	R/O	String indicating the interface ID in the system message (maximum of 40 characters). For details about IDs, see *1.2.5(4) Event interface ID* in the manual *Message and Log Reference For Version 11.10*.	Y
11	ax3640sSystemMsgEventCode {ax3640sSystemMsg 7}	OCTET STRING	R/O	4-byte message ID code of the system message (0x00000000-0xFFFFFFFF). For details about codes, see *1.2.5(5) Message identifier and additional information* in the manual *Message and Log Reference For Version 11.10*.	Y
12	ax3640sSystemMsgAdditionalCode {ax3640sSystemMsg 8}	OCTET STRING	R/O	6-byte ID code of additional information for the system message (0x000000000000-0xFFFFFFFFFFFF). The content of the codes is not made public because it is for maintenance purposes.	Y
13	ax3640sSnmpSendReceiveSize {ax3640sSnmpAgent 1}	INTEGER	R/O	Size of the SNMP packets an agent can send and receive (in bytes)	Y
14	ax3640sSnmpReceiveDelay {ax3640sSnmpAgent 2}	INTEGER	R/O	Recommended delaying interval for receiving SNMP packets (in milliseconds)	Y
15	ax3640sSnmpContinuousSend {ax3640sSnmpAgent 3}	INTEGER	R/O	Recommended number of sequential sends of SNMP packets	Y
16	ax3640sSnmpObjectMaxNumber {ax3640sSnmpAgent 4}	INTEGER	R/O	Recommended number of objects in an SNMP packet	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
17	ax3640sLicenseNumber {ax3640sLicense 1}	INTEGER	R/O	Number of configured license serial numbers	Y
18	ax3640sLicenseTable {ax3640sLicense 2}	NOT-ACCESSIBLE	NA	Table of license information	Y
19	ax3640sLicenseEntry {ax3640sLicenseTable 1}	NOT-ACCESSIBLE	NA	License information entry INDEX { ax3640sLicenseIndex }	Y
20	ax3640sLicenseIndex {ax3640sLicenseEntry 1}	INTEGER	NA	Unique index number assigned to each serial number. Number in the range 1 through ax3640sBcuLicenseNumber.	Y
21	ax3640sLicenseSerialNumber {ax3640sLicenseEntry 2}	DisplayString	R/O	Serial number	Y
22	ax3640sLicenseOptionNumber {ax3640sLicenseEntry 3}	INTEGER	R/O	Number of option licenses related to a serial number	Y
23	ax3640sLicenseOptionTable {ax3640sLicense 3}	NOT-ACCESSIBLE	NA	Table of option licenses related to a serial number	Y
24	ax3640sLicenseOptionEntry {ax3640sLicenseOptionTable 1}	NOT-ACCESSIBLE	NA	Entry of option licenses related to a serial number. INDEX { ax3640sLicenseOptionIndex, ax3640sLicenseOptionNumberIndex }	Y
25	ax3640sLicenseOptionIndex {ax3640sLicenseOptionEntry 1}	INTEGER	NA	Unique index number assigned to each serial number. Equal to ax3640sLicenseIndex.	Y
26	ax3640sLicenseOptionNumberIndex {ax3640sLicenseOptionEntry 2}	INTEGER	NA	Index number of the option license related to a serial number. Number in the range 1 through ax3640sLicenseOptionNumber.	Y
27	ax3640sLicenseOptionSoftwareName {ax3640sLicenseOptionEntry 3}	DisplayString	R/O	Software model name of the option license related to a serial number	Y
28	ax3640sLicenseOptionSoftwareAbbreviation {ax3640sLicenseOptionEntry 4}	DisplayString	R/O	Abbreviation of the software of the option license related to a serial number	Y

3.19 ax3640sDevice group (System device chassis information MIB) [AX3640S]

3.19.1 ax3640sChassis group implementation specifications (Chassis information)

(1) ID

```
ax3640sDevice     OBJECT IDENTIFIER ::= {ax3640sMib 2}
ax3640sChassis    OBJECT IDENTIFIER ::= {ax3640sDevice 1}

ax3640sChassisMaxNumber OBJECT IDENTIFIER ::= {ax3640sChassis 1}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.1.1

ax3640sChassisTable     OBJECT IDENTIFIER ::= {ax3640sChassis 2}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.1.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sChassis group (chassis information).

Table 3-67: ax3640sChassis group implementation specifications (chassis information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sChassisMaxNumber {ax3640sChassis 1}	INTEGER	R/O	Maximum number of cluster chassis connected to the Switch. • For AX3640S series switches: Fixed value of 1	Y
2	ax3640sChassisTable {ax3640sChassis 2}	NOT-ACCESSIBLE	NA	Table of the chassis information	Y
3	ax3640sChassisEntry {ax3640sChassisTable 1}	NOT-ACCESSIBLE	NA	Entry of information on a specific chassis. INDEX { ax3640sChassisIndex }	Y
4	ax3640sChassisIndex {ax3640sChassisEntry 1}	NOT-ACCESSIBLE	NA	Number to identify ax3640sChassisEntry. Fixed value of 1.	Y
5	ax3640sChassisType {ax3640sChassisEntry 2}	INTEGER	R/O	Chassis type: • AX3640S-24T (1000) • AX3640S-24TW (1001) • AX3640S-24T2XW (1002) • AX3640S-24SW (1003) • AX3640S-24S2XW (1004) • AX3640S-48TW (1005) • AX3640S-48T2XW (1006)	Y
6	ax3640sChassisStatus {ax3640sChassisEntry 3}	INTEGER	R/O	Current status of the chassis. Fixed value of in operation (2).	Y
7	ax3640sStsLedStatus {ax3640sChassisEntry 4}	INTEGER	R/O	Status of the STS LED on the Switch: • Blinking green (1) • Stable green (2) • Blinking red (3) • Stable red (4) • Not lit (6)	Y
8	ax3640sCpuName {ax3640sChassisEntry 5}	DisplayString	R/O	CPU Name (maximum of 16 characters). Example: AMD K5	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
9	ax3640sCpuClock {ax3640sChassisEntry 6}	INTEGER	R/O	CPU clock rate (in MHz). Example: 200	Y
10	ax3640sMemoryTotalSize {ax3640sChassisEntry 7}	INTEGER	R/O	Amount of installed memory (in KB)	Y
11	ax3640sMemoryUsedSize {ax3640sChassisEntry 8}	INTEGER	R/O	Amount of used memory (in KB)	Y
12	ax3640sMemoryFreeSize {ax3640sChassisEntry 9}	INTEGER	R/O	Amount of unused memory (in KB)	Y
13	ax3640sRomVersion {ax3640sChassisEntry 10}	DisplayString	R/O	Version of the installed ROM (string). Example: `ROM 01-01 Rev0 BIOS Rev.:R1.02.E4`	Y
14	ax3640sCpuLoad1m {ax3640sChassisEntry 11}	INTEGER	R/O	Percentage of CPU usage over a one-minute period (`0-100`)	Y
15	ax3640sFlashTotalSize {ax3640sChassisEntry 12}	INTEGER	R/O	Sum of the amount of used and unused memory in the file system of the embedded flash memory (in KB)	Y
16	ax3640sFlashUsedSize {ax3640sChassisEntry 13}	INTEGER	R/O	Amount of used memory in the file system of the embedded flash memory (in KB)	Y
17	ax3640sFlashFreeSize {ax3640sChassisEntry 14}	INTEGER	R/O	Amount of unused memory in the file system of the embedded flash memory (in KB)	Y
18	ax3640sSdCardStatus {ax3640sChassisEntry 15}	INTEGER	R/O	Status of the connection with an MC connection: • Connected (`2`) • Not connected (`32`)	Y
19	ax3640sSdCardTotalSize {ax3640sChassisEntry 16}	INTEGER	R/O	Total capacity of the MC (in KB). Returns `-1` if an MC is not connected.	Y
20	ax3640sSdCardUsedSize {ax3640sChassisEntry 17}	INTEGER	R/O	Used capacity of the MC (in KB). Returns `-1` if an MC is not connected.	Y
21	ax3640sSdCardFreeSize {ax3640sChassisEntry 18}	INTEGER	R/O	Amount of unused MC capacity (in KB). Returns `-1` if an MC is not connected.	Y
22	ax3640sPhysLineNumber {ax3640sChassisEntry 19}	INTEGER	R/O	Number of ports available for connection to this chassis	Y
23	ax3640sTemperatureStatusNumber {ax3640sChassisEntry 20}	INTEGER	R/O	Maximum number of temperature monitoring points in this chassis	Y
24	ax3640sPowerUnitNumber {ax3640sChassisEntry 21}	INTEGER	R/O	Number of power supplies available in this chassis • For AX3640S series switches: Maximum of 2	Y
25	ax3640sRedundantPsNumber {ax3640sChassisEntry 22}	INTEGER	R/O	Number of external redundant power units that can be installed in this chassis. • For AX3640S series switches: 0 to 1	Y
26	ax3640sFanNumber {ax3640sChassisEntry 23}	INTEGER	R/O	Number of fans in this chassis. • For AX3640S series switches: 4	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
27	ax3640sTotalAccumRunTime {ax3640sChassisEntry 24}	INTEGER	R/O	Total run time of the Switch since startup. Returns a response of `-1` when the operating time is being read or when the reading process has failed.	Y
28	ax3640sCriticalAccumRunTime {ax3640sChassisEntry 25}	INTEGER	R/O	Total time the Switch ran in an environment that is equal to or greater than 40 degrees Celsius. Returns a response of `-1` when the operating time is being read or when the reading process has failed.	Y
29	ax3640sModuleSlotNumber {ax3640sChassisEntry 26}	INTEGER	R/O	Number of modules that can be installed in this chassis. • For AX3640S series switches: 0 to 2	Y

3.19.2 ax3640sChassis group implementation specifications (Temperature information)

(1) ID

```
ax3640sChassis        OBJECT IDENTIFIER ::= {ax3640sDevice 1}

ax3640sTemperatureStatusTable OBJECT IDENTIFIER ::= {ax3640sChassis 3}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.1.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sChassis group (temperature information).

Table 3-68: ax3640sChassis group implementation specifications (temperature information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sTemperatureStatusTable {ax3640sChassis 3}	NOT-ACCESSIBLE	NA	Table of temperature status	Y
2	ax3640sTemperatureStatusEntry {ax3640sTemperatureStatusTable 1}	NOT-ACCESSIBLE	NA	Entry of temperature status. INDEX { ax3640sChassisIndex, ax3640sTemperatureStatusIndex }	Y
3	ax3640sTemperatureStatusIndex {ax3640sTemperatureStatusEntry 1}	NOT-ACCESSIBLE	NA	Unique index assigned to each temperature monitoring point	Y
4	ax3640sTemperatureStatusDescr {ax3640sTemperatureStatusEntry 2}	DisplayString	R/O	Description of this temperature monitoring point. • `Main board Temperature`: The temperature of the main board	Y
5	ax3640sTemperatureStatusValue {ax3640sTemperatureStatusEntry 3}	Integer32	R/O	Current temperature of this monitoring point	Y
6	ax3640sTemperatureThreshold {ax3640sTemperatureStatusEntry 4}	Integer32	R/O	Temperature on this monitoring point where the Switch is stopped	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	ax3640sTemperatureState {ax3640sTemperatureStatusEntry 5}	INTEGER	R/O	Current temperature state of this monitoring point: • Normal (1) • Caution (2) • Abnormal (4)	Y

3.19.3 ax3640sChassis group implementation specifications (Power supply information)

(1) ID

```
ax3640sChassis        OBJECT IDENTIFIER ::= {ax3640sDevice 1}

ax3640sPowerUnitTable OBJECT IDENTIFIER ::= {ax3640sChassis 4}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.1.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sChassis group (power supply information).

Table 3-69: ax3640sChassis group implementation specifications (power supply information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sPowerUnitTable {ax3640sChassis 4}	NOT-ACCESSIBLE	NA	Table of power supply information	Y
2	ax3640sPowerUnitEntry {ax3640sPowerUnitTable 1}	NOT-ACCESSIBLE	NA	Entry of power supply information. INDEX { ax3640sChassisIndex, ax3640sPowerUnitIndex }	Y
3	ax3640sPowerUnitIndex {ax3640sPowerUnitEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the position of the power supply. Number in the range 1 through ax3640sPowerUnitNumber. • For AX3640S switches: Maximum of 2	Y
4	ax3640sPowerConnectStatus {ax3640sPowerUnitEntry 2}	INTEGER	R/O	Installation status of the power supplies: • Installed (2) • Not installed (32) Fixed value of 2.	Y
5	ax3640sPowerSupplyStatus {ax3640sPowerUnitEntry 3}	INTEGER	R/O	Power status: • In operation (2) • Fault (4) Returns a response of -1 when the power supply unit is not installed.	Y

3.19.4 ax3640sChassis group implementation specifications (Fan information)

(1) ID

```
ax3640sChassis    OBJECT IDENTIFIER ::= {ax3640sDevice 1}

ax3640sFanTable   OBJECT IDENTIFIER ::= {ax3640sChassis 5}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.1.5
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sChassis group (fan information).

Table 3-70: ax3640sChassis group implementation specifications (fan information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sFanTable {ax3640sChassis 5}	NOT-ACCESSIBLE	NA	Table of fan information	Y
2	ax3640sFanEntry {ax3640sFanTable 1}	NOT-ACCESSIBLE	NA	Entry of fan information. INDEX { ax3640sChassisIndex, ax3640sFanIndex }	Y
3	ax3640sFanIndex {ax3640sFanEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the fan position. Number in the range 1 through ax3640sFanNumber. • For AX3640S series switches: From 1 through 4 The relationship between each fan number and the position where it is installed is as follows: 1: Power supply unit on the right in the back or right side of the fan unit 2: Power supply unit on the right in the back or left side of the fan unit 3: Power supply unit on the left in the back or right side of the fan unit 4: Power supply unit on the left in the back or left side of the fan unit	Y
4	ax3640sFanStatus {ax3640sFanEntry 2}	INTEGER	R/O	Fan status: • In operation (2) • High-speed operation (3) • Fault (4)	Y

3.19.5 ax3640sChassis group implementation specifications (Spare power supply unit information)

(1) ID

```
ax3640sChassis          OBJECT IDENTIFIER ::= {ax3640sDevice 1}

ax3640sRedundantPsTable OBJECT IDENTIFIER ::= {ax3640sChassis 6}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.1.6
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sChassis group (spare power supply unit information).

Table 3-71: ax3640sChassis group implementation specifications (spare power supply unit information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sRedundantPsTable {ax3640sChassis 6}	NOT-ACCESSIBLE	NA	Table of the spare power supply unit information	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
2	ax3640sRedundantPsEntry {ax3640sRedundantPsTable 1}	NOT-ACCESSIBLE	NA	Entry of the spare power supply unit information. INDEX { ax3640sChassisIndex, ax3640sRedundantPsIndex }	Y
3	ax3640sRedundantPsIndex {ax3640sRedundantPsEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the position of the spare power supply unit	Y
4	ax3640sRedundantPsConnectStatus {ax3640sRedundantPsEntry 2}	INTEGER	R/O	Installation status of the spare power supply unit: • Installed (2) • Not installed (32)	Y
5	ax3640sRedundantPsStatus {ax3640sRedundantPsEntry 3}	INTEGER	R/O	Status of the spare power supply unit: • In operation (2) • Fault (4) Returns a response of -1 when a spare power supply unit is not installed.	Y

3.19.6 ax3640sChassis group implementation specifications (Module information)

(1) ID

```
ax3640sChassis          OBJECT IDENTIFIER ::= {ax3640sDevice 1}

ax3640sModuleSlotTable OBJECT IDENTIFIER ::= {ax3640sChassis 7}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.1.7
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sChassis group (module information).

Table 3-72: ax3640sChassis group implementation specifications (module information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sModuleSlotTable {ax3640sChassis 7}	NOT-ACCESSIBLE	NA	Table of the module information. The information on the power unit or fan installed in this module slot is obtained from ax3640sPowerUnitTable or ax3640sFanTable. The relationship between each index of the table and the implemented position is as follows: • For ax3640sPowerUnitTable (ax3640sPowerUnitIndex): 1: Power supply unit on the right in the back 2: Power supply unit on the left in the back • For ax3640sFanTable (ax3640sFanIndex): 1: Right side of the fan unit on the right in the back 2: Left side of the fan unit on the right in the back 3: Right side of the fan unit on the left in the back 4: Left side of the fan unit on the left in the back	Y
2	ax3640sModuleSlotEntry {ax3640sModuleSlotTable 1}	NOT-ACCESSIBLE	NA	Entry of the module information. INDEX { ax3640sChassisIndex, ax3640sModuleSlotIndex }	Y
3	ax3640sModuleSlotIndex {ax3640sModuleSlotEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the position. Number in the range `1` through ax3640sModuleSlotNumber.	Y
4	ax3640sModuleSlotStatus {ax3640sModuleSlotEntry 2}	INTEGER	R/O	Installation status of the module. • Installed (`2`) • Fault (`4`) • Not installed (`32`)	Y
5	ax3640sModuleSlotType {ax3640sModuleSlotEntry 3}	INTEGER	R/O	Module type. • AC power supply unit (`1`) • DC power supply unit (`2`) • Fan unit (`3`) Returns a response of `-1` when the module is not installed.	Y

3.19.7 ax3640sPhysLine group implementation specifications (Interface information)

(1) ID

```
ax3640sPhysLine      OBJECT IDENTIFIER ::= {ax3640sDevice 2}

ax3640sPhysLineTable OBJECT IDENTIFIER ::= {ax3640sPhysLine 1}
Object ID value  1.3.6.1.4.1.21839.2.2.11.2.2.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sPhysLine group (interface information).

Table 3-73: ax3640sPhysLine group implementation specifications (interface information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sPhysLineTable {ax3640sPhysLine 1}	NOT-ACCESSIBLE	NA	Table of interface information	Y
2	ax3640sPhysLineEntry {ax3640sPhysLineTable 1}	NOT-ACCESSIBLE	NA	Entry of interface information. INDEX { ax3640sChassisIndex, ax3640sPhysLineIndex }	Y
3	ax3640sPhysLineIndex {ax3640sPhysLineEntry 1}	NOT-ACCESSIBLE	NA	Port number information. Number in the range `1` through ax3640sPhysLineNumber.	Y
4	ax3640sPhysLineConnectorType {ax3640sPhysLineEntry 2}	INTEGER	R/O	Type of interface on the interchangeable transceiver: • other (`1`) • type100BASE-FX (`201`) • type1000BASE-LX (`301`) • type1000BASE-SX (`302`) • type1000BASE-LH (`303`) • type1000BASE-BX10-D (`304`) • type1000BASE-BX10-U (`305`) • type1000BASE-BX40-D (`306`) • type1000BASE-BX40-U (`307`) • type1000BASE-SX2 (`308`) • type1000BASE-UTP (`309`)# • type1000BASE-LHB (`310`) • type10GBASE-SR (`401`) • type10GBASE-LR (`402`) • type10GBASE-ER (`403`) • type10GBASE-ZR (`404`) Returns other (`1`) if either of the following conditions is met: • Interface status is `Other`, `Initializing`, or `Fault` • The type and implementation status of the interchangeable transceiver are any type other than implemented	Y
5	ax3640sPhysLineOperStatus {ax3640sPhysLineEntry 3}	INTEGER	R/O	Interface status: • other (`1`) • In operation (`2`) • init (`3`) • Fault (`4`) • stopped with configuration (`6`) • maintenance (`7`) • In operation (now in line fault) (`8`) • line test (`9`) • unused (no configuration) (`10`)	Y
6	ax3640sPhysLineIfIndexNumber {ax3640sPhysLineEntry 4}	INTEGER	R/O	Number of ifIndex objects in the interface	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	ax3640sPhysLineTransceiverStatus {ax3640sPhysLineEntry 5}	INTEGER	R/O	Type and installation status of the interchangeable transceiver. Returns `other` when the interface is in Initializing or Fault status. • `Other` or non-interchangeable transceiver (`1`) • SFP transceiver installed (`20`) • SFP transceiver not installed (`21`) • Unsupported SFP transceiver installed (`22`) • SFP installation status unknown (`23`) • XFP installed (`30`) • XFP not installed (`31`) • Unsupported XFP transceiver installed (`32`) • XFP installation status unknown (`33`)	Y

#: SFP for 10BASE-T/100BASE-TX/1000BASE-T

3.20 ax3640sManagementMIB group (Change device state and information) [AX3640S]

3.20.1 ax3640sFdbClearMIB group (MIB for clearing MAC address tables)

(1) ID

```
ax3640sMib         OBJECT IDENTIFIER ::= {axsEx 11}
Object ID value  1.3.6.1.4.1.21839.2.2.11

ax3640sManagementMIB    OBJECT IDENTIFIER ::= {ax3640sMib 3}
Object ID value  1.3.6.1.4.1.21839.2.2.11.3

ax3640sOperationCommand OBJECT IDENTIFIER ::= {ax3640sManagementMIB 1}
Object ID value  1.3.6.1.4.1.21839.2.2.11.3.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3640sFdbClearMIB group.

Table 3-74: ax3640sFdbClearMIB group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3640sFdbClearMIB {ax3640sOperationCommand 1}	NOT-ACCESSIBLE	NA	MIB group for clearing of MAC address table information	Y
2	ax3640sFdbClearSet {ax3640sFdbClearMIB 1}	INTEGER	R/W	Status of the clearing of the MAC address table: • initial value (0) • clear in progress (1) • clear failed (2) • clear succeeded (3) Assigns 1 when performing Set.#	Y
3	ax3640sFdbClearReqTime {ax3640sFdbClearMIB 2}	TimeTicks	R/O	The most recent MAC address table clear request was accepted (sysUpTime)	Y
4	ax3640sFdbClearSuccessTime {ax3640sFdbClearMIB 3}	TimeTicks	R/O	The most recent MAC address table clear was performed (sysUpTime)	Y

#: However, if the value is either a value other than 1 or undefined, the Set process will be executed.

3.21 ax3630sSwitch group (System device model information MIB) [AX3630S]

(1) ID

```
ax3630sMib       OBJECT IDENTIFIER ::= {axsEx 7}

ax3630sSwitch    OBJECT IDENTIFIER ::= {ax3630sMib 1}
Object ID value  1.3.6.1.4.1.21839.2.2.7.1

ax3630sSoftware  OBJECT IDENTIFIER ::= {ax3630sSwitch 2}
Object ID value  1.3.6.1.4.1.21839.2.2.7.1.2

ax3630sSystemMsg OBJECT IDENTIFIER ::= {ax3630sSwitch 3}
Object ID value  1.3.6.1.4.1.21839.2.2.7.1.3

ax3630sSnmpAgent OBJECT IDENTIFIER ::= {ax3630sSwitch 4}
Object ID value  1.3.6.1.4.1.21839.2.2.7.1.4

ax3630sLicense   OBJECT IDENTIFIER ::= {ax3630sSwitch 6}
Object ID value  1.3.6.1.4.1.21839.2.2.7.1.6
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sSwitch group.

Table 3-75: ax3630sSwitch group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sModelType {ax3630sSwitch 1}	INTEGER	R/O	System device model information (numeric value): • AX3630S-24T (500)#1 • AX3630S-24T2X (501)#2 • AX3630S-24P (502) • AX3630S-48TW (506) • AX3630S-48T2XW (507) • AX3630S-24S2XW (508)	Y
2	ax3630sSoftwareName {ax3630sSoftware 1}	DisplayString	R/O	Name of the software in operation. Returns a response of 0-length when no software name exists.	Y
3	ax3630sSoftwareAbbreviation {ax3630sSoftware 2}	DisplayString	R/O	Abbreviation of the software in operation.	Y
4	ax3630sSoftwareVersion {ax3630sSoftware 3}	DisplayString	R/O	Version of the software in operation.	Y
5	ax3630sSystemMsgText {ax3630sSystemMsg 1}	DisplayString	R/O	Latest log information in the operational log (string). The latest entry information in the system message log (maximum of 256 characters). For details about log formats, see *1.2.3 Format of operation logs* in the manual *Message and Log Reference For Version 11.10*.	Y
6	ax3630sSystemMsgType {ax3630sSystemMsg 2}	OCTET STRING	R/O	Indicates the event type in one byte: • An event occurred (01). • An event is recovered (02).	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	ax3630sSystemMsgTimeStamp {ax3630sSystemMsg 3}	DisplayString	R/O	Time an event occurred (month, day, hour, minute, and second), expressed as a 14-byte string in the following format: *MM*/*DD* *hh*:*mm*:*ss* • *MM*: month (`01-12`) • *DD*: day (`01-31`) • *hh*: hour (`00-23`) • *mm*: minute (`00-59`) • *ss*: second (`00-59`) A 1-byte space is inserted between *DD* and *hh*.	Y
8	ax3630sSystemMsgLevel {ax3630sSystemMsg 4}	OCTET STRING	R/O	Level of the latest system message log expressed as a 1-byte number. • Fatal fault (`9`) • Severe fault (`8`) • Software failure (`7`) • Network failure (`4`) • Warning (`3`) • Reserved (`2`) • Reserved (`1`)	Y
9	ax3630sSystemMsgEventPoint {ax3630sSystemMsg 5}	DisplayString	R/O	String of no more than 8 bytes indicating the fault point reported in the system message. For details about event points, see *1.2.5(3) Event location* in the manual *Message and Log Reference For Version 11.10*.	Y
10	ax3630sSystemMsgEventInterfaceID {ax3630sSystemMsg 6}	DisplayString	R/O	String indicating the interface ID in the system message (maximum of 40 characters). For details about IDs, see *1.2.5(4) Event interface ID* in the manual *Message and Log Reference For Version 11.10*.	Y
11	ax3630sSystemMsgEventCode {ax3630sSystemMsg 7}	OCTET STRING	R/O	4-byte message ID code of the system message (`0x00000000-0xFFFFFFFF`). For details about codes, see *1.2.5(5) Message identifier and additional information* in the manual *Message and Log Reference For Version 11.10*.	Y
12	ax3630sSystemMsgAdditionalCode {ax3630sSystemMsg 8}	OCTET STRING	R/O	6-byte ID code of additional information for the system message (`0x000000000000-0xFFFFFFFFFFFF`). The content of the codes is not made public because it is for maintenance purposes.	Y
13	ax3630sSnmpSendReceiveSize {ax3630sSnmpAgent 1}	INTEGER	R/O	Size of the SNMP packets an agent can send and receive (in bytes)	Y
14	ax3630sSnmpReceiveDelay {ax3630sSnmpAgent 2}	INTEGER	R/O	Recommended delaying interval for receiving SNMP packets (in milliseconds)	Y
15	ax3630sSnmpContinuousSend {ax3630sSnmpAgent 3}	INTEGER	R/O	Recommended number of sequential sends of SNMP packets	Y
16	ax3630sSnmpObjectMaxNumber {ax3630sSnmpAgent 4}	INTEGER	R/O	Recommended number of objects in an SNMP packet	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
17	ax3630sLicenseNumber {ax3630sLicense 1}	INTEGER	R/O	Number of configured license serial numbers	Y
18	ax3630sLicenseTable {ax3630sLicense 2}	NOT-ACCESSIBLE	NA	Table of license information	Y
19	ax3630sLicenseEntry {ax3630sLicenseTable 1}	NOT-ACCESSIBLE	NA	License information entry INDEX { ax3630sLicenseIndex }	Y
20	ax3630sLicenseIndex {ax3630sLicenseEntry 1}	INTEGER	NA	Unique index number assigned to each serial number. Number in the range 1 through ax3630sBcuLicenseNumber.	Y
21	ax3630sLicenseSerialNumber {ax3630sLicenseEntry 2}	DisplayString	R/O	Serial number	Y
22	ax3630sLicenseOptionNumber {ax3630sLicenseEntry 3}	INTEGER	R/O	Number of option licenses related to a serial number	Y
23	ax3630sLicenseOptionTable {ax3630sLicense 3}	NOT-ACCESSIBLE	NA	Table of option licenses related to a serial number	Y
24	ax3630sLicenseOptionEntry {ax3630sLicenseOptionTable 1}	NOT-ACCESSIBLE	NA	Entry of option licenses related to a serial number. INDEX { ax3630sLicenseOptionIndex, ax3630sLicenseOptionNumberIndex }	Y
25	ax3630sLicenseOptionIndex {ax3630sLicenseOptionEntry 1}	INTEGER	NA	Unique index number assigned to each serial number. Equal to ax3630sLicenseIndex.	Y
26	ax3630sLicenseOptionNumberIndex {ax3630sLicenseOptionEntry 2}	INTEGER	NA	Index number of the option license related to a serial number. Number in the range 1 through ax3630sLicenseOptionNumber.	Y
27	ax3630sLicenseOptionSoftwareName {ax3630sLicenseOptionEntry 3}	DisplayString	R/O	Software model name of the option license related to a serial number	Y
28	ax3630sLicenseOptionSoftwareAbbreviation {ax3630sLicenseOptionEntry 4}	DisplayString	R/O	Abbreviation of the software of the option license related to a serial number	Y

#1: The content shown is the same as for the AX3630S-24T and AX3630S-24TD switches.

#2: The content shown is the same as for the AX3630S-24T2X and AX3630S-24T2XD switches.

3.22 ax3630sDevice group (System device chassis information MIB) [AX3630S]

3.22.1 ax3630sChassis group implementation specifications (Chassis information)

(1) ID

```
ax3630sDevice     OBJECT IDENTIFIER ::= {ax3630sMib 2}
ax3630sChassis    OBJECT IDENTIFIER ::= {ax3630sDevice 1}

ax3630sChassisMaxNumber OBJECT IDENTIFIER ::= {ax3630sChassis 1}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.1.1

ax3630sChassisTable     OBJECT IDENTIFIER ::= {ax3630sChassis 2}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.1.2
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sChassis group (chassis information).

Table 3-76: ax3630sChassis group implementation specifications (chassis information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sChassisMaxNumber {ax3630sChassis 1}	INTEGER	R/O	Maximum number of cluster chassis connected to the Switch. • For AX3630S series switches: Fixed value of 1	Y
2	ax3630sChassisTable {ax3630sChassis 2}	NOT-ACCESSIBLE	NA	Table of the chassis information	Y
3	ax3630sChassisEntry {ax3630sChassisTable 1}	NOT-ACCESSIBLE	NA	Entry of information on a specific chassis. INDEX { ax3630sChassisIndex }	Y
4	ax3630sChassisIndex {ax3630sChassisEntry 1}	NOT-ACCESSIBLE	NA	Number to identify ax3630sChassisEntry. Fixed value of 1.	Y
5	ax3630sChassisType {ax3630sChassisEntry 2}	INTEGER	R/O	Chassis type: • AX3630S-24T (500)#1 • AX3630S-24T2X (501)#2 • AX3630S-24P (502) • AX3630S-48TW (506) • AX3630S-48T2XW (507) • AX3630S-24S2XW (508)	Y
6	ax3630sChassisStatus {ax3630sChassisEntry 3}	INTEGER	R/O	Current status of the chassis. Fixed value of in operation (2).	Y
7	ax3630sStsLedStatus {ax3630sChassisEntry 4}	INTEGER	R/O	Status of the STS LED on the Switch: • Blinking green (1) • Stable green (2) • Blinking red (3) • Stable red (4) • Not lit (6)	Y
8	ax3630sCpuName {ax3630sChassisEntry 5}	DisplayString	R/O	CPU Name (maximum of 16 characters). Example: AMD K5	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
9	ax3630sCpuClock {ax3630sChassisEntry 6}	INTEGER	R/O	CPU clock rate (in MHz). Example: 200	Y
10	ax3630sMemoryTotalSize {ax3630sChassisEntry 7}	INTEGER	R/O	Amount of installed memory (in KB)	Y
11	ax3630sMemoryUsedSize {ax3630sChassisEntry 8}	INTEGER	R/O	Amount of used memory (in KB)	Y
12	ax3630sMemoryFreeSize {ax3630sChassisEntry 9}	INTEGER	R/O	Amount of unused memory (in KB)	Y
13	ax3630sRomVersion {ax3630sChassisEntry 10}	DisplayString	R/O	Version of the installed ROM (string). Example: `ROM 01-01 Rev0 BIOS Rev.:R1.02.E4`	Y
14	ax3630sCpuLoad1m {ax3630sChassisEntry 11}	INTEGER	R/O	Percentage of CPU usage over a one-minute period (`0-100`)	Y
15	ax3630sFlashTotalSize {ax3630sChassisEntry 12}	INTEGER	R/O	Sum of the amount of used and unused memory in the file system of the embedded flash memory (in KB)	Y
16	ax3630sFlashUsedSize {ax3630sChassisEntry 13}	INTEGER	R/O	Amount of used memory in the file system of the embedded flash memory (in KB)	Y
17	ax3630sFlashFreeSize {ax3630sChassisEntry 14}	INTEGER	R/O	Amount of unused memory in the file system of the embedded flash memory (in KB)	Y
18	ax3630sSdCardStatus {ax3630sChassisEntry 15}	INTEGER	R/O	Status of the connection with an MC connection: • Connected (`2`) • Not connected (`32`)	Y
19	ax3630sSdCardTotalSize {ax3630sChassisEntry 16}	INTEGER	R/O	Total capacity of the MC (in KB). Returns `-1` if an MC is not connected.	Y
20	ax3630sSdCardUsedSize {ax3630sChassisEntry 17}	INTEGER	R/O	Used capacity of the MC (in KB). Returns `-1` if an MC is not connected.	Y
21	ax3630sSdCardFreeSize {ax3630sChassisEntry 18}	INTEGER	R/O	Amount of unused MC capacity (in KB). Returns `-1` if an MC is not connected.	Y
22	ax3630sPhysLineNumber {ax3630sChassisEntry 19}	INTEGER	R/O	Number of ports available for connection to this chassis	Y
23	ax3630sTemperatureStatusNumber {ax3630sChassisEntry 20}	INTEGER	R/O	Maximum number of temperature monitoring points in this chassis	Y
24	ax3630sPowerUnitNumber {ax3630sChassisEntry 21}	INTEGER	R/O	Number of power supplies available in this chassis • For AX3630S series switches: Maximum of `2`	Y
25	ax3630sRedundantPsNumber {ax3630sChassisEntry 22}	INTEGER	R/O	Number of external redundant power units that can be installed in this chassis. • For AX3630S series switches: 0 to 1	Y
26	ax3630sFanNumber {ax3630sChassisEntry 23}	INTEGER	R/O	Number of fans in this chassis. • For AX3630S series switches: 4	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
27	ax3630sTotalAccumRunTime{ax3630sChassisEntry 24}	INTEGER	R/O	Total run time of the Switch since startup. Returns a response of `-1` when the operating time is being read or when the reading process has failed.	Y
28	ax3630sCriticalAccumRunTime {ax3630sChassisEntry 25}	INTEGER	R/O	Total time the Switch ran in an environment that is equal to or greater than 40 degrees Celsius. Returns a response of `-1` when the operating time is being read or when the reading process has failed.	Y
29	ax3630sModuleSlotNumber {ax3630sChassisEntry 26}	INTEGER	R/O	Number of modules that can be installed in this chassis. • For AX3630S series switches: 0 to 2	Y

#1: The content shown is the same as for the AX3630S-24T and AX3630S-24TD switches.

#2: The content shown is the same as for the AX3630S-24T2X and AX3630S-24T2XD switches.

3.22.2 ax3630sChassis group implementation specifications (Temperature information)

(1) ID

```
ax3630sChassis        OBJECT IDENTIFIER ::= {ax3630sDevice 1}

ax3630sTemperatureStatusTable OBJECT IDENTIFIER ::= {ax3630sChassis 3}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.1.3
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sChassis group (temperature information).

Table 3-77: ax3630sChassis group implementation specifications (temperature information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sTemperatureStatusTable {ax3630sChassis 3}	NOT-ACCESSIBLE	NA	Table of temperature status	Y
2	ax3630sTemperatureStatusEntry {ax3630sTemperatureStatusTable 1}	NOT-ACCESSIBLE	NA	Entry of temperature status. INDEX { ax3630sChassisIndex, ax3630sTemperatureStatusIndex }	Y
3	ax3630sTemperatureStatusIndex {ax3630sTemperatureStatusEntry 1}	NOT-ACCESSIBLE	NA	Unique index assigned to each temperature monitoring point	Y
4	ax3630sTemperatureStatusDescr {ax3630sTemperatureStatusEntry 2}	DisplayString	R/O	Description of this temperature monitoring point. • `Main board Temperature`: The temperature of the main board	Y
5	ax3630sTemperatureStatusValue {ax3630sTemperatureStatusEntry 3}	Integer32	R/O	Current temperature of this monitoring point	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
6	ax3630sTemperatureThreshold {ax3630sTemperatureStatusEntry 4}	Integer32	R/O	Temperature on this monitoring point where the Switch is stopped	Y
7	ax3630sTemperatureState {ax3630sTemperatureStatusEntry 5}	INTEGER	R/O	Current temperature state of this monitoring point: • Normal (1) • Caution (2) • Abnormal (4)	Y

3.22.3 ax3630sChassis group implementation specifications (Power supply information)

(1) ID

```
ax3630sChassis        OBJECT IDENTIFIER ::= {ax3630sDevice 1}

ax3630sPowerUnitTable OBJECT IDENTIFIER ::= {ax3630sChassis 4}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.1.4
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sChassis group (power supply information).

Table 3-78: ax3630sChassis group implementation specifications (power supply information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sPowerUnitTable {ax3630sChassis 4}	NOT-ACCESSIBLE	NA	Table of power supply information	Y
2	ax3630sPowerUnitEntry {ax3630sPowerUnitTable 1}	NOT-ACCESSIBLE	NA	Entry of power supply information. INDEX { ax3630sChassisIndex, ax3630sPowerUnitIndex }	Y
3	ax3630sPowerUnitIndex {ax3630sPowerUnitEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the position of the power supply. Number in the range 1 through ax3630sPowerUnitNumber. • For AX3630S series switches: Maximum of 2	Y
4	ax3630sPowerConnectStatus {ax3630sPowerUnitEntry 2}	INTEGER	R/O	Installation status of the power supplies: • Installed (2) • Not installed (32)	Y
5	ax3630sPowerSupplyStatus {ax3630sPowerUnitEntry 3}	INTEGER	R/O	Power status: • In operation (2) • Fault (4) Returns a response of -1 when the power supply unit is not installed.	Y

3.22.4 ax3630sChassis group implementation specifications (Fan information)

(1) ID

```
ax3630sChassis    OBJECT IDENTIFIER ::= {ax3630sDevice 1}

ax3630sFanTable   OBJECT IDENTIFIER ::= {ax3630sChassis 5}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.1.5
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sChassis group (fan information).

Table 3-79: ax3630sChassis group implementation specifications (fan information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sFanTable {ax3630sChassis 5}	NOT-ACCESSIBLE	NA	Table of fan information	Y
2	ax3630sFanEntry {ax3630sFanTable 1}	NOT-ACCESSIBLE	NA	Entry of fan information. INDEX { ax3630sChassisIndex, ax3630sFanIndex }	Y
3	ax3630sFanIndex {ax3630sFanEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the fan position. Number in the range 1 through ax3630sFanNumber. • For AX3630S series switches: From 1 through 4 The relationship between each fan number and the position where it is installed is as follows: 1: Power supply unit on the right in the back or right side of the fan unit 2: Power supply unit on the right in the back or left side of the fan unit 3: Power supply unit on the left in the back or right side of the fan unit 4: Power supply unit on the left in the back or left side of the fan unit	Y
4	ax3630sFanStatus {ax3630sFanEntry 2}	INTEGER	R/O	Fan status: • In operation (2) • High-speed operation (3) • Fault (4)	Y

3.22.5 ax3630sChassis group implementation specifications (Spare power supply unit information)

(1) ID

```
ax3630sChassis          OBJECT IDENTIFIER ::= {ax3630sDevice 1}

ax3630sRedundantPsTable OBJECT IDENTIFIER ::= {ax3630sChassis 6}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.1.6
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sChassis group (spare power supply unit information).

Table 3-80: ax3630sChassis group implementation specifications (spare power supply unit information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sRedundantPsTable {ax3630sChassis 6}	NOT-ACCESSIBLE	NA	Table of the spare power supply unit information	Y
2	ax3630sRedundantPsEntry {ax3630sRedundantPsTable 1}	NOT-ACCESSIBLE	NA	Entry of the spare power supply unit information. INDEX { ax3630sChassisIndex, ax3630sRedundantPsIndex }	Y
3	ax3630sRedundantPsIndex {ax3630sRedundantPsEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the position of the spare power supply unit	Y
4	ax3630sRedundantPsConnectStatus {ax3630sRedundantPsEntry 2}	INTEGER	R/O	Installation status of the spare power supply unit: • Installed (2) • Not installed (32)	Y
5	ax3630sRedundantPsStatus {ax3630sRedundantPsEntry 3}	INTEGER	R/O	Status of the spare power supply unit: • In operation (2) • Fault (4) Returns a response of -1 when a spare power supply unit is not installed.	Y

3.22.6 ax3630sChassis group implementation specifications (Module information)

(1) ID

```
ax3630sChassis          OBJECT IDENTIFIER ::= {ax3630sDevice 1}

ax3630sModuleSlotTable OBJECT IDENTIFIER ::= {ax3630sChassis 7}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.1.7
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sChassis group (module information).

Table 3-81: ax3630sChassis group implementation specifications (module information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sModuleSlotTable {ax3630sChassis 7}	NOT-ACCESSIBLE	NA	Table of the module information. The information on the power unit or fan installed in this module slot is obtained from ax3630sPowerUnitTable or ax3630sFanTable. The relationship between each index of the table and the implemented position is as follows: • For ax3630sPowerUnitTable (ax3630sPowerUnitIndex): 1: Power supply unit on the right in the back 2: Power supply unit on the left in the back • For ax3630sFanTable (ax3630sFanIndex): 1: Right side of the fan unit on the right in the back 2: Left side of the fan unit on the right in the back 3: Right side of the fan unit on the left in the back 4: Left side of the fan unit on the left in the back	Y
2	ax3630sModuleSlotEntry {ax3630sModuleSlotTable 1}	NOT-ACCESSIBLE	NA	Entry of the module information. INDEX { ax3630sChassisIndex, ax3630sModuleSlotIndex }	Y
3	ax3630sModuleSlotIndex {ax3630sModuleSlotEntry 1}	NOT-ACCESSIBLE	NA	Index indicating the position. Number in the range 1 through ax3630sModuleSlotNumber.	Y
4	ax3630sModuleSlotStatus {ax3630sModuleSlotEntry 2}	INTEGER	R/O	Installation status of the module. • Installed (2) • Fault (4) • Not installed (32)	Y
5	ax3630sModuleSlotType {ax3630sModuleSlotEntry 3}	INTEGER	R/O	Module type. • AC power supply unit (1) • DC power supply unit (2) • Fan unit (3) Returns a response of -1 when the module is not installed.	Y

3.22.7 ax3630sPhysLine group implementation specifications (Interface information)

(1) ID

```
ax3630sPhysLine      OBJECT IDENTIFIER ::= {ax3630sDevice 2}

ax3630sPhysLineTable OBJECT IDENTIFIER ::= {ax3630sPhysLine 1}
Object ID value  1.3.6.1.4.1.21839.2.2.7.2.2.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sPhysLine group (interface information).

Table 3-82: ax3630sPhysLinev group implementation specifications (interface information)

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sPhysLineTable {ax3630sPhysLine 1}	NOT-ACCESSIBLE	NA	Table of interface information	Y
2	ax3630sPhysLineEntry {ax3630sPhysLineTable 1}	NOT-ACCESSIBLE	NA	Entry of interface information. INDEX { ax3630sChassisIndex, ax3630sPhysLineIndex }	Y
3	ax3630sPhysLineIndex {ax3630sPhysLineEntry 1}	NOT-ACCESSIBLE	NA	Port number information. Number in the range `1` through ax3630sPhysLineNumber.	Y
4	ax3630sPhysLineConnectorType {ax3630sPhysLineEntry 2}	INTEGER	R/O	Type of interface on the interchangeable transceiver: • other (`1`) • type1000BASE-LX (`301`) • type1000BASE-SX (`302`) • type1000BASE-LH (`303`) • type1000BASE-BX10-D (`304`) • type1000BASE-BX10-U (`305`) • type1000BASE-BX40-D (`306`) • type1000BASE-BX40-U (`307`) • type1000BASE-SX2 (`308`) • type1000BASE-UTP (`309`)# • type1000BASE-LHB (`310`) • type10GBASE-SR (`401`) • type10GBASE-LR (`402`) • type10GBASE-ER (`403`) • type10GBASE-ZR (`404`) Returns other (`1`) if either of the following conditions is met: • Interface status is `Other`, `Initializing`, or `Fault` • The type and implementation status of the interchangeable transceiver are any type other than implemented	Y
5	ax3630sPhysLineOperStatus {ax3630sPhysLineEntry 3}	INTEGER	R/O	Interface status: • other (`1`) • In operation (`2`) • init (`3`) • Fault (`4`) • stopped with configuration (`6`) • maintenance (`7`) • In operation (now in line fault) (`8`) • line test (`9`) • unused (no configuration) (`10`)	Y
6	ax3630sPhysLineIfIndexNumber {ax3630sPhysLineEntry 4}	INTEGER	R/O	Number of ifIndex objects in the interface	Y

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
7	ax3630sPhysLineTransceiverStatus {ax3630sPhysLineEntry 5}	INTEGER	R/O	Type and installation status of the interchangeable transceiver. Returns `other` when the interface is in Initializing or Fault status. • `Other` or non-interchangeable transceiver (`1`) • SFP transceiver installed (`20`) • SFP transceiver not installed (`21`) • Unsupported SFP transceiver installed (`22`) • SFP installation status unknown (`23`) • XFP installed (`30`) • XFP not installed (`31`) • Unsupported XFP transceiver installed (`32`) • XFP installation status unknown (`33`)	Y

#: SFP for 10BASE-T/100BASE-TX/1000BASE-T

3.23 ax3630sManagementMIB group (Change device state and information) [AX3630S]

3.23.1 ax3630sFdbClearMIB group (MIB for clearing MAC address tables)

(1) ID

```
ax3630sMib         OBJECT IDENTIFIER ::= {axsEx 7}
Object ID value  1.3.6.1.4.1.21839.2.2.7

ax3630sManagementMIB    OBJECT IDENTIFIER ::= {ax3630sMib 3}
Object ID value  1.3.6.1.4.1.21839.2.2.7.3

ax3630sOperationCommand OBJECT IDENTIFIER ::= {ax3630sManagementMIB 1}
Object ID value  1.3.6.1.4.1.21839.2.2.7.3.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the ax3630sFdbClearMIB group.

Table 3-83: ax3630sFdbClearMIB group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	ax3630sFdbClearMIB {ax3630sOperationCommand 1}	NOT-ACCESSIBLE	NA	MIB group for clearing of MAC address table information	Y
2	ax3630sFdbClearSet {ax3630sFdbClearMIB 1}	INTEGER	R/W	Status of the clearing of the MAC address table: • initial value (0) • clear in progress (1) • clear failed (2) • clear succeeded (3) Assigns 1 when performing Set.	Y
3	ax3630sFdbClearReqTime {ax3630sFdbClearMIB 2}	TimeTicks	R/O	The most recent MAC address table clear request was accepted (sysUpTime)	Y
4	ax3630sFdbClearSuccessTime {ax3630sFdbClearMIB 3}	TimeTicks	R/O	The most recent MAC address table clear was performed (sysUpTime)	Y

3.24 icmp group (HP private MIB)

(1) ID

```
hp OBJECT IDENTIFIER ::= {enterprises 11}
nm OBJECT IDENTIFIER ::= {hp 2}

icmp OBJECT IDENTIFIER ::= {nm 7}
Object ID value  1.3.6.1.4.1.11.2.7
```

(2) Implementation specifications

The following table shows the implementation specifications for the icmp group.

Table 3-84: icmp group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	icmpEchoReq {icmp 1}	INTEGER	R/O	Period (in milliseconds) required to receive ICMP Echo Reply. INDEX {PacketSize, TimeOut, IPAddress} • PacketSize: 32 to 2048 • TimeOut: `1-60` (unit: seconds) • IP Address: IP address of the target If ICMP Echo Reply was not properly received, one of the following values is returned: • `-1`: Internal error • `-2`: Time out • `-3`: Invalid ICMP Echo Reply value • `-4`: Error in sent packet size • `-5`: Timeout configuration invalid	Y

3.25 sFlow group (InMon private MIB)

(1) ID

```
InMon           OBJECT IDENTIFIER ::= {enterprises 4300}
sFlowMIB        OBJECT IDENTIFIER ::= {InMon 1}

sFlowAgent      OBJECT IDENTIFIER ::= {sFlowMIB 1}
Object ID value 1.3.6.1.4.1.4300.1.1
```

(2) Implementation specifications

The following table shows the implementation specifications for the sFlow group.

Table 3-85: sFlow group implementation specifications

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
1	sFlowVersion {sFlowAgent 1}	SnmpAdminString	R/O	[Standard] Version of sFlow. A string in the following format: *<MIB Version>;<Organization>;<Software Revision>* [Implementation] Same as the standard. Fixed value of `1.2;;`.	Y
2	sFlowAgentAddressType {sFlowAgent 2}	InetAddressType	R/O	[Standard] Type of the IP address of the agent that gathers statistics: • ipv4 (`1`) • ipv6 (`2`) [Implementation] Same as the standard.	Y#1
3	sFlowAgentAddress {sFlowAgent 3}	InetAddress	R/O	[Standard] IP address (IPv4 or IPv6) of the agent that gathers statistics. [Implementation] Same as the standard.	Y#1#2
4	sFlowTable {sFlowAgent 4}	NOT-ACCESSIBLE	NA	[Standard] Table containing the information on sFlow packets. [Implementation] Same as the standard.	Y
5	sFlowEntry {sFlowTable 1}	NOT-ACCESSIBLE	NA	[Standard] List of information on sFlow packets. INDEX { sFlowDataSource } [Implementation] Same as the standard.	Y
6	sFlowDataSource {sFlowEntry 1}	OBJECT IDENTIFIER	R/O	[Standard] Source of sFlow packet information: • Upper 1 byte: type of source: 0 = ifIndex 1 = smonVlanDataSource • Lower 3 bytes: Index value [Implementation] Same as the standard.	Y
7	sFlowOwner {sFlowEntry 2}	OwnerString	R/NW	[Standard] Owner using sFlow sampler. [Implementation] Same as the standard. Fixed value of blank.	Y
8	sFlowTimeout {sFlowEntry 3}	Integer32	R/NW	[Standard] Time until the sFlow sampler stops from the time it is released (in seconds). [Implementation] Same as the standard. Fixed value of `0`.	Y
9	sFlowPacketSamplingRate {sFlowEntry 4}	Integer32	R/NW	[Standard] Interval of sFlow packet sampling. [Implementation] Same as the standard.	Y#1

#	Object identifier	SYNTAX	Access	Implementation specifications	Support?
10	sFlowCounterSamplingInterval {sFlowEntry 5}	Integer32	R/NW	[Standard] Sending interval of counter samples to the collector. [Implementation] Same as the standard.	Y#1
11	sFlowMaximumHeaderSize {sFlowEntry 6}	Integer32	R/NW	[Standard] Maximum length of the copied object from the head of the sample packet. [Implementation] Same as the standard.	Y#1
12	sFlowMaximumDatagramSize {sFlowEntry 7}	Integer32	R/NW	[Standard] Maximum number of bytes of data that can be sent as sFlow packets. [Implementation] Same as the standard.	Y#1
13	sFlowCollectorAddressType {sFlowEntry 8}	InetAddressType	R/NW	[Standard] Type of the IP address of the collector. • ipv4 (1) • ipv6 (2) [Implementation] Same as the standard.	Y#1
14	sFlowCollectorAddress {sFlowEntry 9}	InetAddress	R/NW	[Standard] IP address of the collector. [Implementation] Same as the standard.	Y#1#3
15	sFlowCollectorPort {sFlowEntry 10}	Integer32	R/NW	[Standard] Destination port of the sFlow packets. [Implementation] Same as the standard.	Y#1
16	sFlowDatagramVersion {sFlowEntry 11}	Integer32	R/NW	[Standard] Version of the sFlow packets. 2 and 4 are supported. [Implementation] Same as the standard.	Y#1

#1: The entry takes the value defined by an sFlow statistics configuration command

#2: Returns the IPv4 address if both an IPv4 address and an IPv6 address are assigned.

#3: If multiple collectors are set up, the entry takes the value of the collector with the lowest IP address.

Chapter

4. Supported MIB Traps

This chapter describes the supported MIB traps.

4.1 Types and issuance timings of supported traps and informs
4.2 Supported traps and informs of PDU parameters [AX3640S]
4.3 Supported traps and informs of PDU parameters [AX3630S]

4.1 Types and issuance timings of supported traps and informs

The table below lists the types and issuance timings of supported traps and informs.

Traps other than coldStart and informs are not sent from when the switch starts until a coldStart is issued. Even if the timing of the trap or inform occurs between the start of the switch and the issuance of a coldStart, the trap or inform is not sent at the same time the coldStart is sent. For informs, if the timing of certain informs occurs between the issuance of a coldStart at the start of the switch and receipt of the response, they are retained. The retained informs are issued when the response of a coldStart is received, fails to be sent, or is discarded.

Table 4-1: Types and issuance timings of supported traps and informs

#	Type	Meaning	Issued when	Support?
1	coldStart	An object in a system re-initialization might have been changed.	This trap is issued when any of the following occurs: 1. When a device starts 2. When the IP address of a VLAN is added, deleted, or changed due to a change in the configuration 3. When the running configuration is changed by using the `copy` command 4. When the time is changed by using the `set clock` command In items 2, 3, and 4, this trap is issued only when the `unlimited_coldstart_trap` parameter is set using the `snmp-server traps` configuration command.	Y
2	warmStart	The object in a system re-initialization is not changed.	This trap is issued when the SNMP or access list configuration is changed.	Y
3	linkDown	Line failure detection	This trap is issued when the operating state of an interface is changed from ACTIVE (communication enabled) to DISABLE (communication disabled).	Y
4	linkUp	Line failure recovery	This trap is issued when the operating state of an interface is changed from DISABLE (communication disabled) to ACTIVE (communication enabled).	Y
5	authenticationFailure	Confirmation error	This trap is issued when an SNMP packet is received from an illegal community (when an authentication error occurs).	Y
6	egpNeighborLoss	The link with a neighbor router was closed using EGP protocol.	--	N
7	bgpEstablished **[OS-L3A]**	A BGP link is established.	This trap is issued when the FSM (finite state machine) is put into the Establish state by using BGP.	Y
8	bgpBackwardTransition **[OS-L3A]**	A BGP link is closed.	This trap is issued when the FSM is put into the Closed state by using BGP.	Y
9	risingAlarm	A value exceeded an upper threshold.	This trap is issued when a value exceeds the upper threshold of an RMON alarm.	Y
10	fallingAlarm	A value fell below a lower threshold.	This trap is issued when a value falls below the lower threshold of an RMON alarm.	Y
11	vrrpTrapNewMaster	Master notification of the virtual router	This trap is issued when a virtual router is changed to the master state.	Y

#	Type	Meaning	Issued when	Support?
12	vrrpTrapAuthFailure	ADVERTISEMENT packet authentication error	• When the authentication type of the received ADVERTISEMENT packet differs from the expected type • When the received ADVERTISEMENT packet fails in authentication[#1]	Y
13	vrrpTrapProtoError	VRRP protocol error	This trap is issued when any of the following errors is detected in the received packet:[#1] • Hop limit error • Version error • Checksum error[#2]	Y
14	ospfVirtNbrStateChange **[OS-L3A]**	Transition to the virtual link neighboring state	This trap is issued when one of the following adjacency state changes occurs in a virtual link. However, it is not issued in the neighboring Down state that follows the transition to the Down state of a virtual link. 1. When the state is put into Full (the neighboring relation is established) 2. When the state is reversed from ExStart or higher to Down (the neighboring relation is closed because a Hello packet was not received) 3. When the state is reversed from Full to ExStart (the neighboring relation is closed due to an inconsistent sequence) 4. When the state is reversed from Full to Init (the neighboring relation is closed because the Switch was not recognized in the Hello packet received from a neighboring router) Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y
15	ospfNbrStateChange **[OS-L3A]**	Transition to an OSPF neighboring state	This trap is issued when one of the adjacency state changes below occurs in a non-virtual link interface. However, it is not issued in the neighboring Down state that follows the transition to the Down state of an OSPF interface. 1. When the state is put into Full (the neighboring relation is established) 2. When the state is reversed from ExStart or higher to Down (the neighboring relation is closed because a Hello packet was not received) 3. When the state is reversed from Full to ExStart (the neighboring relation is closed due to an inconsistent sequence) 4. When the state is reversed from Full to 2Way (the neighboring relation is closed due to a change in the specified router) 5. When the state is reversed from Full to Init (the neighboring relation is closed because the Switch was not recognized in the Hello packet received from a neighboring router) Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y

#	Type	Meaning	Issued when	Support?
16	ospfVirtIfStateChange **[OS-L3A]**	Transition of the virtual link interface state	When using a virtual link, this trap is issued on the transition to the interface state in the items below. 1. When a virtual link is established (OSPF operation started in a virtual link) 2. When a virtual link is not established (OSPF operation stopped in a virtual link due to a failure in a transit area or the deletion of the configuration of a virtual link) Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y
17	ospfIfStateChange **[OS-L3A]**	Transition of the OSPF interface state	When using the OSPF domain, this trap is issued on the transition to the interface state in the items below. 1. When a point-to-point type OSPF interface is established 2. When the state is put into DR, Backup, and DROther in a broadcast-type interface (the specified router was determined or a timeout occurred in a wait timer) 3. When an OSPF interface (not including a virtual link) is not established (an OSPF interface is physically not established or the configuration of an OSPF interface has been deleted) Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y
18	ospfVirtIfConfigError **[OS-L3A]**	Configuration error of the packet received in a virtual link	When using a virtual link, this trap is issued on the reception of error packets in the items below. 1. The version number of the OSPF header is not version 2. 2. The transmission source is not a virtual neighbor specified in the configuration. 3. For a Hello packet, parameters (`HelloInterval` and `RouterDeadInterval`) are inconsistent. Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y
19	ospfIfConfigError **[OS-L3A]**	Configuration error of the packet received in an OSPF interface	When using the OSPF domain, this trap is issued on the reception of error packets in the items below. 1. The version number of the OSPF header is not version 2. 2. The area ID of the OSPF header does not coincide with the area ID defined in an interface that received an OSPF packet. 3. For a Hello packet, parameters (`HelloInterval`, `RouterDeadInterval`, and `netmask`) are inconsistent. Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y
20	ospfVirtIfAuthFailure **[OS-L3A]**	Authentication error for the packet received in a virtual link	When using a virtual link, this trap is issued on the detection of an inconsistent authentication system or authentication error of the received OSPF packet. Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y
21	ospfIfAuthFailure **[OS-L3A]**	Authentication error for the packet received in an OSPF interface	When using interfaces other than a virtual link, this trap is issued on the detection of an inconsistent authentication system or authentication error for the received OSPF packet. Furthermore, if the OSPF domain is being partitioned, all domains other than the domain with the smallest domain number will issue a private trap.	Y

#	Type	Meaning	Issued when	Support?
22	pethPsePortOnOffNotification **[AX3630S]**	PD feed state	This trap is issued when the PD feed state changes.	Y
23	pethMainPowerUsageOnNotification **[AX3630S]**	Power threshold-over notification	This trap is issued when the total power consumption of a device exceeds a threshold value.	Y
24	pethMainPowerUsageOffNotification **[AX3630S]**	Power threshold-under notification	This trap is issued when the total power consumption of a device falls below a threshold value.	Y
25	dot1agCfmFaultAlarm	Failure detection at other MEPs	This trap is issued when a failure is detected by a continuity check (CC).	Y
26	ax3640sSystemMsgTrap **[AX3640S]** ax3630sSystemMsgTrap **[AX3630S]**	System message output	This trap is issued when a system message is output.	Y
27	ax3640sTemperatureTrap **[AX3640S]** ax3630sTemperatureTrap **[AX3630S]**	Transition of temperature state	This trap is issued when the temperature that the Switch monitors is changed to a normal, warning, or abnormal state.	Y
28	ax3640sAxrpStateTransitionTrap **[AX3640S]** ax3630sAxrpStateTransitionTrap **[AX3630S]**	Transition of Ring Protocol ring state	This trap is issued when the ring state (failure monitoring and recovery monitoring) of the Ring Protocol changes.	Y
29	ax3640sAxrpMultiFaultDetectionStartTrap **[AX3640S]** ax3630sAxrpMultiFaultDetectionStartTrap **[AX3630S]**	Multi-failure monitoring start of the Ring Protocol	This trap is issued when the multi-failure monitoring of the Ring Protocol is started.	Y
30	ax3640sAxrpMultiFaultDetectionStateTransitionTrap **[AX3640S]** ax3630sAxrpMultiFaultDetectionStateTransitionTrap **[AX3630S]**	Transition of Ring Protocol multi-failure monitoring state	This trap is issued when the multi-failure monitoring state (multi-failure monitoring and recovery monitoring) of the Ring Protocol changes.	Y

#	Type	Meaning	Issued when	Support?
31	ax3640sGsrpStateTransitionTrap **[AX3640S]** ax3630sGsrpStateTransitionTrap **[AX3630S]**	Transition notification of GSRP VLAN group state	This trap is issued when the GSRP VLAN group states (master; backup; backup (master wait); backup (neighboring unknown); backup (fixed)) move between the changes, except when changing between backup and backup (master wait).	Y
32	ax3640sL2ldLinkDown **[AX3640S]** ax3630sL2ldLinkDown **[AX3630S]**	Transition of a line to the communication disable state by L2 loop detection	This trap is issued when the operating state of an interface is changed from ACTIVE (communication enabled) to DISABLE (communication disabled) by L2 loop detection.	Y
33	ax3640sL2ldLinkUp **[AX3640S]** ax3630sL2ldLinkUp **[AX3630S]**	Transition of a line to the communication enable state by the automatic recovery function of L2 loop detection	This trap is issued when the operating state of an interface is changed from DISABLE (communication disabled) to ACTIVE (communication enabled) by the automatic recovery function of L2 loop detection.	Y
34	ax3640sL2ldLoopDetection **[AX3640S]** ax3630sL2ldLoopDetection **[AX3630S]**	L2 loop detection	This trap is issued when an L2 loop is detected. This trap is issued every 60 seconds while the L2 loop continues.	Y
35	axsOspfVirtNbrStateChange **[OS-L3A]**	Transition to the virtual link neighboring state	During use of a virtual link, this trap is issued on transition to the neighboring state in the situations below. However, this trap is not issued in the neighboring Down state following the transition to the Down state of a virtual link. 1. When the state is set to Full (the neighboring relation is established) 2. When the state is reversed from ExStart or higher to Down 3. When the state is reversed from Full to ExStart (re-establishment of the neighboring relation is started) 4. When the state is reversed from Full to 2Way 5. When the state is reversed from Full to Init (the Switch was not recognized in the Hello packet received from a neighboring router)	Y
36	axsOspfNbrStateChange **[OS-L3A]**	Transition to an OSPF neighboring state	During use of interfaces other than a virtual link, this trap is issued on transition to the same neighboring state as for ospfVirtNbrStateChange. However, this trap is not issued in the neighboring Down state that follows the transition to the Down state of an OSPF interface.	Y
37	axsOspfVirtIfStateChange **[OS-L3A]**	Transition of the virtual link interface state	During use of a virtual link, this trap is issued on transition to the neighboring state in the following situations: 1. When a virtual link is established (OSPF operation started in a virtual link) 2. When a virtual link is not established (OSPF operation stopped in a virtual link due to a failure in a transit area or the deletion of the configuration of a virtual link)	Y

#	Type	Meaning	Issued when	Support?
38	axsOspfIfStateChange **[OS-L3A]**	Transition of the OSPF interface state	During use of the OSPF domain, this trap is issued on transition to the interface state in the following situations: 1. When a point-to-point type OSPF interface is established 2. When the state is set to DR, Backup, or DROther in a broadcast-type interface 3. When an OSPF interface (not including a virtual link) is not established (an OSPF interface is physically not established or the configuration of an OSPF interface has been deleted)	Y
39	axsOspfVirtIfConfigError **[OS-L3A]**	Configuration error of the packet received in a virtual link	During use of a virtual link, this trap is issued on reception of error packets in the following situations: 1. The version number of the OSPF header is not version 2. 2. The transmission source is not a virtual neighbor specified in the configuration. 3. For a Hello packet, parameters (`HelloInterval` and `RouterDeadInterval`) are inconsistent.	Y
40	axsOspfIfConfigError **[OS-L3A]**	Configuration error of the packet received in an OSPF interface	During use of the OSPF domain, this trap is issued on reception of error packets in the following situations: 1. The version number of the OSPF header is not version 2. 2. The area ID of the OSPF header does not coincide with the area ID defined in the interface that received an OSPF packet. 3. For a Hello packet, parameters (`HelloInterval`, `RouterDeadInterval`, and `netmask`) are inconsistent.	Y
41	axsOspfVirtIfAuthFailure **[OS-L3A]**	Authentication error for the packet received in a virtual link	During use of a virtual link, this trap is issued on detection of an inconsistent authentication system or authentication error of the received OSPF packet.	Y
42	axsOspfIfAuthFailure **[OS-L3A]**	Authentication error for the packet received in an OSPF interface	During use of interfaces other than a virtual link, this trap is issued on detection of an inconsistent authentication system or authentication error for the received OSPF packet.	Y
43	axsStaticGatewayStateChange	State change of the gateway being used by the dynamic monitoring functionality of a static route	This trap is issued when the state of the gateway being used by the dynamic monitoring functionality of an IPv4 static route changes from unreachable to reachable or from reachable to unreachable.	Y
44	axsStaticIpv6GatewayStateChange	State change of the gateway being used by the dynamic monitoring functionality of a static route	This trap is issued when the state of the gateway being used by the dynamic monitoring functionality of an IPv6 static route changes from unreachable to reachable or from reachable to unreachable.	Y
45	axsPolicyBaseRoutingRouteChange **[AX3640S][OS-L3A]**	Change to the route selected by policy-based routing	This trap is issued when the route selected by policy-based routing changes.	Y
46	axsTrackObjectStateUp **[AX3640S][OS-L3A]**	Transition of the track state to Up	This trap is issued when the track state for the tracking functionality of policy-based routing changes from Down to Up.	Y

#	Type	Meaning	Issued when	Support?
47	axsTrackObjectStateDown **[AX3640S][OS-L3A]**	Transition of the track state to Down	This trap is issued when the track state for the tracking functionality of policy-based routing changes from Up to Down.	Y
48	ax3640sAirFanStopTrap **[AX3640S]** ax3630sAirFanStopTrap **[AX3630S]**	A fan is out of order.	This trap is issued when a problem with a fan is detected.	Y
49	ax3640sPowerSupplyFailureTrap **[AX3640S]** ax3630sPowerSupplyFailureTrap **[AX3630S]**	Power is out of order.	When an abnormality occurs in any of the installed power supplies	Y
50	ax3640sLoginSuccessTrap **[AX3640S]** ax3630sLoginSuccessTrap **[AX3630S]**	A device user login succeeded.	This trap is issued when a user succeeds in logging in by using the console, telnet, or FTP.	Y
51	ax3640sLoginFailureTrap **[AX3640S]** ax3630sLoginFailureTrap **[AX3630S]**	A device user login failed.	• This trap is sent every time user authentication fails during a login operation by using the console, telnet, or FTP. • This trap is not sent during disconnection due to remote access restrictions, during a timeout when the `login:` or `Password:` prompt is displayed, or during forced disconnection. (This trap is also not sent when a user presses only the Enter key when the `login:` prompt is displayed.)	Y
52	ax3640sLogoutTrap **[AX3640S]** ax3630sLogoutTrap **[AX3630S]**	A device user logged out.	This trap is issued when a user succeeds in logging out using the console, telnet, or FTP.	Y
53	ax3640sMemoryUsageTrap **[AX3640S]** ax3630sMemoryUsageTrap **[AX3630S]**	Usable memory reduced.	This trap is issued when usable memory falls below the lower threshold.	Y
54	axsOadpNeighborCachelastChangeTrap	Information on an OADP neighboring node was updated.	This trap is issued when information on an OADP neighboring node is updated.	Y

#	Type	Meaning	Issued when	Support?
55	ax3640sFrameErrorReceiveTrap **[AX3640S]** ax3630sFrameErrorReceiveTrap **[AX3630S]**	A frame reception error occurred.	This trap is issued when a frame reception error occurs. The setting for detection of this error can be configured by using the `frame-error-notice` configuration command.	Y
56	ax3640sFrameErrorSendTrap **[AX3640S]** ax3630sFrameErrorSendTrap **[AX3630S]**	A frame transmission error occurred.	This trap is issued when a frame transmission error occurs. The setting for detection of this error can be configured by using the `frame-error-notice` configuration command.	Y
57	ax3640sBroadcastStormDetectTrap **[AX3640S]** ax3630sBroadcastStormDetectTrap **[AX3630S]**	Storm detection	This trap is issued when a broadcast storm is detected. (A port is not inactivated.) The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
58	ax3640sMulticastStormDetectTrap **[AX3640S]** ax3630sMulticastStormDetectTrap **[AX3630S]**	Storm detection	This trap is issued when a multicast storm is detected. (A port is not inactivated.) The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
59	ax3640sUnicastStormDetectTrap **[AX3640S]** ax3630sUnicastStormDetectTrap **[AX3630S]**	Storm detection	This trap is issued when a unicast storm is detected. (A port is not inactivated.) The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
60	ax3640sBroadcastStormPortInactivateTrap **[AX3640S]** ax3630sBroadcastStormPortInactivateTrap **[AX3630S]**	A port is inactivated by storm detection.	This trap is issued when a broadcast storm is detected and a port is inactivated. The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
61	ax3640sMulticastStormPortInactivateTrap **[AX3640S]** ax3630sMulticastStormPortInactivateTrap **[AX3630S]**	A port is inactivated by storm detection.	This trap is issued when a multicast storm is detected and a port is inactivated. The setting for detection of this error can be configured using the `storm-control` configuration command.	Y

#	Type	Meaning	Issued when	Support?
62	ax3640sUnicastStormPortInactivateTrap **[AX3640S]** ax3630sUnicastStormPortInactivateTrap **[AX3630S]**	A port is inactivated by storm detection.	This trap is issued when a unicast storm is detected and when a port is inactivated. The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
63	ax3640sBroadcastStormRecoverTrap **[AX3640S]** ax3630sBroadcastStormRecoverTrap **[AX3630S]**	Storm termination	This trap is issued when the termination of a broadcast storm is detected. The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
64	ax3640sMulticastStormRecoverTrap **[AX3640S]** ax3630sMulticastStormRecoverTrap **[AX3630S]**	Storm termination	This trap is issued when the termination of a multicast storm is detected. The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
65	ax3640sUnicastStormRecoverTrap **[AX3640S]** ax3630sUnicastStormRecoverTrap **[AX3630S]**	Storm termination	This trap is issued when the termination of a unicast storm is detected. The setting for detection of this error can be configured using the `storm-control` configuration command.	Y
66	ax3640sEfmoamUdldPortInactivateTrap **[AX3640S]** ax3630sEfmoamUdldPortInactivateTrap **[AX3630S]**	A port is inactivated by detection of a one-way link failure.	This trap is issued when a one-way link failure is detected and a port is inactivated. The setting for detection of this error can be configured using the `efmoam active` configuration command.	Y
67	ax3640sEfmoamLoopDetectPortInactivateTrap **[AX3640S]** ax3630sEfmoamLoopDetectPortInactivateTrap **[AX3630S]**	A port is inactivated by loop detection.	This trap is issued when the loop state is detected and a port is inactivated. The setting for detection of this error can be configured using the `efmoam active` configuration command.	Y

#	Type	Meaning	Issued when	Support?
68	ax3640sUlrChangeSecondary **[AX3640S]** ax3630sUlrChangeSecondary **[AX3630S]**	A secondary port is changed to an active port due to uplink redundancy.	This trap is issued when a secondary port becomes an active port due to uplink redundancy.	Y
69	ax3640sUlrChangePrimary **[AX3640S]** ax3630sUlrChangePrimary **[AX3630S]**	A primary port is changed to an active port due to uplink redundancy.	This trap is issued when a primary port becomes an active port due to uplink redundancy.	Y
70	ax3640sUlrActivePortDown **[AX3640S]** ax3630sUlrActivePortDown **[AX3630S]**	An active port was lost.	This trap is issued when an active port is lost.	Y

Legend:

Y: Indicates a trap or an inform that is supported in (responds to) the Switch.

N: Indicates a trap that or an inform is not supported in (does not respond to) the Switch.

--: Not applicable.

#1

This trap is issued every 60 seconds when the same error occurs continuously. However, it can be issued in less than 60 seconds when the virtual router information changes.

#2

This trap is issued for each switch.

4.2 Supported traps and informs of PDU parameters [AX3640S]

The parameters of the Trap-PDU and InformRequest-PDU (SNMPv2C/SNMPv3) for SNMPv1 are shown in *Table 4-2: List of parameters of the Trap-PDU (for SNMPv1)*, and those for SNMPv2C/SNMPv3 are shown in *Table 4-3: List of parameters of the Trap-PDU and InformRequest-PDU (for SNMPv2C/SNMPv3)*.

Table 4-2: List of parameters of the Trap-PDU (for SNMPv1)

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
1	coldStart	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	0	0	sysUpTime value	None
2	warmStart	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	1	0	sysUpTime value	None
3	linkDown	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	2	0	sysUpTime value	ifIndex However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
4	linkUp	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	3	0	sysUpTime value	ifIndex However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
5	authenticationFailure	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	4	0	sysUpTime value	None
6	bgpEstablished **[OS-L3A]**	Object ID of bgpTraps 1.3.6.1.2.1.15.7	Specific IP address#	6	1	sysUpTime value	bgpPeerLastError bgpPeerState

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
7	bgpBackwardTransition **[OS-L3A]**	Object ID of bgpTraps 1.3.6.1.2.1.15.7	Specific IP address#	6	2	sysUpTime value	bgpPeerLastError bgpPeerState
8	risingAlarm	Object ID of rmon 1.3.6.1.2.1.16	Specific IP address#	6	1	sysUpTime value	alarmIndex alarmVariable alarmSampleType alarmValue alarmRisingThreshold
9	fallingAlarm	Object ID of rmon 1.3.6.1.2.1.16	Specific IP address#	6	2	sysUpTime value	alarmIndex alarmVariable alarmSampleType alarmValue alarmFallingThreshold
10	vrrpTrapNewMaster	Object ID of vrrpMIB 1.3.6.1.2.1.68	Specific IP address#	6	1	sysUpTime value	vrrpOperationsMasterIpAddr vrrpTrapNewMasterReason
11	vrrpTrapAuthFailure	Object ID of vrrpMIB 1.3.6.1.2.1.68	Specific IP address#	6	2	sysUpTime value	vrrpTrapPacketSrc vrrpTrapAuthErrorType
12	vrrpTrapProtoError	Object ID of vrrpMIB 1.3.6.1.2.1.68	Specific IP address#	6	3	sysUpTime value	vrrpTrapProtoErrReason
13	ospfVirtIfStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	1	sysUpTime value	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfVirtIfState
14	ospfNbrStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	2	sysUpTime value	ospfRouterId ospfNbrIpAddr ospfNbrAddressLessIndex ospfNbrRtrId ospfNbrState
15	ospfVirtNbrStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	3	sysUpTime value	ospfRouterId ospfVirtNbrArea ospfVirtNbrRtrId ospfVirtNbrState
16	ospfIfConfigError **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	4	sysUpTime value	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
17	ospfVirtIfConfigError **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	5	sysUpTime value	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType
18	ospfIfAuthFailure **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	6	sysUpTime value	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType
19	ospfVirtIfAuthFailure **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	7	sysUpTime value	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType
20	ospfIfStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	16	sysUpTime value	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfIfState
21	dot1agCfmFaultAlarm	Object ID of ieee8021CfmMib 1.3.111.2.802.1.1.8	Specific IP address#	6	1	sysUpTime value	dot1agCfmMdIndex dot1agCfmMaIndex dot1agCfmMepIdentifier
22	ax3640sSystemMsgTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	1	sysUpTime value	ax3640sSystemMsgType ax3640sSystemMsgTimeStamp ax3640sSystemMsgLevel ax3640sSystemMsgEventPoint ax3640sSystemMsgEventInterfaceID ax3640sSystemMsgEventCode ax3640sSystemMsgAdditionalCode ax3640sSystemMsgText

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
23	ax3640sTemperatureTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	4	sysUpTime value	ax3640sChassisIndex ax3640sTemperatureStatusIndex ax3640sTemperatureStatusDescr ax3640sTemperatureStatusValue ax3640sTemperatureState
24	ax3640sAxrpStateTransitionTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	36	sysUpTime value	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMonitoringState
25	ax3640sAxrpMultiFaultDetectionStartTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	41	sysUpTime value	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute
26	ax3640sAxrpMultiFaultDetectionStateTransitionTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	42	sysUpTime value	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMultiFaultDetectionState
27	ax3640sGsrpStateTransitionTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	6	sysUpTime value	axsGsrpGroupId axsGsrpVlanGroupId axsGsrpState
28	ax3640sL2ldLinkDown	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	51	sysUpTime value	axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortDestinationPortIfindex axsL2ldPortSourceVlan
29	ax3640sL2ldLinkUp	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	52	sysUpTime value	axsL2ldPortIfIndex
30	ax3640sL2ldLoopDetection	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	53	sysUpTime value	axsL2ldPortIndex axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortSourceVlan

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
31	axsOspfVirtIfStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	1	sysUpTime value	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfVirtIfState
32	axsOspfNbrStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	2	sysUpTime value	axsOspfNbrDomainNumber axsOspfRouterId axsOspfNbrIpAddr axsOspfNbrAddressLessIndex axsOspfNbrRtrId axsOspfNbrState
33	axsOspfVirtNbrStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	3	sysUpTime value	axsOspfVirtNbrDomainNumber axsOspfRouterId axsOspfVirtNbrArea axsOspfVirtNbrRtrId axsOspfVirtNbrState
34	axsOspfIfConfigError **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	4	sysUpTime value	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType
35	axsOspfVirtIfConfigError **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	5	sysUpTime value	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType
36	axsOspfIfAuthFailure **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	6	sysUpTime value	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
37	axsOspfVirtIfAuthFailure **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	7	sysUpTime value	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType
38	axsOspfIfStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	16	sysUpTime value	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfIfState
39	axsStaticGatewayStateChange	Object ID of axsStaticTrap 1.3.6.1.4.1.21839.2.2.1.38.2	Specific IP address#	6	1	sysUpTime value	axsStaticGatewayAddr axsStaticGatewayState
40	axsStaticIpv6GatewayStateChange	Object ID of axsStaticTrap 1.3.6.1.4.1.21839.2.2.1.38.2	Specific IP address#	6	2	sysUpTime value	axsStaticIpv6Ifindex axsStaticIpv6GatewayAddr axsStaticIpv6GatewayState
41	axsPolicyBaseRoutingRouteChange **[OS-L3A]**	Object ID of axsPolicyBaseRouting 1.3.6.1.4.1.21839.2.2.1.45.1	Specific IP address#	6	1	sysUpTime value	axsPolicyBaseRoutingChangeListNumber axsPolicyBaseRoutingChangeSequenceNumber
42	axsTrackObjectStateUp **[OS-L3A]**	Object ID of axsTrackObjectTraps 1.3.6.1.4.1.21839.2.2.1.41.2	Specific IP address#	6	1	sysUpTime value	axsTrackObjectId axsTrackObjectState axsTrackObjectOperation axsTrackObjectType axsTrackObjectNetIndex
43	axsTrackObjectStateDown **[OS-L3A]**	Object ID of axsTrackObjectTraps 1.3.6.1.4.1.21839.2.2.1.41.2	Specific IP address#	6	2	sysUpTime value	axsTrackObjectId axsTrackObjectState axsTrackObjectOperation axsTrackObjectType axsTrackObjectNetIndex
44	ax3640sAirFanStopTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	8	sysUpTime value	None

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
45	ax3640sPowerSupplyFailureTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	9	sysUpTime value	None
46	ax3640sLoginSuccessTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	10	sysUpTime value	axsLoginName axsLoginTime axsLoginLocation axsLoginLine
47	ax3640sLoginFailureTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	11	sysUpTime value	axsLoginName axsLoginFailureTime axsLoginLocation axsLoginLine
48	ax3640sLogoutTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	12	sysUpTime value	axsLoginName axsLoginTime axsLogoutTime axsLoginLocation axsLoginLine axsLogoutStatus
49	ax3640sMemoryUsageTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	13	sysUpTime value	None
50	axsOadpNeighborCachelastChangeTrap	Object ID of axsOadpMIBNotifications 1.3.6.1.4.1.21839.2.2.1.7.2	Specific IP address#	6	1	sysUpTime value	axsOadpNeighborCacheLastChange
51	ax3640sFrameErrorReceiveTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	18	sysUpTime value	ifIndex
52	ax3640sFrameErrorSendTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	19	sysUpTime value	ifIndex
53	ax3640sBroadcastStormDetectTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	20	sysUpTime value	ifIndex
54	ax3640sMulticastStormDetectTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	21	sysUpTime value	ifIndex

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
55	ax3640sUnicastStormDetectTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	22	sysUpTime value	ifIndex
56	ax3640sBroadcastStormPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	23	sysUpTime value	ifIndex
57	ax3640sMulticastStormPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	24	sysUpTime value	ifIndex
58	ax3640sUnicastStormPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	25	sysUpTime value	ifIndex
59	ax3640sBroadcastStormRecoverTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	26	sysUpTime value	ifIndex
60	ax3640sMulticastStormRecoverTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	27	sysUpTime value	ifIndex
61	ax3640sUnicastStormRecoverTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	28	sysUpTime value	ifIndex
62	ax3640sEfmoamUdldPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	29	sysUpTime value	ifIndex
63	ax3640sEfmoamLoopDetectPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	30	sysUpTime value	ifIndex
64	ax3640sUlrChangeSecondary	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	87	sysUpTime value	axsUlrPortIfIndex axsUlrPairedPortIfIndex
65	ax3640sUlrChangePrimary	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	88	sysUpTime value	axsUlrPortIfIndex axsUlrPairedPortIfIndex
66	ax3640sUlrActivePortDown	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.11	Specific IP address#	6	89	sysUpTime value	axsUlrPortIfIndex axsUlrPairedPortIfIndex

#

The value of `agent-addr` is set according to the following priorities:

1. The IPv4 address set by using the `snmp-server traps agent-address` configuration command
2. The IPv4 address that is set to a loopback interface
3. The IPv4 address of an interface in which an IPv4 address is set and that has the lowest ifIndex. The target interface is VLAN. The target interface is VLAN.
4. `0.0.0.0` is set if none of the IPv4 addresses described in 1 to 3 is set.

Table 4-3: List of parameters of the Trap-PDU and InformRequest-PDU (for SNMPv2C/SNMPv3)

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	**Variable-Binding [2](SnmpTrapOID.0)**	**Variable-Binding [3-]**
1	coldStart	sysUpTime value	Object ID of coldStart (1.3.6.1.6.3.1.1.5.1)	None
2	warmStart	sysUpTime value	Object ID of warmStart (1.3.6.1.6.3.1.1.5.2)	None
3	linkDown	sysUpTime value	Object ID of linkDown (1.3.6.1.6.3.1.1.5.3)	ifIndex ifAdminStatus ifOperStatus However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
4	linkUp	sysUpTime value	Object ID of linkUp (1.3.6.1.6.3.1.1.5.4)	ifIndex ifAdminStatus ifOperStatus However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
5	authentication Failure	sysUpTime value	Object ID of authentication Failure (1.3.6.1.6.3.1.1.5.5)	None
6	bgpEstablished **[OS-L3A]**	sysUpTime value	Object ID of bgpEstablished (1.3.6.1.2.1.15.7.1)	bgpPeerLastError bgpPeerState
7	bgpBackwardTransition **[OS-L3A]**	sysUpTime value	Object ID of bgpBackwardTransition (1.3.6.1.2.1.15.7.2)	bgpPeerLastError bgpPeerState

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	**Variable-Binding [2](SnmpTrapOID.0)**	**Variable-Binding [3-]**
8	risingAlarm	sysUpTime value	Object ID of risingAlarm (1.3.6.1.2.1.16.0.1)	alarmIndex alarmVariable alarmSampleType alarmValue alarmRisingThreshold
9	fallingAlarm	sysUpTime value	Object ID of fallingAlarm (1.3.6.1.2.1.16.0.2)	alarmIndex alarmVariable alarmSampleType alarmValue alarmFallingThreshold
10	vrrpTrapNewMaster	sysUpTime value	Object ID of vrrpTrapNewMaster (1.3.6.1.2.1.68.0.1)	vrrpOperationsMasterIpAddr vrrpTrapNewMasterReason
11	vrrpTrapAuthFailure	sysUpTime value	Object ID of vrrpTrapAuthFailure (1.3.6.1.2.1.68.0.2)	vrrpTrapPacketSrc vrrpTrapAuthErrorType
12	vrrpTrapProtoError	sysUpTime value	Object ID of vrrpTrapProtoError (1.3.6.1.2.1.68.0.3)	vrrpTrapProtoErrReason
13	ospfVirtIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtIfStateChange (1.3.6.1.2.1.14.16.2.1)	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfVirtIfState
14	ospfNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfNbrStateChange (1.3.6.1.2.1.14.16.2.2)	ospfRouterId ospfNbrIpAddr ospfNbrAddressLessIndex ospfNbrRtrId ospfNbrState
15	ospfVirtNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtNbrStateChange (1.3.6.1.2.1.14.16.2.3)	ospfRouterId ospfVirtNbrArea ospfVirtNbrRtrId ospfVirtNbrState
16	ospfIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of ospfIfConfigError (1.3.6.1.2.1.14.16.2.4)	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType
17	ospfVirtIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtIfConfigError (1.3.6.1.2.1.14.16.2.5)	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
18	ospfIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of ospfIfAuthFailure (1.3.6.1.2.1.14.16.2.6)	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType
19	ospfVirtIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtIfAuthFailure (1.3.6.1.2.1.14.16.2.7)	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType
20	ospfIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfIfStateChange (1.3.6.1.2.1.14.16.2.16)	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfIfState
21	dot1agCfmFaultAlarm	sysUpTime value	Object ID of dot1agCfmFaultAlarm (1.3.111.2.802.1.1.8.0.1)	dot1agCfmMdIndex dot1agCfmMaIndex dot1agCfmMepIdentifier
22	ax3640sSystemMsgTrap	sysUpTime value	Object ID of ax3640sSystemMsgTrap (1.3.6.1.4.1.21839.1.2.11.0.1)	ax3640sSystemMsgType ax3640sSystemMsgTimeStamp ax3640sSystemMsgLevel ax3640sSystemMsgEventPoint ax3640sSystemMsgEventInterfaceID ax3640sSystemMsgEventCode ax3640sSystemMsgAdditionalCode ax3640sSystemMsgText
23	ax3640sTemperatureTrap	sysUpTime value	Object ID of ax3640sTemperatureTrap (1.3.6.1.4.1.21839.1.2.11.0.4)	ax3640sChassisIndex ax3640sTemperatureStatusIndex ax3640sTemperatureStatusDescr ax3640sTemperatureStatusValue ax3640sTemperatureState
24	ax3640sAxrpStateTransitionTrap	sysUpTime value	Object ID of ax3640sAxrpStateTransitionTrap (1.3.6.1.4.1.21839.1.2.11.0.36)	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMonitoringState
25	ax3640sAxrpMultiFaultDetectionStartTrap	sysUpTime value	Object ID of ax3640sAxrpMultiFaultDetectionStartTrap (1.3.6.1.4.1.21839.1.2.11.0.41)	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute
26	ax3640sAxrpMultiFaultDetectionStateTransitionTrap	sysUpTime value	Object ID of ax3640sAxrpMultiFaultDetectionStateTransitionTrap (1.3.6.1.4.1.21839.1.2.11.0.42)	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMultiFaultDetectionState

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	**Variable-Binding [2](SnmpTrapOID.0)**	**Variable-Binding [3-]**
27	ax3640sGsrpStateTransitionTrap	sysUpTime value	Object ID of ax3640sGsrpStateTransitionTrap (1.3.6.1.4.1.21839.1.2.11.0.6)	axsGsrpGroupId axsGsrpVlanGroupId axsGsrpState
28	ax3640sL2ldLinkDown	sysUpTime value	Object ID of ax3640sL2ldLinkDown (1.3.6.1.4.1.21839.1.2.11.0.51)	axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortDestinationPortIfindex axsL2ldPortSourceVlan
29	ax3640sL2ldLinkUp	sysUpTime value	Object ID of ax3640sL2ldLinkUp (1.3.6.1.4.1.21839.1.2.11.0.52)	axsL2ldPortIfIndex
30	ax3640sL2ldLoopDetection	sysUpTime value	Object ID of ax3640sL2ldLoopDetection (1.3.6.1.4.1.21839.1.2.11.0.53)	axsL2ldPortIndex axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortSourceVlan
31	axsOspfVirtIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtIfStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.1)	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfVirtIfState
32	axsOspfNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfNbrStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.2)	axsOspfNbrDomainNumber axsOspfRouterId axsOspfNbrIpAddr axsOspfNbrAddressLessIndex axsOspfNbrRtrId axsOspfNbrState
33	axsOspfVirtNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtNbrStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.3)	axsOspfVirtNbrDomainNumber axsOspfRouterId axsOspfVirtNbrArea axsOspfVirtNbrRtrId axsOspfVirtNbrState
34	axsOspfIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of axsOspfIfConfigError (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.4)	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType
35	axsOspfVirtIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtIfConfigError (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.5)	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
36	axsOspfIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of axsOspfIfAuthFailure (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.6)	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType
37	axsOspfVirtIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtIfAuthFailure (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.7)	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType
38	axsOspfIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfIfStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.16)	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfIfState
39	axsStaticGatewayStateChange	sysUpTime value	Object ID of axsStaticGatewayStateChange (1.3.6.1.4.1.21839.2.2.1.38.2.0.1)	axsStaticGatewayAddr axsStaticGatewayState
40	axsStaticIpv6GatewayStateChange	sysUpTime value	Object ID of axsStaticIpv6GatewayStateChange (1.3.6.1.4.1.21839.2.2.1.38.2.0.2)	axsStaticIpv6Ifindex axsStaticIpv6GatewayAddr axsStaticIpv6GatewayState
41	axsPolicyBaseRoutingRouteChange **[OS-L3A]**	sysUpTime value	Object ID of axsPolicyBaseRoutingRouteChange (1.3.6.1.4.1.21839.2.2.1.45.1.0.1)	axsPolicyBaseRoutingChangeListNumber axsPolicyBaseRoutingChangeSequenceNumber
42	axsTrackObjectStateUp **[OS-L3A]**	sysUpTime value	Object ID of axsTrackObjectStateUp (1.3.6.1.4.1.21839.2.2.1.41.2.0.1)	axsTrackObjectId axsTrackObjectState axsTrackObjectOperation axsTrackObjectType axsTrackObjectNetIndex
43	axsTrackObjectStateDown **[OS-L3A]**	sysUpTime value	Object ID of axsTrackObjectStateDown (1.3.6.1.4.1.21839.2.2.1.41.2.0.2)	axsTrackObjectId axsTrackObjectState axsTrackObjectOperation axsTrackObjectType axsTrackObjectNetIndex
44	ax3640sAirFanStopTrap	sysUpTime value	Object ID of ax3640sAirFanStopTrap (1.3.6.1.4.1.21839.1.2.11.0.8)	None

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
45	ax3640sPowerSupplyFailureTrap	sysUpTime value	Object ID of ax3640sPowerSupplyFailureTrap (1.3.6.1.4.1.21839.1.2.11.0.9)	None
46	ax3640sLoginSuccessTrap	sysUpTime value	Object ID of ax3640sLoginSuccessTrap (1.3.6.1.4.1.21839.1.2.11.0.10)	axsLoginName axsLoginTime axsLoginLocation axsLoginLine
47	ax3640sLoginFailureTrap	sysUpTime value	Object ID of ax3640sLoginFailureTrap (1.3.6.1.4.1.21839.1.2.11.0.11)	axsLoginName axsLoginFailureTime axsLoginLocation axsLoginLine
48	ax3640sLogoutTrap	sysUpTime value	Object ID of ax3640sLogoutTrap (1.3.6.1.4.1.21839.1.2.11.0.12)	axsLoginName axsLoginTime axsLogoutTime axsLoginLocation axsLoginLine axsLogoutStatus
49	ax3640sMemoryUsageTrap	sysUpTime value	Object ID of ax3640sMemoryUsageTrap (1.3.6.1.4.1.21839.1.2.11.0.13)	None
50	axsOadpNeighborCachelastChangeTrap	sysUpTime value	Object ID of axsOadpNeighborCachelastChangeTrap (1.3.6.1.4.1.21839.2.2.1.7.2.0.1)	axsOadpNeighborCacheLastChange
51	ax3640sFrameErrorReceiveTrap	sysUpTime value	Object ID of ax3640sFrameErrorReceiveTrap (1.3.6.1.4.1.21839.1.2.11.0.18)	ifIndex
52	ax3640sFrameErrorSendTrap	sysUpTime value	Object ID of ax3640sFrameErrorSendTrap (1.3.6.1.4.1.21839.1.2.11.0.19)	ifIndex
53	ax3640sBroadcastStormDetectTrap	sysUpTime value	Object ID of ax3640sBroadcastStormDetectTrap (1.3.6.1.4.1.21839.1.2.11.0.20)	ifIndex
54	ax3640sMulticastStormDetectTrap	sysUpTime value	Object ID of ax3640sMulticastStormDetectTrap (1.3.6.1.4.1.21839.1.2.11.0.21)	ifIndex

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
55	ax3640sUnicastStormDetectTrap	sysUpTime value	Object ID of ax3640sUnicastStormDetectTrap (1.3.6.1.4.1.21839.1.2.11.0.22)	ifIndex
56	ax3640sBroadcastStormPortInactivateTrap	sysUpTime value	Object ID of ax3640sBroadcastStormPortInactivateTrap (1.3.6.1.4.1.21839.1.2.11.0.23)	ifIndex
57	ax3640sMulticastStormPortInactivateTrap	sysUpTime value	Object ID of ax3640sMulticastStormPortInactivateTrap (1.3.6.1.4.1.21839.1.2.11.0.24)	ifIndex
58	ax3640sUnicastStormPortInactivateTrap	sysUpTime value	Object ID of ax3640sUnicastStormPortInactivateTrap (1.3.6.1.4.1.21839.1.2.11.0.25)	ifIndex
59	ax3640sBroadcastStormRecoverTrap	sysUpTime value	Object ID of ax3640sBroadcastStormRecoverTrap (1.3.6.1.4.1.21839.1.2.11.0.26)	ifIndex
60	ax3640sMulticastStormRecoverTrap	sysUpTime value	Object ID of ax3640sMulticastStormRecoverTrap (1.3.6.1.4.1.21839.1.2.11.0.27)	ifIndex
61	ax3640sUnicastStormRecoverTrap	sysUpTime value	Object ID of ax3640sUnicastStormRecoverTrap (1.3.6.1.4.1.21839.1.2.11.0.28)	ifIndex
62	ax3640sEfmoamUdldPortInactivateTrap	sysUpTime value	Object ID of ax3640sEfmoamUdldPortInactivateTrap (1.3.6.1.4.1.21839.1.2.11.0.29)	ifIndex
63	ax3640sEfmoamLoopDetectPortInactivateTrap	sysUpTime value	Object ID of ax3640sEfmoamLoopDetectPortInactivateTrap (1.3.6.1.4.1.21839.1.2.11.0.30)	ifIndex
64	ax3640sUlrChangeSecondary	sysUpTime value	Object ID of ax3640sUlrChangeSecondary (1.3.6.1.4.1.21839.1.2.11.0.87)	axsUlrPortIfIndex axsUlrPairedPortIfIndex

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
65	ax3640sUlrChangePrimary	sysUpTime value	Object ID of ax3640sUlrChangePrimary (1.3.6.1.4.1.21839.1.2.11.0.88)	axsUlrPortIfIndex axsUlrPairedPortIfIndex
66	ax3640sUlrActivePortDown	sysUpTime value	Object ID of ax3640sUlrActivePortDown (1.3.6.1.4.1.21839.1.2.11.0.89)	axsUlrPortIfIndex axsUlrPairedPortIfIndex

4.3 Supported traps and informs of PDU parameters [AX3630S]

The parameters of the Trap-PDU and InformRequest-PDU (SNMPv2C/SNMPv3) for SNMPv1 are shown in *Table 4-4: List of parameters of the Trap-PDU (for SNMPv1)*, and those for SNMPv2C/SNMPv3 are shown in *Table 4-5: List of parameters of the Trap-PDU and InformRequest-PDU (for SNMPv2C/SNMPv3)*.

Table 4-4: List of parameters of the Trap-PDU (for SNMPv1)

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
1	coldStart	sysObjectID of the Switch 1.3.6.1.4.1.2 1839.1.2.7	Specific IP address#	0	0	sysUpTime value	None
2	warmStart	sysObjectID of the Switch 1.3.6.1.4.1.2 1839.1.2.7	Specific IP address#	1	0	sysUpTime value	None
3	linkDown	sysObjectID of the Switch 1.3.6.1.4.1.2 1839.1.2.7	Specific IP address#	2	0	sysUpTime value	ifIndex However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
4	linkUp	sysObjectID of the Switch 1.3.6.1.4.1.2 1839.1.2.7	Specific IP address#	3	0	sysUpTime value	ifIndex However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
5	authentication Failure	sysObjectID of the Switch 1.3.6.1.4.1.2 1839.1.2.7	Specific IP address#	4	0	sysUpTime value	None
6	bgpEstablished **[OS-L3A]**	Object ID of bgpTraps 1.3.6.1.2.1.1 5.7	Specific IP address#	6	1	sysUpTime value	bgpPeerLastError bgpPeerState

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
7	bgpBackwardTransition **[OS-L3A]**	Object ID of bgpTraps 1.3.6.1.2.1.15.7	Specific IP address#	6	2	sysUpTime value	bgpPeerLastError bgpPeerState
8	risingAlarm	Object ID of rmon 1.3.6.1.2.1.16	Specific IP address#	6	1	sysUpTime value	alarmIndex alarmVariable alarmSampleType alarmValue alarmRisingThreshold
9	fallingAlarm	Object ID of rmon 1.3.6.1.2.1.16	Specific IP address#	6	2	sysUpTime value	alarmIndex alarmVariable alarmSampleType alarmValue alarmFallingThreshold
10	vrrpTrapNewMaster	Object ID of vrrpMIB 1.3.6.1.2.1.68	Specific IP address#	6	1	sysUpTime value	vrrpOperationsMasterIpAddr vrrpTrapNewMasterReason
11	vrrpTrapAuthFailure	Object ID of vrrpMIB 1.3.6.1.2.1.68	Specific IP address#	6	2	sysUpTime value	vrrpTrapPacketSrc vrrpTrapAuthErrorType
12	vrrpTrapProtoError	Object ID of vrrpMIB 1.3.6.1.2.1.68	Specific IP address#	6	3	sysUpTime value	vrrpTrapProtoErrReason
13	ospfVirtIfStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	1	sysUpTime value	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfVirtIfState
14	ospfNbrStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	2	sysUpTime value	ospfRouterId ospfNbrIpAddr ospfNbrAddressLessIndex ospfNbrRtrId ospfNbrState
15	ospfVirtNbrStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	3	sysUpTime value	ospfRouterId ospfVirtNbrArea ospfVirtNbrRtrId ospfVirtNbrState
16	ospfIfConfigError **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	4	sysUpTime value	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
17	ospfVirtIfConfigError **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	5	sysUpTime value	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType
18	ospfIfAuthFailure **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	6	sysUpTime value	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType
19	ospfVirtIfAuthFailure **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	7	sysUpTime value	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType
20	ospfIfStateChange **[OS-L3A]**	Object ID of ospfTraps 1.3.6.1.2.1.14.16.2	Specific IP address#	6	16	sysUpTime value	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfIfState
21	pethPsePortOnOffNotification	Object ID of powerEthernetMIB 1.3.6.1.2.1.105	Specific IP address#	6	1	sysUpTime value	pethPsePortDetectionStatus
22	pethMainPowerUsageOnNotification	Object ID of powerEthernetMIB 1.3.6.1.2.1.105	Specific IP address#	6	2	sysUpTime value	pethMainPseConsumptionPower
23	pethMainPowerUsageOffNotification	Object ID of powerEthernetMIB 1.3.6.1.2.1.105	Specific IP address#	6	3	sysUpTime value	pethMainPseConsumptionPower
24	dot1agCfmFaultAlarm	Object ID of ieee8021CfmMib 1.3.111.2.802.1.1.8	Specific IP address#	6	1	sysUpTime value	dot1agCfmMdIndex dot1agCfmMaIndex dot1agCfmMepIdentifier

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
25	ax3630sSystemMsgTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	1	sysUpTime value	ax3630sSystemMsgType ax3630sSystemMsgTimeStamp ax3630sSystemMsgLevel ax3630sSystemMsgEventPoint ax3630sSystemMsgEventInterfaceID ax3630sSystemMsgEventCode ax3630sSystemMsgAdditionalCode ax3630sSystemMsgText
26	ax3630sTemperatureTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	4	sysUpTime value	ax3630sChassisIndex ax3630sTemperatureStatusIndex ax3630sTemperatureStatusDescr ax3630sTemperatureStatusValue ax3630sTemperatureState
27	ax3630sAxrpStateTransitionTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	36	sysUpTime value	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMonitoringState
28	ax3630sAxrpMultiFaultDetectionStartTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	41	sysUpTime value	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute
29	ax3630sAxrpMultiFaultDetectionStateTransitionTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	42	sysUpTime value	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMultiFaultDetectionState
30	ax3630sGsrpStateTransitionTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	6	sysUpTime value	axsGsrpGroupId axsGsrpVlanGroupId axsGsrpState

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
31	ax3630sL2ldLinkDown	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	51	sysUpTime value	axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortDestinationPortIfindex axsL2ldPortSourceVlan
32	ax3630sL2ldLinkUp	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	52	sysUpTime value	axsL2ldPortIfIndex
33	ax3630sL2ldLoopDetection	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	53	sysUpTime value	axsL2ldPortIndex axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortSourceVlan
34	axsOspfVirtIfStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	1	sysUpTime value	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfVirtIfState
35	axsOspfNbrStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	2	sysUpTime value	axsOspfNbrDomainNumber axsOspfRouterId axsOspfNbrIpAddr axsOspfNbrAddressLessIndex axsOspfNbrRtrId axsOspfNbrState
36	axsOspfVirtNbrStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	3	sysUpTime value	axsOspfVirtNbrDomainNumber axsOspfRouterId axsOspfVirtNbrArea axsOspfVirtNbrRtrId axsOspfVirtNbrState
37	axsOspfIfConfigError **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	4	sysUpTime value	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
38	axsOspfVirtIfConfigError **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	5	sysUpTime value	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType
39	axsOspfIfAuthFailure **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	6	sysUpTime value	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType
40	axsOspfVirtIfAuthFailure **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	7	sysUpTime value	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType
41	axsOspfIfStateChange **[OS-L3A]**	Object ID of axsOspfTraps 1.3.6.1.4.1.21839.2.2.1.14.16.2	Specific IP address#	6	16	sysUpTime value	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfIfState
42	axsStaticGatewayStateChange	Object ID of axsStaticTrap 1.3.6.1.4.1.21839.2.2.1.38.2	Specific IP address#	6	1	sysUpTime value	axsStaticGatewayAddr axsStaticGatewayState
43	axsStaticIpv6GatewayStateChange	Object ID of axsStaticTrap 1.3.6.1.4.1.21839.2.2.1.38.2	Specific IP address#	6	2	sysUpTime value	axsStaticIpv6Ifindex axsStaticIpv6GatewayAddr axsStaticIpv6GatewayState
44	ax3630sAirFanStopTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	8	sysUpTime value	None

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
45	ax3630sPowerSupplyFailureTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	9	sysUpTime value	None
46	ax3630sLoginSuccessTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	10	sysUpTime value	axsLoginName axsLoginTime axsLoginLocation axsLoginLine
47	ax3630sLoginFailureTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	11	sysUpTime value	axsLoginName axsLoginFailureTime axsLoginLocation axsLoginLine
48	ax3630sLogoutTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	12	sysUpTime value	axsLoginName axsLoginTime axsLogoutTime axsLoginLocation axsLoginLine axsLogoutStatus
49	ax3630sMemoryUsageTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	13	sysUpTime value	None
50	axsOadpNeighborCachelastChangeTrap	Object ID of axsOadpMIBNotifications 1.3.6.1.4.1.21839.2.2.1.7.2	Specific IP address#	6	1	sysUpTime value	axsOadpNeighborCacheLastChange
51	ax3630sFrameErrorReceiveTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	18	sysUpTime value	ifIndex
52	ax3630sFrameErrorSendTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	19	sysUpTime value	ifIndex
53	ax3630sBroadcastStormDetectTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	20	sysUpTime value	ifIndex
54	ax3630sMulticastStormDetectTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	21	sysUpTime value	ifIndex

#	Type	Trap-PDU data value					
		enterprise	agentaddr	generic-trap	specific-trap	time-stamp	variable-bindings
55	ax3630sUnicastStormDetectTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	22	sysUpTime value	ifIndex
56	ax3630sBroadcastStormPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	23	sysUpTime value	ifIndex
57	ax3630sMulticastStormPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	24	sysUpTime value	ifIndex
58	ax3630sUnicastStormPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	25	sysUpTime value	ifIndex
59	ax3630sBroadcastStormRecoverTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	26	sysUpTime value	ifIndex
60	ax3630sMulticastStormRecoverTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	27	sysUpTime value	ifIndex
61	ax3630sUnicastStormRecoverTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	28	sysUpTime value	ifIndex
62	ax3630sEfmoamUdldPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	29	sysUpTime value	ifIndex
63	ax3630sEfmoamLoopDetectPortInactivateTrap	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	30	sysUpTime value	ifIndex
64	ax3630sUlrChangeSecondary	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	87	sysUpTime value	axsUlrPortIfIndex axsUlrPairedPortIfIndex
65	ax3630sUlrChangePrimary	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	88	sysUpTime value	axsUlrPortIfIndex axsUlrPairedPortIfIndex
66	ax3630sUlrActivePortDown	sysObjectID of the Switch 1.3.6.1.4.1.21839.1.2.7	Specific IP address#	6	89	sysUpTime value	axsUlrPortIfIndex axsUlrPairedPortIfIndex

#

The value of `agent-addr` is set according to the following priorities:

1. The IPv4 address set by using the `snmp-server traps agent-address` configuration command
2. The IPv4 address that is set to a loopback interface
3. The IPv4 address of an interface in which an IPv4 address is set and that has the lowest ifIndex. The target interface is VLAN. The target interface is VLAN.
4. `0.0.0.0` is set if none of the IPv4 addresses described in 1 to 3 is set.

Table 4-5: List of parameters of the Trap-PDU and InformRequest-PDU (for SNMPv2C/SNMPv3)

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	**Variable-Binding [2](SnmpTrapOID.0)**	**Variable-Binding [3-]**
1	coldStart	sysUpTime value	Object ID of coldStart (1.3.6.1.6.3.1.1.5.1)	None
2	warmStart	sysUpTime value	Object ID of warmStart (1.3.6.1.6.3.1.1.5.2)	None
3	linkDown	sysUpTime value	Object ID of linkDown (1.3.6.1.6.3.1.1.5.3)	ifIndex ifAdminStatus ifOperStatus However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
4	linkUp	sysUpTime value	Object ID of linkUp (1.3.6.1.6.3.1.1.5.4)	ifIndex ifAdminStatus ifOperStatus However, the following MIBs are obtained when `private` is set for a `link_trap_bind_info` parameter by using the `snmp-server-traps` configuration command: ifIndex ifDescr ifType
5	authentication Failure	sysUpTime value	Object ID of authentication Failure (1.3.6.1.6.3.1.1.5.5)	None
6	bgpEstablished **[OS-L3A]**	sysUpTime value	Object ID of bgpEstablished (1.3.6.1.2.1.15.7.1)	bgpPeerLastError bgpPeerState
7	bgpBackwardTransition **[OS-L3A]**	sysUpTime value	Object ID of bgpBackwardTransition (1.3.6.1.2.1.15.7.2)	bgpPeerLastError bgpPeerState

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	**Variable-Binding [2](SnmpTrapOID.0)**	**Variable-Binding [3-]**
8	risingAlarm	sysUpTime value	Object ID of risingAlarm (1.3.6.1.2.1.16.0.1)	alarmIndex alarmVariable alarmSampleType alarmValue alarmRisingThreshold
9	fallingAlarm	sysUpTime value	Object ID of fallingAlarm (1.3.6.1.2.1.16.0.2)	alarmIndex alarmVariable alarmSampleType alarmValue alarmFallingThreshold
10	vrrpTrapNewMaster	sysUpTime value	Object ID of vrrpTrapNewMaster (1.3.6.1.2.1.68.0.1)	vrrpOperationsMasterIpAddr vrrpTrapNewMasterReason
11	vrrpTrapAuthFailure	sysUpTime value	Object ID of vrrpTrapAuthFailure (1.3.6.1.2.1.68.0.2)	vrrpTrapPacketSrc vrrpTrapAuthErrorType
12	vrrpTrapProtoError	sysUpTime value	Object ID of vrrpTrapProtoError (1.3.6.1.2.1.68.0.3)	vrrpTrapProtoErrReason
13	ospfVirtIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtIfStateChange (1.3.6.1.2.1.14.16.2.1)	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfVirtIfState
14	ospfNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfNbrStateChange (1.3.6.1.2.1.14.16.2.2)	ospfRouterId ospfNbrIpAddr ospfNbrAddressLessIndex ospfNbrRtrId ospfNbrState
15	ospfVirtNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtNbrStateChange (1.3.6.1.2.1.14.16.2.3)	ospfRouterId ospfVirtNbrArea ospfVirtNbrRtrId ospfVirtNbrState
16	ospfIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of ospfIfConfigError (1.3.6.1.2.1.14.16.2.4)	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType
17	ospfVirtIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtIfConfigError (1.3.6.1.2.1.14.16.2.5)	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
18	ospfIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of ospfIfAuthFailure (1.3.6.1.2.1.14.16.2.6)	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfPacketSrc ospfConfigErrorType ospfPacketType
19	ospfVirtIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of ospfVirtIfAuthFailure (1.3.6.1.2.1.14.16.2.7)	ospfRouterId ospfVirtIfAreaId ospfVirtIfNeighbor ospfConfigErrorType ospfPacketType
20	ospfIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of ospfIfStateChange (1.3.6.1.2.1.14.16.2.16)	ospfRouterId ospfIfIpAddress ospfAddressLessIf ospfIfState
21	pethPsePortOnOffNotification	sysUpTime value	Object ID of pethPsePortOnOffNotification (1.3.6.1.2.1.105.0.1)	pethPsePortDetectionStatus
22	pethMainPowerUsageOnNotification	sysUpTime value	Object ID of pethMainPowerUsageOnNotification (1.3.6.1.2.1.105.0.2)	pethMainPseConsumptionPower
23	pethMainPowerUsageOffNotification	sysUpTime value	Object ID of pethMainPowerUsageOffNotification (1.3.6.1.2.1.105.0.3)	pethMainPseConsumptionPower
24	dot1agCfmFaultAlarm	sysUpTime value	Object ID of dot1agCfmFaultAlarm (1.3.111.2.802.1.1.8.0.1)	dot1agCfmMdIndex dot1agCfmMaIndex dot1agCfmMepIdentifier
25	ax3630sSystemMsgTrap	sysUpTime value	Object ID of ax3630sSystemMsgTrap (1.3.6.1.4.1.21839.1.2.7.0.1)	ax3630sSystemMsgType ax3630sSystemMsgTimeStamp ax3630sSystemMsgLevel ax3630sSystemMsgEventPoint ax3630sSystemMsgEventInterfaceID ax3630sSystemMsgEventCode ax3630sSystemMsgAdditionalCode ax3630sSystemMsgText
26	ax3630sTemperatureTrap	sysUpTime value	Object ID of ax3630sTemperatureTrap (1.3.6.1.4.1.21839.1.2.7.0.4)	ax3630sChassisIndex ax3630sTemperatureStatusIndex ax3630sTemperatureStatusDescr ax3630sTemperatureStatusValue ax3630sTemperatureState
27	ax3630sAxrpStateTransitionTrap	sysUpTime value	Object ID of ax3630sAxrpStateTransitionTrap (1.3.6.1.4.1.21839.1.2.7.0.36)	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMonitoringState

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
28	ax3630sAxrpMultiFaultDetectionStartTrap	sysUpTime value	Object ID of ax3630sAxrpMultiFaultDetectionStartTrap (1.3.6.1.4.1.21839.1.2.7.0.41)	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute
29	ax3630sAxrpMultiFaultDetectionStateTransitionTrap	sysUpTime value	Object ID of ax3630sAxrpMultiFaultDetectionStateTransitionTrap (1.3.6.1.4.1.21839.1.2.7.0.42)	axsAxrpGroupRingId axsAxrpGroupMode axsAxrpGroupRingAttribute axsAxrpGroupMultiFaultDetectionState
30	ax3630sGsrpStateTransitionTrap	sysUpTime value	Object ID of ax3630sGsrpStateTransitionTrap (1.3.6.1.4.1.21839.1.2.7.0.6)	axsGsrpGroupId axsGsrpVlanGroupId axsGsrpState
31	ax3630sL2ldLinkDown	sysUpTime value	Object ID of ax3630sL2ldLinkDown (1.3.6.1.4.1.21839.1.2.7.0.51)	axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortDestinationPortIfindex axsL2ldPortSourceVlan
32	ax3630sL2ldLinkUp	sysUpTime value	Object ID of ax3630sL2ldLinkUp (1.3.6.1.4.1.21839.1.2.7.0.52)	axsL2ldPortIfIndex
33	ax3630sL2ldLoopDetection	sysUpTime value	Object ID of ax3630sL2ldLoopDetection (1.3.6.1.4.1.21839.1.2.7.0.53)	axsL2ldPortIndex axsL2ldPortIfIndex axsL2ldPortSourcePortIfindex axsL2ldPortSourceVlan
34	axsOspfVirtIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtIfStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.1)	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfVirtIfState
35	axsOspfNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfNbrStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.2)	axsOspfNbrDomainNumber axsOspfRouterId axsOspfNbrIpAddr axsOspfNbrAddressLessIndex axsOspfNbrRtrId axsOspfNbrState
36	axsOspfVirtNbrStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtNbrStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.3)	axsOspfVirtNbrDomainNumber axsOspfRouterId axsOspfVirtNbrArea axsOspfVirtNbrRtrId axsOspfVirtNbrState

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
37	axsOspfIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of axsOspfIfConfigError (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.4)	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType
38	axsOspfVirtIfConfigError **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtIfConfigError (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.5)	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType
39	axsOspfIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of axsOspfIfAuthFailure (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.6)	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfPacketSrc axsOspfConfigErrorType axsOspfPacketType
40	axsOspfVirtIfAuthFailure **[OS-L3A]**	sysUpTime value	Object ID of axsOspfVirtIfAuthFailure (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.7)	axsOspfVirtIfDomainNumber axsOspfRouterId axsOspfVirtIfAreaId axsOspfVirtIfNeighbor axsOspfConfigErrorType axsOspfPacketType
41	axsOspfIfStateChange **[OS-L3A]**	sysUpTime value	Object ID of axsOspfIfStateChange (1.3.6.1.4.1.21839.2.2.1.14.16.2.0.16)	axsOspfIfDomainNumber axsOspfRouterId axsOspfIfIpAddress axsOspfAddressLessIf axsOspfIfState
42	axsStaticGatewayStateChange	sysUpTime value	Object ID of axsStaticGatewayStateChange (1.3.6.1.4.1.21839.2.2.1.38.2.0.1)	axsStaticGatewayAddr axsStaticGatewayState
43	axsStaticIpv6GatewayStateChange	sysUpTime value	Object ID of axsStaticIpv6GatewayStateChange (1.3.6.1.4.1.21839.2.2.1.38.2.0.2)	axsStaticIpv6Ifindex axsStaticIpv6GatewayAddr axsStaticIpv6GatewayState
44	ax3630sAirFanStopTrap	sysUpTime value	Object ID of ax3630sAirFanStopTrap (1.3.6.1.4.1.21839.1.2.7.0.8)	None

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
45	ax3630sPowerSupplyFailureTrap	sysUpTime value	Object ID of ax3630sPowerSupplyFailureTrap (1.3.6.1.4.1.21839.1.2.7.0.9)	None
46	ax3630sLoginSuccessTrap	sysUpTime value	Object ID of ax3630sLoginSuccessTrap (1.3.6.1.4.1.21839.1.2.7.0.10)	axsLoginName axsLoginTime axsLoginLocation axsLoginLine
47	ax3630sLoginFailureTrap	sysUpTime value	Object ID of ax3630sLoginFailureTrap (1.3.6.1.4.1.21839.1.2.7.0.11)	axsLoginName axsLoginFailureTime axsLoginLocation axsLoginLine
48	ax3630sLogoutTrap	sysUpTime value	Object ID of ax3630sLogoutTrap (1.3.6.1.4.1.21839.1.2.7.0.12)	axsLoginName axsLoginTime axsLogoutTime axsLoginLocation axsLoginLine axsLogoutStatus
49	ax3630sMemoryUsageTrap	sysUpTime value	Object ID of ax3630sMemoryUsageTrap (1.3.6.1.4.1.21839.1.2.7.0.13)	None
50	axsOadpNeighborCachelastChangeTrap	sysUpTime value	Object ID of axsOadpNeighborCachelastChangeTrap (1.3.6.1.4.1.21839.2.2.1.7.2.0.1)	axsOadpNeighborCacheLastChange
51	ax3630sFrameErrorReceiveTrap	sysUpTime value	Object ID of ax3630sFrameErrorReceiveTrap (1.3.6.1.4.1.21839.1.2.7.0.18)	ifIndex
52	ax3630sFrameErrorSendTrap	sysUpTime value	Object ID of ax3630sFrameErrorSendTrap (1.3.6.1.4.1.21839.1.2.7.0.19)	ifIndex
53	ax3630sBroadcastStormDetectTrap	sysUpTime value	Object ID of ax3630sBroadcastStormDetectTrap (1.3.6.1.4.1.21839.1.2.7.0.20)	ifIndex
54	ax3630sMulticastStormDetectTrap	sysUpTime value	Object ID of ax3630sMulticastStormDetectTrap (1.3.6.1.4.1.21839.1.2.7.0.21)	ifIndex

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
55	ax3630sUnicastStormDetectTrap	sysUpTime value	Object ID of ax3630sUnicastStormDetectTrap (1.3.6.1.4.1.21839.1.2.7.0.22)	ifIndex
56	ax3630sBroadcastStormPortInactivateTrap	sysUpTime value	Object ID of ax3630sBroadcastStormPortInactivateTrap (1.3.6.1.4.1.21839.1.2.7.0.23)	ifIndex
57	ax3630sMulticastStormPortInactivateTrap	sysUpTime value	Object ID of ax3630sMulticastStormPortInactivateTrap (1.3.6.1.4.1.21839.1.2.7.0.24)	ifIndex
58	ax3630sUnicastStormPortInactivateTrap	sysUpTime value	Object ID of ax3630sUnicastStormPortInactivateTrap (1.3.6.1.4.1.21839.1.2.7.0.25)	ifIndex
59	ax3630sBroadcastStormRecoverTrap	sysUpTime value	Object ID of ax3630sBroadcastStormRecoverTrap (1.3.6.1.4.1.21839.1.2.7.0.26)	ifIndex
60	ax3630sMulticastStormRecoverTrap	sysUpTime value	Object ID of ax3630sMulticastStormRecoverTrap (1.3.6.1.4.1.21839.1.2.7.0.27)	ifIndex
61	ax3630sUnicastStormRecoverTrap	sysUpTime value	Object ID of ax3630sUnicastStormRecoverTrap (1.3.6.1.4.1.21839.1.2.7.0.28)	ifIndex
62	ax3630sEfmoamUdldPortInactivateTrap	sysUpTime value	Object ID of ax3630sEfmoamUdldPortInactivateTrap (1.3.6.1.4.1.21839.1.2.7.0.29)	ifIndex
63	ax3630sEfmoamLoopDetectPortInactivateTrap	sysUpTime value	Object ID of ax3630sEfmoamLoopDetectPortInactivateTrap (1.3.6.1.4.1.21839.1.2.7.0.30)	ifIndex
64	ax3630sUlrChangeSecondary	sysUpTime value	Object ID of ax3630sUlrChangeSecondary (1.3.6.1.4.1.21839.1.2.7.0.87)	axsUlrPortIfIndex axsUlrPairedPortIfIndex

#	Type	Trap-PDU and InformRequest-PDU data value		
		Variable-Binding [1](SysUpTime.0)	Variable-Binding [2](SnmpTrapOID.0)	Variable-Binding [3-]
65	ax3630sUlrChangePrimary	sysUpTime value	Object ID of ax3630sUlrChangePrimary (1.3.6.1.4.1.21839.1.2.7.0.88)	axsUlrPortIfIndex axsUlrPairedPortIfIndex
66	ax3630sUlrActivePortDown	sysUpTime value	Object ID of ax3630sUlrActivePortDown (1.3.6.1.4.1.21839.1.2.7.0.89)	axsUlrPortIfIndex axsUlrPairedPortIfIndex

Appendix

A. Private MIB names and object ID values

A. Private MIB names and object ID values

For the private MIBs, HP private MIBs, and InMon private MIBs used in the Switch, the MIB names and their corresponding object ID values are given below.

A.1 Private MIBs

Private MIB names and their corresponding object ID values are given below.

(1) axsStats group

The MIB names in the axsStats group and their corresponding object ID values are given below.

Table A-1: MIB names in the axsStats group and their corresponding object ID values

MIB name	Object ID
axsStats	1.3.6.1.4.1.21839.2.2.1.1
axsIfStats	1.3.6.1.4.1.21839.2.2.1.1.4
axsIfStatsTable	1.3.6.1.4.1.21839.2.2.1.1.4.1
axsIfStatsEntry	1.3.6.1.4.1.21839.2.2.1.1.4.1.1
axsIfStatsIndex	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.1
axsIfStatsName	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.2
axsIfStatsInMegaOctets	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.3
axsIfStatsInUcastMegaPkts	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.4
axsIfStatsInMulticastMegaPkts	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.5
axsIfStatsInBroadcastMegaPkts	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.6
axsIfStatsOutMegaOctets	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.7
axsIfStatsOutUcastMegaPkts	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.8
axsIfStatsOutMulticastMegaPkts	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.9
axsIfStatsOutBroadcastMegaPkts	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.10
axsIfStatsHighSpeed	1.3.6.1.4.1.21839.2.2.1.1.4.1.1.11
axsQoS	1.3.6.1.4.1.21839.2.2.1.1.6
axsEtherTxQoS	1.3.6.1.4.1.21839.2.2.1.1.6.1
axsEtherTxQoSStatsTable	1.3.6.1.4.1.21839.2.2.1.1.6.1.1
axsEtherTxQoSStatsEntry	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1
axsEtherTxQoSStatsIndex	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1.1
axsEtherTxQoSStatsMaxQnum	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1.2
axsEtherTxQoSStatsLimitQlen	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1.3
axsEtherTxQoSStatsTotalOutFrames	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1.4
axsEtherTxQoSStatsTotalOutBytesHigh	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1.5
axsEtherTxQoSStatsTotalOutBytesLow	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1.6
axsEtherTxQoSStatsTotalDiscardFrames	1.3.6.1.4.1.21839.2.2.1.1.6.1.1.1.7

MIB name	Object ID
axsEtherTxQoSStatsQueueTable	1.3.6.1.4.1.21839.2.2.1.1.6.1.2
axsEtherTxQoSStatsQueueEntry	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1
axsEtherTxQoSStatsQueueIndex	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.1
axsEtherTxQoSStatsQueueQueIndex	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.2
axsEtherTxQoSStatsQueueQlen	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.3
axsEtherTxQoSStatsQueueMaxQlen	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.4
axsEtherTxQoSStatsQueueDiscardFramesClass1	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.5
axsEtherTxQoSStatsQueueDiscardFramesClass2	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.6
axsEtherTxQoSStatsQueueDiscardFramesClass3	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.7
axsEtherTxQoSStatsQueueDiscardFramesClass4	1.3.6.1.4.1.21839.2.2.1.1.6.1.2.1.8
axsToCpuQoS	1.3.6.1.4.1.21839.2.2.1.1.6.11
axsToCpuQoSStatsTable	1.3.6.1.4.1.21839.2.2.1.1.6.11.1
axsToCpuQoSStatsEntry	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1
axsToCpuQoSStatsIndex	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1.1
axsToCpuQoSStatsMaxQnum	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1.2
axsToCpuQoSStatsLimitQlen	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1.3
axsToCpuQoSStatsTotalOutFrames	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1.4
axsToCpuQoSStatsTotalOutBytesHigh	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1.5
axsToCpuQoSStatsTotalOutBytesLow	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1.6
axsToCpuQoSStatsTotalDiscardFrames	1.3.6.1.4.1.21839.2.2.1.1.6.11.1.1.7
axsToCpuQoSStatsQueueTable	1.3.6.1.4.1.21839.2.2.1.1.6.11.2
axsToCpuQoSStatsQueueEntry	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1
axsToCpuQoSStatsQueueIndex	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.1
axsToCpuQoSStatsQueueQueIndex	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.2
axsToCpuQoSStatsQueueQlen	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.3
axsToCpuQoSStatsQueueMaxQlen	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.4
axsToCpuQoSStatsQueueDiscardFramesClass1	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.5
axsToCpuQoSStatsQueueDiscardFramesClass2	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.6
axsToCpuQoSStatsQueueDiscardFramesClass3	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.7
axsToCpuQoSStatsQueueDiscardFramesClass4	1.3.6.1.4.1.21839.2.2.1.1.6.11.2.1.8
axsDHCP	1.3.6.1.4.1.21839.2.2.1.1.10
axsDHCPAddrValue	1.3.6.1.4.1.21839.2.2.1.1.10.1
axsDHCPFreeAddrValue	1.3.6.1.4.1.21839.2.2.1.1.10.2

(2) axsGsrpMIB group

The MIB names in the axsGsrpMIB group and their corresponding object ID values are given below.

Table A-2: MIB names in the axsGsrpMIB group and their corresponding object ID values

MIB name	Object ID
axsGsrp	1.3.6.1.4.1.21839.2.2.1.4
axsGsrpGroupTable	1.3.6.1.4.1.21839.2.2.1.4.1
axsGsrpGroupEntry	1.3.6.1.4.1.21839.2.2.1.4.1.1
axsGsrpGroupId	1.3.6.1.4.1.21839.2.2.1.4.1.1.1
axsGsrpGroupRowStatus	1.3.6.1.4.1.21839.2.2.1.4.1.1.2
axsGsrpMacAddress	1.3.6.1.4.1.21839.2.2.1.4.1.1.3
axsGsrpAdvertiseHoldTime	1.3.6.1.4.1.21839.2.2.1.4.1.1.4
axsGsrpAdvertiseInterval	1.3.6.1.4.1.21839.2.2.1.4.1.1.5
axsGsrpSelectionPattern	1.3.6.1.4.1.21839.2.2.1.4.1.1.6
axsGsrpLayer3Redundancy	1.3.6.1.4.1.21839.2.2.1.4.1.1.7
axsGsrpVlanGroupTable	1.3.6.1.4.1.21839.2.2.1.4.2
axsGsrpVlanGroupEntry	1.3.6.1.4.1.21839.2.2.1.4.2.1
axsGsrpVlanGroupId	1.3.6.1.4.1.21839.2.2.1.4.2.1.1
axsGsrpVlanGroupRowStatus	1.3.6.1.4.1.21839.2.2.1.4.2.1.2
axsGsrpState	1.3.6.1.4.1.21839.2.2.1.4.2.1.3
axsGsrpPriority	1.3.6.1.4.1.21839.2.2.1.4.2.1.4
axsGsrpActivePorts	1.3.6.1.4.1.21839.2.2.1.4.2.1.5
axsGsrpTransitionToMasterCounts	1.3.6.1.4.1.21839.2.2.1.4.2.1.6
axsGsrpTransitionFromMasterCounts	1.3.6.1.4.1.21839.2.2.1.4.2.1.7
axsGsrpLastTransitionTime	1.3.6.1.4.1.21839.2.2.1.4.2.1.8
axsGsrpVirtualMacAddress	1.3.6.1.4.1.21839.2.2.1.4.2.1.9
axsGsrpNeighborGroupTable	1.3.6.1.4.1.21839.2.2.1.4.3
axsGsrpNeighborGroupEntry	1.3.6.1.4.1.21839.2.2.1.4.3.1
axsGsrpNeighborGroupId	1.3.6.1.4.1.21839.2.2.1.4.3.1.1
axsGsrpNeighborMacAddress	1.3.6.1.4.1.21839.2.2.1.4.3.1.2
axsGsrpNeighborAdvertiseHoldTime	1.3.6.1.4.1.21839.2.2.1.4.3.1.3
axsGsrpNeighborAdvertiseInterval	1.3.6.1.4.1.21839.2.2.1.4.3.1.4
axsGsrpNeighborSelectionPattern	1.3.6.1.4.1.21839.2.2.1.4.3.1.5
axsGsrpNeighborVlanGroupTable	1.3.6.1.4.1.21839.2.2.1.4.4
axsGsrpNeighborVlanGroupEntry	1.3.6.1.4.1.21839.2.2.1.4.4.1
axsGsrpNeighborVlanGroupId	1.3.6.1.4.1.21839.2.2.1.4.4.1.1

MIB name	Object ID
axsGsrpNeighborState	1.3.6.1.4.1.21839.2.2.1.4.4.1.2
axsGsrpNeighborPriority	1.3.6.1.4.1.21839.2.2.1.4.4.1.3
axsGsrpNeighborActivePorts	1.3.6.1.4.1.21839.2.2.1.4.4.1.4

(3) axsFdb group

The MIB names in the axsFdb group and their corresponding object ID values are given below.

Table A-3: MIB names in the axsFdb group and their corresponding object ID values

MIB name	Object ID
axsFdb	1.3.6.1.4.1.21839.2.2.1.5
axsFdbCounterTable	1.3.6.1.4.1.21839.2.2.1.5.1
axsFdbCounterEntry	1.3.6.1.4.1.21839.2.2.1.5.1.1
axsFdbCounterNifIndex	1.3.6.1.4.1.21839.2.2.1.5.1.1.1
axsFdbCounterLineIndex	1.3.6.1.4.1.21839.2.2.1.5.1.1.2
axsFdbCounterCounts	1.3.6.1.4.1.21839.2.2.1.5.1.1.3
axsFdbCounterType	1.3.6.1.4.1.21839.2.2.1.5.1.1.4
axsFdbCounterLimits	1.3.6.1.4.1.21839.2.2.1.5.1.1.5

(4) axsVlan group

The MIB names in the axsVlan group and their corresponding object ID values are given below.

Table A-4: MIB names in the axsVlan group and their corresponding object ID values

MIB name	Object ID
axsVlan	1.3.6.1.4.1.21839.2.2.1.6
axsVlanBridge	1.3.6.1.4.1.21839.2.2.1.6.1
axsVlanBridgeBase	1.3.6.1.4.1.21839.2.2.1.6.1.1
axsVBBaseTable	1.3.6.1.4.1.21839.2.2.1.6.1.1.1
axsVBBaseEntry	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1
axsVBBaseIndex	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.1
axsVBBaseBridgeAddress	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.2
axsVBBaseNumPorts	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.3
axsVBBaseType	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.4
axsVBBaseVlanIfIndex	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.5
axsVBBaseVlanType	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.6
axsVBBaseVlanID	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.7
axsVBBaseAssociatedPrimaryVlan	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.8
axsVBBaseIfStatus	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.9
axsVBBaseLastChange	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.10

MIB name	Object ID
axsVBBasePrivateVlanType	1.3.6.1.4.1.21839.2.2.1.6.1.1.1.1.11
axsVBBasePortTable	1.3.6.1.4.1.21839.2.2.1.6.1.1.2
axsVBBasePortEntry	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1
axsVBBasePortIndex	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.1
axsVBBasePort	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.2
axsVBBasePortIfIndex	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.3
axsVBBasePortCircuit	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.4
axsVBBasePortDelayExceededDiscards	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.5
axsVBBasePortMtuExceededDiscards	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.6
axsVBBasePortState	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.7
axsVBBasePortTaggedState	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.8
axsVBBasePortTranslatedTagID	1.3.6.1.4.1.21839.2.2.1.6.1.1.2.1.9
axsVlanBridgeStp	1.3.6.1.4.1.21839.2.2.1.6.1.2
axsVBStpTable	1.3.6.1.4.1.21839.2.2.1.6.1.2.1
axsVBStpEntry	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1
axsVBStpIndex	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.1
axsVBStpProtocolSpecification	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.2
axsVBStpPriority	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.3
axsVBStpTimeSinceTopologyChange	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.4
axsVBStpTopChanges	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.5
axsVBStpDesignatedRoot	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.6
axsVBStpRootCost	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.7
axsVBStpRootPort	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.8
axsVBStpMaxAge	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.9
axsVBStpHelloTime	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.10
axsVBStpHoldTime	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.11
axsVBStpForwardDelay	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.12
axsVBStpBridgeMaxAge	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.13
axsVBStpBridgeHelloTime	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.14
axsVBStpBridgeForwardDelay	1.3.6.1.4.1.21839.2.2.1.6.1.2.1.1.15
axsVBStpPortTable	1.3.6.1.4.1.21839.2.2.1.6.1.2.2
axsVBStpPortEntry	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1
axsVBStpPortIndex	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.1
axsVBStpPort	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.2

MIB name	Object ID
axsVBStpPortPriority	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.3
axsVBStpPortState	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.4
axsVBStpPortEnable	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.5
axsVBStpPortPathCost	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.6
axsVBStpPortDesignatedRoot	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.7
axsVBStpPortDesignatedCost	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.8
axsVBStpPortDesignatedBridge	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.9
axsVBStpPortDesignatedPort	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.10
axsVBStpPortForwardTransitions	1.3.6.1.4.1.21839.2.2.1.6.1.2.2.1.11
axsVlanBridgeTp	1.3.6.1.4.1.21839.2.2.1.6.1.4
axsVBTpTable	1.3.6.1.4.1.21839.2.2.1.6.1.4.1
axsVBTpEntry	1.3.6.1.4.1.21839.2.2.1.6.1.4.1.1
axsVBTpIndex	1.3.6.1.4.1.21839.2.2.1.6.1.4.1.1.1
axsVBTpLearnedEntryDiscards	1.3.6.1.4.1.21839.2.2.1.6.1.4.1.1.2
axsVBTpAgingTime	1.3.6.1.4.1.21839.2.2.1.6.1.4.1.1.3
axsVBTpFdbTable	1.3.6.1.4.1.21839.2.2.1.6.1.4.2
axsVBTpFdbEntry	1.3.6.1.4.1.21839.2.2.1.6.1.4.2.1
axsVBTpFdbIndex	1.3.6.1.4.1.21839.2.2.1.6.1.4.2.1.1
axsVBTpFdbAddress	1.3.6.1.4.1.21839.2.2.1.6.1.4.2.1.2
axsVBTpFdbPort	1.3.6.1.4.1.21839.2.2.1.6.1.4.2.1.3
axsVBTpFdbStatus	1.3.6.1.4.1.21839.2.2.1.6.1.4.2.1.4
axsVBTpPortTable	1.3.6.1.4.1.21839.2.2.1.6.1.4.3
axsVBTpPortEntry	1.3.6.1.4.1.21839.2.2.1.6.1.4.3.1
axsVBTpPortIndex	1.3.6.1.4.1.21839.2.2.1.6.1.4.3.1.1
axsVBTpPort	1.3.6.1.4.1.21839.2.2.1.6.1.4.3.1.2
axsVBTpPortMaxInfo	1.3.6.1.4.1.21839.2.2.1.6.1.4.3.1.3
axsVBTpPortInFrames	1.3.6.1.4.1.21839.2.2.1.6.1.4.3.1.4
axsVBTpPortOutFrames	1.3.6.1.4.1.21839.2.2.1.6.1.4.3.1.5
axsVBTpPortInDiscards	1.3.6.1.4.1.21839.2.2.1.6.1.4.3.1.6
axsVlanBridgeStatic	1.3.6.1.4.1.21839.2.2.1.6.1.5
axsVBStaticTable	1.3.6.1.4.1.21839.2.2.1.6.1.5.1
axsVBStaticEntry	1.3.6.1.4.1.21839.2.2.1.6.1.5.1.1
axsVBStaticIndex	1.3.6.1.4.1.21839.2.2.1.6.1.5.1.1.1
axsVBStaticAddress	1.3.6.1.4.1.21839.2.2.1.6.1.5.1.1.2

MIB name	Object ID
axsVBStaticReceivePort	1.3.6.1.4.1.21839.2.2.1.6.1.5.1.1.3
axsVBStaticAllowedToGoTo	1.3.6.1.4.1.21839.2.2.1.6.1.5.1.1.4
axsVBStaticStatus	1.3.6.1.4.1.21839.2.2.1.6.1.5.1.1.5
axsVlanBridgeMaxVlans	1.3.6.1.4.1.21839.2.2.1.6.1.101
axsVlanBridgeMaxSpans	1.3.6.1.4.1.21839.2.2.1.6.1.102
axsVlanTagTranslation	1.3.6.1.4.1.21839.2.2.1.6.10
axsVlanTagTranslationTable	1.3.6.1.4.1.21839.2.2.1.6.10.1
axsVlanTagTranslationEntry	1.3.6.1.4.1.21839.2.2.1.6.10.1.1
axsVlanTagTranslationVlanId	1.3.6.1.4.1.21839.2.2.1.6.10.1.1.1
axsVlanTagTranslationTranslatedId	1.3.6.1.4.1.21839.2.2.1.6.10.1.1.2
axsVlanTagTranslationPorts	1.3.6.1.4.1.21839.2.2.1.6.10.1.1.3

(5) axsOadp group

The MIB names in the axsOadp group and their corresponding object ID values are given below.

Table A-5: MIB names in the axsOadp group and their corresponding object ID values

MIB name	Object ID
axsOadp	1.3.6.1.4.1.21839.2.2.1.7
axsOadpMIBObjects	1.3.6.1.4.1.21839.2.2.1.7.1
axsOadpGlobalInfo	1.3.6.1.4.1.21839.2.2.1.7.1.1
axsOadpGlobalActive	1.3.6.1.4.1.21839.2.2.1.7.1.1.1
axsOadpGlobalCdpActive	1.3.6.1.4.1.21839.2.2.1.7.1.1.2
axsOadpGlobalMessageInterval	1.3.6.1.4.1.21839.2.2.1.7.1.1.3
axsOadpGlobalHoldTime	1.3.6.1.4.1.21839.2.2.1.7.1.1.4
axsOadpGlobalCacheLastChange	1.3.6.1.4.1.21839.2.2.1.7.1.1.5
axsOadpGlobalName	1.3.6.1.4.1.21839.2.2.1.7.1.1.6
axsOadpGlobalNameType	1.3.6.1.4.1.21839.2.2.1.7.1.1.7
axsOadpPortInfo	1.3.6.1.4.1.21839.2.2.1.7.1.2
axsOadpPortConfigTable	1.3.6.1.4.1.21839.2.2.1.7.1.2.1
axsOadpPortConfigEntry	1.3.6.1.4.1.21839.2.2.1.7.1.2.1.1
axsOadpPortConfigIfIndex	1.3.6.1.4.1.21839.2.2.1.7.1.2.1.1.1
axsOadpPortConfigActive	1.3.6.1.4.1.21839.2.2.1.7.1.2.1.1.2
axsOadpNeighborInfo	1.3.6.1.4.1.21839.2.2.1.7.1.3
axsOadpNeighborTable	1.3.6.1.4.1.21839.2.2.1.7.1.3.1
axsOadpNeighborEntry	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1
axsOadpIfIndex	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.1

MIB name	Object ID
axsOadpTagID	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.2
axsOadpNeighborIndex	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.3
axsOadpNeighborTagID	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.4
axsOadpNeighborVendorType	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.5
axsOadpNeighborSNMPAgentAddressType	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.6
axsOadpNeighborSNMPAgentAddress	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.7
axsOadpNeighborDescr	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.8
axsOadpNeighborDeviceID	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.9
axsOadpNeighborSlotPort	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.10
axsOadpNeighborIfIndex	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.11
axsOadpNeighborIfSpeed	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.12
axsOadpNeighborDeviceType	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.13
axsOadpNeighborService	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.14
axsOadpNeighborVTPMgmtDomain	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.15
axsOadpNeighborNativeVLAN	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.16
axsOadpNeighborDuplex	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.17
axsOadpNeighborApplianceID	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.18
axsOadpNeighborVlanID	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.19
axsOadpNeighborPowerConsumption	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.20
axsOadpNeighborMTU	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.21
axsOadpNeighborSysName	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.22
axsOadpNeighborSysObjectID	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.23
axsOadpNeighborSecondarySNMPAgentAddress Type	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.24
axsOadpNeighborSecondarySNMPAgentAddress	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.25
axsOadpNeighborPhysLocation	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.26
axsOadpNeighborCacheLastChange	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.27
axsOadpNeighborIfHighSpeed	1.3.6.1.4.1.21839.2.2.1.7.1.3.1.1.28
axsOadpMIBNotification	1.3.6.1.4.1.21839.2.2.1.7.2

(6) axsFlow group

The MIB names in the axsFlow group and their corresponding object ID values are given below.

Table A-6: MIB names in the axsFlow group and their corresponding object ID values

MIB name	Object ID
axsAccessFilterStats	1.3.6.1.4.1.21839.2.2.1.8.9

MIB name	Object ID
axsAccessFilterStatsInTable	1.3.6.1.4.1.21839.2.2.1.8.9.1
axsAccessFilterStatsInEntry	1.3.6.1.4.1.21839.2.2.1.8.9.1.1
axsAccessFilterStatsInifIndex	1.3.6.1.4.1.21839.2.2.1.8.9.1.1.1
axsAccessFilterStatsInifIndexType	1.3.6.1.4.1.21839.2.2.1.8.9.1.1.2
axsAccessFilterStatsInListIndex	1.3.6.1.4.1.21839.2.2.1.8.9.1.1.3
axsAccessFilterStatsInSequenceNumber	1.3.6.1.4.1.21839.2.2.1.8.9.1.1.4
axsAccessFilterStatsInListName	1.3.6.1.4.1.21839.2.2.1.8.9.1.1.5
axsAccessFilterStatsInMatchedPackets	1.3.6.1.4.1.21839.2.2.1.8.9.1.1.6
axsQosFlowStats	1.3.6.1.4.1.21839.2.2.1.8.11
axsQosFlowStatsInTable	1.3.6.1.4.1.21839.2.2.1.8.11.1
axsQosFlowStatsInEntry	1.3.6.1.4.1.21839.2.2.1.8.11.1.1
axsQosFlowStatsInifIndex	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.1
axsQosFlowStatsInifIndexType	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.2
axsQosFlowStatsInListIndex	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.3
axsQosFlowStatsInSequenceNumber	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.4
axsQosFlowStatsInListName	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.5
axsQosFlowStatsInMatchedPackets	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.6
axsQosFlowStatsInMatchedPacketsMinUnder	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.7
axsQosFlowStatsInMatchedPacketsMinOver	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.8
axsQosFlowStatsInMatchedPacketsMaxUnder	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.9
axsQosFlowStatsInMatchedPacketsMaxOver	1.3.6.1.4.1.21839.2.2.1.8.11.1.1.10

(7) axsL2ld group

The MIB names in the axsL2ld group and their corresponding object ID values are given below.

Table A-7: MIB names in the axsL2ld group and their corresponding object ID values

MIB name	Object ID
axsL2ld	1.3.6.1.4.1.21839.2.2.1.10
axsL2ldGlobalInfo	1.3.6.1.4.1.21839.2.2.1.10.1
axsL2ldVersion	1.3.6.1.4.1.21839.2.2.1.10.1.1
axsL2ldLoopDetectionId	1.3.6.1.4.1.21839.2.2.1.10.1.2
axsL2ldIntervalTime	1.3.6.1.4.1.21839.2.2.1.10.1.3
axsL2ldOutputRate	1.3.6.1.4.1.21839.2.2.1.10.1.4
axsL2ldThreshold	1.3.6.1.4.1.21839.2.2.1.10.1.5
axsL2ldHoldTime	1.3.6.1.4.1.21839.2.2.1.10.1.6
axsL2ldAutoRestoreTime	1.3.6.1.4.1.21839.2.2.1.10.1.7

MIB name	Object ID
axsL2ldConfigurationVlanPortCounts	1.3.6.1.4.1.21839.2.2.1.10.1.8
axsL2ldCapacityVlanPortCounts	1.3.6.1.4.1.21839.2.2.1.10.1.9
axsL2ldPortTable	1.3.6.1.4.1.21839.2.2.1.10.2
axsL2ldPortEntry	1.3.6.1.4.1.21839.2.2.1.10.2.1
axsL2ldPortIndex	1.3.6.1.4.1.21839.2.2.1.10.2.1.1
axsL2ldPortIfIndex	1.3.6.1.4.1.21839.2.2.1.10.2.1.2
axsL2ldPortStatus	1.3.6.1.4.1.21839.2.2.1.10.2.1.3
axsL2ldPortType	1.3.6.1.4.1.21839.2.2.1.10.2.1.4
axsL2ldPortDetectCount	1.3.6.1.4.1.21839.2.2.1.10.2.1.5
axsL2ldPortAutoRestoringTimer	1.3.6.1.4.1.21839.2.2.1.10.2.1.6
axsL2ldPortSourcePortIfindex	1.3.6.1.4.1.21839.2.2.1.10.2.1.7
axsL2ldPortDestinationPortIfindex	1.3.6.1.4.1.21839.2.2.1.10.2.1.8
axsL2ldPortSourceVlan	1.3.6.1.4.1.21839.2.2.1.10.2.1.9
axsL2ldPortHCInFrames	1.3.6.1.4.1.21839.2.2.1.10.2.1.10
axsL2ldPortHCOutFrames	1.3.6.1.4.1.21839.2.2.1.10.2.1.11
axsL2ldPortHCInDiscards	1.3.6.1.4.1.21839.2.2.1.10.2.1.12
axsL2ldPortInactiveCount	1.3.6.1.4.1.21839.2.2.1.10.2.1.13
axsL2ldPortLastInactiveTime	1.3.6.1.4.1.21839.2.2.1.10.2.1.14
axsL2ldPortLastInFramesTime	1.3.6.1.4.1.21839.2.2.1.10.2.1.15

(8) axsOspf group [OS-L3A]

The MIB names in the axsOspf group and their corresponding object ID values are given below.

Table A-8: MIB names in the axsOspf group and their corresponding object ID values

MIB name	Object ID
axsOspf	1.3.6.1.4.1.21839.2.2.1.14
axsOspfGeneralTable	1.3.6.1.4.1.21839.2.2.1.14.1
axsOspfGeneralEntry	1.3.6.1.4.1.21839.2.2.1.14.1.1
axsOspfGeneralDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.1.1.1
axsOspfRouterId	1.3.6.1.4.1.21839.2.2.1.14.1.1.2
axsOspfAdminStat	1.3.6.1.4.1.21839.2.2.1.14.1.1.3
axsOspfVersionNumber	1.3.6.1.4.1.21839.2.2.1.14.1.1.4
axsOspfAreaBdrRtrStatus	1.3.6.1.4.1.21839.2.2.1.14.1.1.5
axsOspfASBdrRtrStatus	1.3.6.1.4.1.21839.2.2.1.14.1.1.6
axsOspfExternLsaCount	1.3.6.1.4.1.21839.2.2.1.14.1.1.7
axsOspfExternLsaCksumSum	1.3.6.1.4.1.21839.2.2.1.14.1.1.8

MIB name	Object ID
axsOspfTOSSupport	1.3.6.1.4.1.21839.2.2.1.14.1.1.9
axsOspfOriginateNewLsas	1.3.6.1.4.1.21839.2.2.1.14.1.1.10
axsOspfRxNewLsas	1.3.6.1.4.1.21839.2.2.1.14.1.1.11
axsOspfExtLsdbLimit	1.3.6.1.4.1.21839.2.2.1.14.1.1.12
axsOspfMulticastExtensions	1.3.6.1.4.1.21839.2.2.1.14.1.1.13
axsOspfAreaTable	1.3.6.1.4.1.21839.2.2.1.14.2
axsOspfAreaEntry	1.3.6.1.4.1.21839.2.2.1.14.2.1
axsOspfAreaDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.2.1.1
axsOspfAreaId	1.3.6.1.4.1.21839.2.2.1.14.2.1.2
axsOspfAuthType	1.3.6.1.4.1.21839.2.2.1.14.2.1.3
axsOspfImportAsExtern	1.3.6.1.4.1.21839.2.2.1.14.2.1.4
axsOspfSpfRuns	1.3.6.1.4.1.21839.2.2.1.14.2.1.5
axsOspfAreaBdrRtrCount	1.3.6.1.4.1.21839.2.2.1.14.2.1.6
axsOspfAsBdrRtrCount	1.3.6.1.4.1.21839.2.2.1.14.2.1.7
axsOspfAreaLsaCount	1.3.6.1.4.1.21839.2.2.1.14.2.1.8
axsOspfAreaLsaCksumSum	1.3.6.1.4.1.21839.2.2.1.14.2.1.9
axsOspfAreaSummary	1.3.6.1.4.1.21839.2.2.1.14.2.1.10
axsOspfAreaStatus	1.3.6.1.4.1.21839.2.2.1.14.2.1.11
axsOspfStubAreaTable	1.3.6.1.4.1.21839.2.2.1.14.3
axsOspfStubAreaEntry	1.3.6.1.4.1.21839.2.2.1.14.3.1
axsOspfStubDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.3.1.1
axsOspfStubAreaId	1.3.6.1.4.1.21839.2.2.1.14.3.1.2
axsOspfStubTOS	1.3.6.1.4.1.21839.2.2.1.14.3.1.3
axsOspfStubMetric	1.3.6.1.4.1.21839.2.2.1.14.3.1.4
axsOspfStubStatus	1.3.6.1.4.1.21839.2.2.1.14.3.1.5
axsOspfStubMetricType	1.3.6.1.4.1.21839.2.2.1.14.3.1.6
axsOspfLsdbTable	1.3.6.1.4.1.21839.2.2.1.14.4
axsOspfLsdbEntry	1.3.6.1.4.1.21839.2.2.1.14.4.1
axsOspfLsdbDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.4.1.1
axsOspfLsdbAreaId	1.3.6.1.4.1.21839.2.2.1.14.4.1.2
axsOspfLsdbType	1.3.6.1.4.1.21839.2.2.1.14.4.1.3
axsOspfLsdbLsid	1.3.6.1.4.1.21839.2.2.1.14.4.1.4
axsOspfLsdbRouterId	1.3.6.1.4.1.21839.2.2.1.14.4.1.5
axsOspfLsdbSequence	1.3.6.1.4.1.21839.2.2.1.14.4.1.6

MIB name	Object ID
axsOspfLsdbAge	1.3.6.1.4.1.21839.2.2.1.14.4.1.7
axsOspfLsdbChecksum	1.3.6.1.4.1.21839.2.2.1.14.4.1.8
axsOspfLsdbAdvertisement	1.3.6.1.4.1.21839.2.2.1.14.4.1.9
axsOspfAreaRangeTable	1.3.6.1.4.1.21839.2.2.1.14.5
axsOspfAreaRangeEntry	1.3.6.1.4.1.21839.2.2.1.14.5.1
axsOspfAreaRangeDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.5.1.1
axsOspfAreaRangeAreaId	1.3.6.1.4.1.21839.2.2.1.14.5.1.2
axsOspfAreaRangeNet	1.3.6.1.4.1.21839.2.2.1.14.5.1.3
axsOspfAreaRangeMask	1.3.6.1.4.1.21839.2.2.1.14.5.1.4
axsOspfAreaRangeStatus	1.3.6.1.4.1.21839.2.2.1.14.5.1.5
axsOspfAreaRangeEffect	1.3.6.1.4.1.21839.2.2.1.14.5.1.6
axsOspfIfTable	1.3.6.1.4.1.21839.2.2.1.14.7
axsOspfIfEntry	1.3.6.1.4.1.21839.2.2.1.14.7.1
axsOspfIfDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.7.1.1
axsOspfIfIpAddress	1.3.6.1.4.1.21839.2.2.1.14.7.1.2
axsOspfAddressLessIf	1.3.6.1.4.1.21839.2.2.1.14.7.1.3
axsOspfIfAreaId	1.3.6.1.4.1.21839.2.2.1.14.7.1.4
axsOspfIfType	1.3.6.1.4.1.21839.2.2.1.14.7.1.5
axsOspfIfAdminStat	1.3.6.1.4.1.21839.2.2.1.14.7.1.6
axsOspfIfRtrPriority	1.3.6.1.4.1.21839.2.2.1.14.7.1.7
axsOspfIfTransitDelay	1.3.6.1.4.1.21839.2.2.1.14.7.1.8
axsOspfIfRetransInterval	1.3.6.1.4.1.21839.2.2.1.14.7.1.9
axsOspfIfHelloInterval	1.3.6.1.4.1.21839.2.2.1.14.7.1.10
axsOspfIfRtrDeadInterval	1.3.6.1.4.1.21839.2.2.1.14.7.1.11
axsOspfIfPollInterval	1.3.6.1.4.1.21839.2.2.1.14.7.1.12
axsOspfIfState	1.3.6.1.4.1.21839.2.2.1.14.7.1.13
axsOspfIfDesignatedRouter	1.3.6.1.4.1.21839.2.2.1.14.7.1.14
axsOspfIfBackupDesignatedRouter	1.3.6.1.4.1.21839.2.2.1.14.7.1.15
axsOspfIfEvents	1.3.6.1.4.1.21839.2.2.1.14.7.1.16
axsOspfIfAuthKey	1.3.6.1.4.1.21839.2.2.1.14.7.1.17
axsOspfIfStatus	1.3.6.1.4.1.21839.2.2.1.14.7.1.18
axsOspfIfMulticastForwarding	1.3.6.1.4.1.21839.2.2.1.14.7.1.19
axsOspfIfMetricTable	1.3.6.1.4.1.21839.2.2.1.14.8
axsOspfIfMetricEntry	1.3.6.1.4.1.21839.2.2.1.14.8.1

MIB name	Object ID
axsOspfIfMetricDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.8.1.1
axsOspfIfMetricIpAddress	1.3.6.1.4.1.21839.2.2.1.14.8.1.2
axsOspfIfMetricAddressLessIf	1.3.6.1.4.1.21839.2.2.1.14.8.1.3
axsOspfIfMetricTOS	1.3.6.1.4.1.21839.2.2.1.14.8.1.4
axsOspfIfMetricValue	1.3.6.1.4.1.21839.2.2.1.14.8.1.5
axsOspfIfMetricStatus	1.3.6.1.4.1.21839.2.2.1.14.8.1.6
axsOspfVirtIfTable	1.3.6.1.4.1.21839.2.2.1.14.9
axsOspfVirtIfEntry	1.3.6.1.4.1.21839.2.2.1.14.9.1
axsOspfVirtIfDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.9.1.1
axsOspfVirtIfAreaId	1.3.6.1.4.1.21839.2.2.1.14.9.1.2
axsOspfVirtIfNeighbor	1.3.6.1.4.1.21839.2.2.1.14.9.1.3
axsOspfVirtIfTransitDelay	1.3.6.1.4.1.21839.2.2.1.14.9.1.4
axsOspfVirtIfRetransInterval	1.3.6.1.4.1.21839.2.2.1.14.9.1.5
axsOspfVirtIfHelloInterval	1.3.6.1.4.1.21839.2.2.1.14.9.1.6
axsOspfVirtIfRtrDeadInterval	1.3.6.1.4.1.21839.2.2.1.14.9.1.7
axsOspfVirtIfState	1.3.6.1.4.1.21839.2.2.1.14.9.1.8
axsOspfVirtIfEvents	1.3.6.1.4.1.21839.2.2.1.14.9.1.9
axsOspfVirtIfAuthKey	1.3.6.1.4.1.21839.2.2.1.14.9.1.10
axsOspfVirtIfStatus	1.3.6.1.4.1.21839.2.2.1.14.9.1.11
axsOspfNbrTable	1.3.6.1.4.1.21839.2.2.1.14.10
axsOspfNbrEntry	1.3.6.1.4.1.21839.2.2.1.14.10.1
axsOspfNbrDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.10.1.1
axsOspfNbrIpAddr	1.3.6.1.4.1.21839.2.2.1.14.10.1.2
axsOspfNbrAddressLessIndex	1.3.6.1.4.1.21839.2.2.1.14.10.1.3
axsOspfNbrRtrId	1.3.6.1.4.1.21839.2.2.1.14.10.1.4
axsOspfNbrOptions	1.3.6.1.4.1.21839.2.2.1.14.10.1.5
axsOspfNbrPriority	1.3.6.1.4.1.21839.2.2.1.14.10.1.6
axsOspfNbrState	1.3.6.1.4.1.21839.2.2.1.14.10.1.7
axsOspfNbrEvents	1.3.6.1.4.1.21839.2.2.1.14.10.1.8
axsOspfNbrLsRetransQLen	1.3.6.1.4.1.21839.2.2.1.14.10.1.9
axsOspfNbmaNbrStatus	1.3.6.1.4.1.21839.2.2.1.14.10.1.10
axsOspfNbmaNbrPermanence	1.3.6.1.4.1.21839.2.2.1.14.10.1.11
axsOspfVirtNbrTable	1.3.6.1.4.1.21839.2.2.1.14.11
axsOspfVirtNbrEntry	1.3.6.1.4.1.21839.2.2.1.14.11.1

MIB name	Object ID
axsOspfVirtNbrDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.11.1.1
axsOspfVirtNbrArea	1.3.6.1.4.1.21839.2.2.1.14.11.1.2
axsOspfVirtNbrRtrId	1.3.6.1.4.1.21839.2.2.1.14.11.1.3
axsOspfVirtNbrIpAddr	1.3.6.1.4.1.21839.2.2.1.14.11.1.4
axsOspfVirtNbrOptions	1.3.6.1.4.1.21839.2.2.1.14.11.1.5
axsOspfVirtNbrState	1.3.6.1.4.1.21839.2.2.1.14.11.1.6
axsOspfVirtNbrEvents	1.3.6.1.4.1.21839.2.2.1.14.11.1.7
axsOspfVirtNbrLsRetransQLen	1.3.6.1.4.1.21839.2.2.1.14.11.1.8
axsOspfExtLsdbTable	1.3.6.1.4.1.21839.2.2.1.14.12
axsOspfExtLsdbEntry	1.3.6.1.4.1.21839.2.2.1.14.12.1
axsOspfExtLsdbDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.12.1.1
axsOspfExtLsdbType	1.3.6.1.4.1.21839.2.2.1.14.12.1.2
axsOspfExtLsdbLsid	1.3.6.1.4.1.21839.2.2.1.14.12.1.3
axsOspfExtLsdbRouterId	1.3.6.1.4.1.21839.2.2.1.14.12.1.4
axsOspfExtLsdbSequence	1.3.6.1.4.1.21839.2.2.1.14.12.1.5
axsOspfExtLsdbAge	1.3.6.1.4.1.21839.2.2.1.14.12.1.6
axsOspfExtLsdbChecksum	1.3.6.1.4.1.21839.2.2.1.14.12.1.7
axsOspfExtLsdbAdvertisement	1.3.6.1.4.1.21839.2.2.1.14.12.1.8
axsOspfAreaAggregateTable	1.3.6.1.4.1.21839.2.2.1.14.14
axsOspfAreaAggregateEntry	1.3.6.1.4.1.21839.2.2.1.14.14.1
axsOspfAreaAggregateDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.14.1.1
axsOspfAreaAggregateAreaID	1.3.6.1.4.1.21839.2.2.1.14.14.1.2
axsOspfAreaAggregateLsdbType	1.3.6.1.4.1.21839.2.2.1.14.14.1.3
axsOspfAreaAggregateNet	1.3.6.1.4.1.21839.2.2.1.14.14.1.4
axsOspfAreaAggregateMask	1.3.6.1.4.1.21839.2.2.1.14.14.1.5
axsOspfAreaAggregateStatus	1.3.6.1.4.1.21839.2.2.1.14.14.1.6
axsOspfAreaAggregateEffect	1.3.6.1.4.1.21839.2.2.1.14.14.1.7
axsOspfTrap	1.3.6.1.4.1.21839.2.2.1.14.16
axsOspfTrapControlTable	1.3.6.1.4.1.21839.2.2.1.14.16.1
axsOspfTrapControlEntry	1.3.6.1.4.1.21839.2.2.1.14.16.1.1
axsOspfTrapDomainNumber	1.3.6.1.4.1.21839.2.2.1.14.16.1.1.1
axsOspfSetTrap	1.3.6.1.4.1.21839.2.2.1.14.16.1.1.2
axsOspfConfigErrorType	1.3.6.1.4.1.21839.2.2.1.14.16.1.1.3
axsOspfPacketType	1.3.6.1.4.1.21839.2.2.1.14.16.1.1.4

MIB name	Object ID
axsOspfPacketSrc	1.3.6.1.4.1.21839.2.2.1.14.16.1.1.5
axsOspfTraps	1.3.6.1.4.1.21839.2.2.1.14.16.2

(9) axsOspfv3MIB group [OS-L3A]

The MIB names in the axsOspfv3MIB group and their corresponding object ID values are given below.

Table A-9: MIB names in the axsOspfv3MIB group and their corresponding object ID values

MIB name	Object ID
axsOspfv3	1.3.6.1.4.1.21839.2.2.1.15
axsOspfv3GeneralTable	1.3.6.1.4.1.21839.2.2.1.15.1
axsOspfv3GeneralEntry	1.3.6.1.4.1.21839.2.2.1.15.1.1
axsOspfv3GeneralDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.1.1.1
axsOspfv3RouterId	1.3.6.1.4.1.21839.2.2.1.15.1.1.2
axsOspfv3AdminStat	1.3.6.1.4.1.21839.2.2.1.15.1.1.3
axsOspfv3VersionNumber	1.3.6.1.4.1.21839.2.2.1.15.1.1.4
axsOspfv3AreaBdrRtrStatus	1.3.6.1.4.1.21839.2.2.1.15.1.1.5
axsOspfv3ASBdrRtrStatus	1.3.6.1.4.1.21839.2.2.1.15.1.1.6
axsOspfv3AsScopeLsaCount	1.3.6.1.4.1.21839.2.2.1.15.1.1.7
axsOspfv3AsScopeLsaCksumSum	1.3.6.1.4.1.21839.2.2.1.15.1.1.8
axsOspfv3OriginateNewLsas	1.3.6.1.4.1.21839.2.2.1.15.1.1.9
axsOspfv3RxNewLsas	1.3.6.1.4.1.21839.2.2.1.15.1.1.10
axsOspfv3ExtAreaLsdbLimit	1.3.6.1.4.1.21839.2.2.1.15.1.1.11
axsOspfv3MulticastExtensions	1.3.6.1.4.1.21839.2.2.1.15.1.1.12
axsOspfv3DemandExtensions	1.3.6.1.4.1.21839.2.2.1.15.1.1.14
axsOspfv3TrafficEngineeringSupport	1.3.6.1.4.1.21839.2.2.1.15.1.1.15
axsOspfv3AreaTable	1.3.6.1.4.1.21839.2.2.1.15.2
axsOspfv3AreaEntry	1.3.6.1.4.1.21839.2.2.1.15.2.1
axsOspfv3AreaDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.2.1.1
axsOspfv3AreaId	1.3.6.1.4.1.21839.2.2.1.15.2.1.2
axsOspfv3ImportAsExtern	1.3.6.1.4.1.21839.2.2.1.15.2.1.3
axsOspfv3SpfRuns	1.3.6.1.4.1.21839.2.2.1.15.2.1.4
axsOspfv3AreaBdrRtrCount	1.3.6.1.4.1.21839.2.2.1.15.2.1.5
axsOspfv3AsBdrRtrCount	1.3.6.1.4.1.21839.2.2.1.15.2.1.6
axsOspfv3AreaScopeLsaCount	1.3.6.1.4.1.21839.2.2.1.15.2.1.7
axsOspfv3AreaScopeLsaCksumSum	1.3.6.1.4.1.21839.2.2.1.15.2.1.8

MIB name	Object ID
axsOspfv3AreaSummary	1.3.6.1.4.1.21839.2.2.1.15.2.1.9
axsOspfv3AreaStatus	1.3.6.1.4.1.21839.2.2.1.15.2.1.10
axsOspfv3StubMetric	1.3.6.1.4.1.21839.2.2.1.15.2.1.11
axsOspfv3AsLsdbTable	1.3.6.1.4.1.21839.2.2.1.15.3
axsOspfv3AsLsdbEntry	1.3.6.1.4.1.21839.2.2.1.15.3.1
axsOspfv3AsLsdbDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.3.1.1
axsOspfv3AsLsdbType	1.3.6.1.4.1.21839.2.2.1.15.3.1.2
axsOspfv3AsLsdbRouterId	1.3.6.1.4.1.21839.2.2.1.15.3.1.3
axsOspfv3AsLsdbLsid	1.3.6.1.4.1.21839.2.2.1.15.3.1.4
axsOspfv3AsLsdbSequence	1.3.6.1.4.1.21839.2.2.1.15.3.1.5
axsOspfv3AsLsdbAge	1.3.6.1.4.1.21839.2.2.1.15.3.1.6
axsOspfv3AsLsdbChecksum	1.3.6.1.4.1.21839.2.2.1.15.3.1.7
axsOspfv3AsLsdbAdvertisement	1.3.6.1.4.1.21839.2.2.1.15.3.1.8
axsOspfv3AreaLsdbTable	1.3.6.1.4.1.21839.2.2.1.15.4
axsOspfv3AreaLsdbEntry	1.3.6.1.4.1.21839.2.2.1.15.4.1
axsOspfv3AreaLsdbDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.4.1.1
axsOspfv3AreaLsdbAreaId	1.3.6.1.4.1.21839.2.2.1.15.4.1.2
axsOspfv3AreaLsdbType	1.3.6.1.4.1.21839.2.2.1.15.4.1.3
axsOspfv3AreaLsdbRouterId	1.3.6.1.4.1.21839.2.2.1.15.4.1.4
axsOspfv3AreaLsdbLsid	1.3.6.1.4.1.21839.2.2.1.15.4.1.5
axsOspfv3AreaLsdbSequence	1.3.6.1.4.1.21839.2.2.1.15.4.1.6
axsOspfv3AreaLsdbAge	1.3.6.1.4.1.21839.2.2.1.15.4.1.7
axsOspfv3AreaLsdbChecksum	1.3.6.1.4.1.21839.2.2.1.15.4.1.8
axsOspfv3AreaLsdbAdvertisement	1.3.6.1.4.1.21839.2.2.1.15.4.1.9
axsOspfv3LinkLsdbTable	1.3.6.1.4.1.21839.2.2.1.15.5
axsOspfv3LinkLsdbEntry	1.3.6.1.4.1.21839.2.2.1.15.5.1
axsOspfv3LinkLsdbDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.5.1.1
axsOspfv3LinkLsdbIfIndex	1.3.6.1.4.1.21839.2.2.1.15.5.1.2
axsOspfv3LinkLsdbType	1.3.6.1.4.1.21839.2.2.1.15.5.1.3
axsOspfv3LinkLsdbRouterId	1.3.6.1.4.1.21839.2.2.1.15.5.1.4
axsOspfv3LinkLsdbLsid	1.3.6.1.4.1.21839.2.2.1.15.5.1.5
axsOspfv3LinkLsdbSequence	1.3.6.1.4.1.21839.2.2.1.15.5.1.6
axsOspfv3LinkLsdbAge	1.3.6.1.4.1.21839.2.2.1.15.5.1.7
axsOspfv3LinkLsdbChecksum	1.3.6.1.4.1.21839.2.2.1.15.5.1.8

MIB name	Object ID
axsOspfv3LinkLsdbAdvertisement	1.3.6.1.4.1.21839.2.2.1.15.5.1.9
axsOspfv3IfTable	1.3.6.1.4.1.21839.2.2.1.15.7
axsOspfv3IfEntry	1.3.6.1.4.1.21839.2.2.1.15.7.1
axsOspfv3IfDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.7.1.1
axsOspfv3IfIndex	1.3.6.1.4.1.21839.2.2.1.15.7.1.2
axsOspfv3IfAreaId	1.3.6.1.4.1.21839.2.2.1.15.7.1.3
axsOspfv3IfType	1.3.6.1.4.1.21839.2.2.1.15.7.1.4
axsOspfv3IfAdminStat	1.3.6.1.4.1.21839.2.2.1.15.7.1.5
axsOspfv3IfRtrPriority	1.3.6.1.4.1.21839.2.2.1.15.7.1.6
axsOspfv3IfTransitDelay	1.3.6.1.4.1.21839.2.2.1.15.7.1.7
axsOspfv3IfRetransInterval	1.3.6.1.4.1.21839.2.2.1.15.7.1.8
axsOspfv3IfHelloInterval	1.3.6.1.4.1.21839.2.2.1.15.7.1.9
axsOspfv3IfRtrDeadInterval	1.3.6.1.4.1.21839.2.2.1.15.7.1.10
axsOspfv3IfPollInterval	1.3.6.1.4.1.21839.2.2.1.15.7.1.11
axsOspfv3IfState	1.3.6.1.4.1.21839.2.2.1.15.7.1.12
axsOspfv3IfDesignatedRouter	1.3.6.1.4.1.21839.2.2.1.15.7.1.13
axsOspfv3IfBackupDesignatedRouter	1.3.6.1.4.1.21839.2.2.1.15.7.1.15
axsOspfv3IfEvents	1.3.6.1.4.1.21839.2.2.1.15.7.1.16
axsOspfv3IfStatus	1.3.6.1.4.1.21839.2.2.1.15.7.1.18
axsOspfv3IfMulticastForwarding	1.3.6.1.4.1.21839.2.2.1.15.7.1.19
axsOspfv3IfDemand	1.3.6.1.4.1.21839.2.2.1.15.7.1.20
axsOspfv3IfMetricValue	1.3.6.1.4.1.21839.2.2.1.15.7.1.21
axsOspfv3IfLinkScopeLsaCount	1.3.6.1.4.1.21839.2.2.1.15.7.1.22
axsOspfv3IfLinkLsaCksumSum	1.3.6.1.4.1.21839.2.2.1.15.7.1.23
axsOspfv3IfInstId	1.3.6.1.4.1.21839.2.2.1.15.7.1.24
axsOspfv3VirtIfTable	1.3.6.1.4.1.21839.2.2.1.15.8
axsOspfv3VirtIfEntry	1.3.6.1.4.1.21839.2.2.1.15.8.1
axsOspfv3VirtIfDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.8.1.1
axsOspfv3VirtIfAreaId	1.3.6.1.4.1.21839.2.2.1.15.8.1.2
axsOspfv3VirtIfNeighbor	1.3.6.1.4.1.21839.2.2.1.15.8.1.3
axsOspfv3VirtIfIndex	1.3.6.1.4.1.21839.2.2.1.15.8.1.4
axsOspfv3VirtIfTransitDelay	1.3.6.1.4.1.21839.2.2.1.15.8.1.5
axsOspfv3VirtIfRetransInterval	1.3.6.1.4.1.21839.2.2.1.15.8.1.6
axsOspfv3VirtIfHelloInterval	1.3.6.1.4.1.21839.2.2.1.15.8.1.7

MIB name	Object ID
axsOspfv3VirtIfRtrDeadInterval	1.3.6.1.4.1.21839.2.2.1.15.8.1.8
axsOspfv3VirtIfState	1.3.6.1.4.1.21839.2.2.1.15.8.1.9
axsOspfv3VirtIfEvents	1.3.6.1.4.1.21839.2.2.1.15.8.1.10
axsOspfv3VirtIfStatus	1.3.6.1.4.1.21839.2.2.1.15.8.1.11
axsOspfv3VirtIfLinkScopeLsaCount	1.3.6.1.4.1.21839.2.2.1.15.8.1.12
axsOspfv3VirtIfLinkLsaCksumSum	1.3.6.1.4.1.21839.2.2.1.15.8.1.13
axsOspfv3NbrTable	1.3.6.1.4.1.21839.2.2.1.15.9
axsOspfv3NbrEntry	1.3.6.1.4.1.21839.2.2.1.15.9.1
axsOspfv3NbrDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.9.1.1
axsOspfv3NbrIfIndex	1.3.6.1.4.1.21839.2.2.1.15.9.1.2
axsOspfv3NbrIpv6Addr	1.3.6.1.4.1.21839.2.2.1.15.9.1.3
axsOspfv3NbrRtrId	1.3.6.1.4.1.21839.2.2.1.15.9.1.4
axsOspfv3NbrOptions	1.3.6.1.4.1.21839.2.2.1.15.9.1.5
axsOspfv3NbrPriority	1.3.6.1.4.1.21839.2.2.1.15.9.1.6
axsOspfv3NbrState	1.3.6.1.4.1.21839.2.2.1.15.9.1.7
axsOspfv3NbrEvents	1.3.6.1.4.1.21839.2.2.1.15.9.1.8
axsOspfv3NbrLsRetransQLen	1.3.6.1.4.1.21839.2.2.1.15.9.1.9
axsOspfv3NbrHelloSuppressed	1.3.6.1.4.1.21839.2.2.1.15.9.1.12
axsOspfv3NbrIfId	1.3.6.1.4.1.21839.2.2.1.15.9.1.13
axsOspfv3VirtNbrTable	1.3.6.1.4.1.21839.2.2.1.15.10
axsOspfv3VirtNbrEntry	1.3.6.1.4.1.21839.2.2.1.15.10.1
axsOspfv3VirtNbrDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.10.1.1
axsOspfv3VirtNbrArea	1.3.6.1.4.1.21839.2.2.1.15.10.1.2
axsOspfv3VirtNbrRtrId	1.3.6.1.4.1.21839.2.2.1.15.10.1.3
axsOspfv3VirtNbrIfIndex	1.3.6.1.4.1.21839.2.2.1.15.10.1.4
axsOspfv3VirtNbrIpv6Addr	1.3.6.1.4.1.21839.2.2.1.15.10.1.5
axsOspfv3VirtNbrOptions	1.3.6.1.4.1.21839.2.2.1.15.10.1.6
axsOspfv3VirtNbrState	1.3.6.1.4.1.21839.2.2.1.15.10.1.7
axsOspfv3VirtNbrEvents	1.3.6.1.4.1.21839.2.2.1.15.10.1.8
axsOspfv3VirtNbrLsRetransQLen	1.3.6.1.4.1.21839.2.2.1.15.10.1.9
axsOspfv3VirtNbrHelloSuppressed	1.3.6.1.4.1.21839.2.2.1.15.10.1.10
axsOspfv3VirtNbrIfId	1.3.6.1.4.1.21839.2.2.1.15.10.1.11
axsOspfv3AreaAggregateTable	1.3.6.1.4.1.21839.2.2.1.15.11
axsOspfv3AreaAggregateEntry	1.3.6.1.4.1.21839.2.2.1.15.11.1

MIB name	Object ID
axsOspfv3AreaAggregateDomainNumber	1.3.6.1.4.1.21839.2.2.1.15.11.1.1
axsOspfv3AreaAggregateAreaID	1.3.6.1.4.1.21839.2.2.1.15.11.1.2
axsOspfv3AreaAggregateAreaLsdbType	1.3.6.1.4.1.21839.2.2.1.15.11.1.3
axsOspfv3AreaAggregateIndex	1.3.6.1.4.1.21839.2.2.1.15.11.1.4
axsOspfv3AreaAggregatePrefix	1.3.6.1.4.1.21839.2.2.1.15.11.1.5
axsOspfv3AreaAggregatePrefixLen	1.3.6.1.4.1.21839.2.2.1.15.11.1.6
axsOspfv3AreaAggregateStatus	1.3.6.1.4.1.21839.2.2.1.15.11.1.7
axsOspfv3AreaAggregateEffect	1.3.6.1.4.1.21839.2.2.1.15.11.1.8

(10) axsUlr group

The MIB names in the axsUlr group and their corresponding object ID values are given below.

Table A-10: MIB names in the axsUlr group and their corresponding object ID values

MIB name	Object ID
axsUlr	1.3.6.1.4.1.21839.2.2.1.20
axsUlrGlobalInfo	1.3.6.1.4.1.21839.2.2.1.20.1
axsUlrID	1.3.6.1.4.1.21839.2.2.1.20.1.2
axsUlrConfigurationPortCounts	1.3.6.1.4.1.21839.2.2.1.20.1.3
axsUlrStartupActivePortSelection	1.3.6.1.4.1.21839.2.2.1.20.1.4
axsUlrPortTable	1.3.6.1.4.1.21839.2.2.1.20.2
axsUlrPortEntry	1.3.6.1.4.1.21839.2.2.1.20.2.1
axsUlrPortIfIndex	1.3.6.1.4.1.21839.2.2.1.20.2.1.1
axsUlrPortType	1.3.6.1.4.1.21839.2.2.1.20.2.1.2
axsUlrPairedPortIfIndex	1.3.6.1.4.1.21839.2.2.1.20.2.1.3
axsUlrPortStatus	1.3.6.1.4.1.21839.2.2.1.20.2.1.4
axsUlrPairedPortStatus	1.3.6.1.4.1.21839.2.2.1.20.2.1.5
axsUlrAutoChangeToPrimary	1.3.6.1.4.1.21839.2.2.1.20.2.1.6
axsUlrAutoChangeToPrimaryDelay	1.3.6.1.4.1.21839.2.2.1.20.2.1.7
axsUlrAutoChangeToPrimaryRest	1.3.6.1.4.1.21839.2.2.1.20.2.1.8
axsUlrStartupActivePortSelectionStatus	1.3.6.1.4.1.21839.2.2.1.20.2.1.9
axsUlrFlushTransmit	1.3.6.1.4.1.21839.2.2.1.20.2.1.10
axsUlrFlushVlan	1.3.6.1.4.1.21839.2.2.1.20.2.1.11
axsUlrMacAddressUpdateTransmit	1.3.6.1.4.1.21839.2.2.1.20.2.1.12
axsUlrLastActivePortDecisionTime	1.3.6.1.4.1.21839.2.2.1.20.2.1.13
axsUlrLastFlushTransmitTime	1.3.6.1.4.1.21839.2.2.1.20.2.1.14
axsUlrLastMacUpdateTransmitTime	1.3.6.1.4.1.21839.2.2.1.20.2.1.15

MIB name	Object ID
axsUlrLastChangeFactor	1.3.6.1.4.1.21839.2.2.1.20.2.1.16
axsUlrFlushTransmitTotalPackets	1.3.6.1.4.1.21839.2.2.1.20.2.1.17
axsUlrMacAddressUpdateTransmitTotalPackets	1.3.6.1.4.1.21839.2.2.1.20.2.1.18
axsUlrMacAddressUpdateTransmitOverFlow	1.3.6.1.4.1.21839.2.2.1.20.2.1.19
axsUlrActiveDecisionCount	1.3.6.1.4.1.21839.2.2.1.20.2.1.20

(11) axsStatic group

The MIB names in the axsStatic group and their corresponding object ID values are given below.

Table A-11: MIB names in the axsStatic group and their corresponding object ID values

MIB name	Object ID
axsStatic	1.3.6.1.4.1.21839.2.2.1.38
axsStaticTable	1.3.6.1.4.1.21839.2.2.1.38.1
axsStaticGatewayEntry	1.3.6.1.4.1.21839.2.2.1.38.1.1
axsStaticGatewayAddr	1.3.6.1.4.1.21839.2.2.1.38.1.1.1
axsStaticGatewayState	1.3.6.1.4.1.21839.2.2.1.38.1.1.2
axsStaticIpv6Table	1.3.6.1.4.1.21839.2.2.1.38.3
axsStaticIpv6GatewayEntry	1.3.6.1.4.1.21839.2.2.1.38.3.1
axsStaticIpv6Ifindex	1.3.6.1.4.1.21839.2.2.1.38.3.1.1
axsStaticIpv6GatewayAddr	1.3.6.1.4.1.21839.2.2.1.38.3.1.2
axsStaticIpv6GatewayState	1.3.6.1.4.1.21839.2.2.1.38.3.1.3
axsStaticTrap	1.3.6.1.4.1.21839.2.2.1.38.2

(12) axsTrackObjectMIB group [AX3640S] [OS-L3A]

The MIB names in the axsTrackObjectMIB group and their corresponding object ID values are given below.

Table A-12: MIB names in the axsTrackObjectMIB group and their corresponding object ID values

MIB name	Object ID
axsTrackObject	1.3.6.1.4.1.21839.2.2.1.41
axsTrackObjectGeneralGroup	1.3.6.1.4.1.21839.2.2.1.41.1
axsTrackObjectGeneralLastChange	1.3.6.1.4.1.21839.2.2.1.41.1.1
axsTrackObjectTraps	1.3.6.1.4.1.21839.2.2.1.41.2
axsTrackObjectTable	1.3.6.1.4.1.21839.2.2.1.41.3
axsTrackObjectEntry	1.3.6.1.4.1.21839.2.2.1.41.3.1
axsTrackObjectId	1.3.6.1.4.1.21839.2.2.1.41.3.1.1
axsTrackObjectState	1.3.6.1.4.1.21839.2.2.1.41.3.1.2

MIB name	Object ID
axsTrackObjectOperation	1.3.6.1.4.1.21839.2.2.1.41.3.1.3
axsTrackObjectType	1.3.6.1.4.1.21839.2.2.1.41.3.1.4
axsTrackObjectNetIndex	1.3.6.1.4.1.21839.2.2.1.41.3.1.5

(13) axsPolicyBase group [AX3640S] [OS-L3A]

The MIB names in the axsPolicyBase group and their corresponding object ID values are given below.

Table A-13: MIB names in the axsPolicyBase group and their corresponding object ID values

MIB name	Object ID
axsPolicyBase	1.3.6.1.4.1.21839.2.2.1.45
axsPolicyBaseRouting	1.3.6.1.4.1.21839.2.2.1.45.1
axsPolicyBaseRoutingChangeListNumber	1.3.6.1.4.1.21839.2.2.1.45.1.1
axsPolicyBaseRoutingChangeSequenceNumber	1.3.6.1.4.1.21839.2.2.1.45.1.2

(14) axsBootManagement group

The MIB names in the axsBootManagement group and their corresponding object ID values are given below.

Table A-14: MIB names in the axsBootManagement group and their corresponding object ID values

MIB name	Object ID
axsBootManagement	1.3.6.1.4.1.21839.2.2.1.51
axsBootReason	1.3.6.1.4.1.21839.2.2.1.51.1

(15) axsLogin group

The MIB names in the axsLogin group and their corresponding object ID values are given below.

Table A-15: MIB names in the axsLogin group and their corresponding object ID values

MIB name	Object ID
axsLogin	1.3.6.1.4.1.21839.2.2.1.52
axsLoginName	1.3.6.1.4.1.21839.2.2.1.52.1
axsLoginTime	1.3.6.1.4.1.21839.2.2.1.52.2
axsLogoutTime	1.3.6.1.4.1.21839.2.2.1.52.3
axsLoginFailureTime	1.3.6.1.4.1.21839.2.2.1.52.4
axsLoginLocation	1.3.6.1.4.1.21839.2.2.1.52.5
axsLoginLine	1.3.6.1.4.1.21839.2.2.1.52.6
axsLogoutStatus	1.3.6.1.4.1.21839.2.2.1.52.7

(16) axslldp group

The MIB names in the axslldp group and their corresponding object ID values are given below.

Table A-16: MIB names in the axslldp group and their corresponding object ID values

MIB name	Object ID
axslldp	1.3.6.1.4.1.21839.2.2.1.100
axslldpConfiguration	1.3.6.1.4.1.21839.2.2.1.100.1
axslldpMessageTxInterval	1.3.6.1.4.1.21839.2.2.1.100.1.1
axslldpMessageTxHoldMultiplier	1.3.6.1.4.1.21839.2.2.1.100.1.2
axslldpReinitDelay	1.3.6.1.4.1.21839.2.2.1.100.1.3
axslldpTxDelay	1.3.6.1.4.1.21839.2.2.1.100.1.4
axslldpPortConfigTable	1.3.6.1.4.1.21839.2.2.1.100.1.6
axslldpPortConfigEntry	1.3.6.1.4.1.21839.2.2.1.100.1.6.1
axslldpPortConfigPortNum	1.3.6.1.4.1.21839.2.2.1.100.1.6.1.2
axslldpPortConfigAdminStatus	1.3.6.1.4.1.21839.2.2.1.100.1.6.1.3
axslldpPortConfigTLVsTxEnable	1.3.6.1.4.1.21839.2.2.1.100.1.6.1.4
axslldpPortConfigRowStatus	1.3.6.1.4.1.21839.2.2.1.100.1.6.1.5
axslldpConfigManAddrTable	1.3.6.1.4.1.21839.2.2.1.100.1.7
axslldpConfigManAddrEntry	1.3.6.1.4.1.21839.2.2.1.100.1.7.1
axslldpConfigManAddrPortsTxEnable	1.3.6.1.4.1.21839.2.2.1.100.1.7.1.1
axslldpStats	1.3.6.1.4.1.21839.2.2.1.100.2
axslldpStatsTable	1.3.6.1.4.1.21839.2.2.1.100.2.1
axslldpStatsEntry	1.3.6.1.4.1.21839.2.2.1.100.2.1.1
axslldpStatsPortNum	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.2
axslldpStatsOperStatus	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.3
axslldpStatsFramesInErrors	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.4
axslldpStatsFramesInTotal	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.5
axslldpStatsFramesOutTotal	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.6
axslldpStatsTLVsInErrors	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.7
axslldpStatsTLVsDiscardedTotal	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.8
axslldpStatsCounterDiscontinuityTime	1.3.6.1.4.1.21839.2.2.1.100.2.1.1.9
axslldpLocalSystemData	1.3.6.1.4.1.21839.2.2.1.100.3
axslldpLocChassisType	1.3.6.1.4.1.21839.2.2.1.100.3.1
axslldpLocChassisId	1.3.6.1.4.1.21839.2.2.1.100.3.2
axslldpLocSysName	1.3.6.1.4.1.21839.2.2.1.100.3.3
axslldpLocSysDesc	1.3.6.1.4.1.21839.2.2.1.100.3.4
axslldpLocSysCapSupported	1.3.6.1.4.1.21839.2.2.1.100.3.5
axslldpLocSysCapEnabled	1.3.6.1.4.1.21839.2.2.1.100.3.6

MIB name	Object ID
axslldpLocPortTable	1.3.6.1.4.1.21839.2.2.1.100.3.7
axslldpLocPortEntry	1.3.6.1.4.1.21839.2.2.1.100.3.7.1
axslldpLocPortNum	1.3.6.1.4.1.21839.2.2.1.100.3.7.1.1
axslldpLocPortType	1.3.6.1.4.1.21839.2.2.1.100.3.7.1.2
axslldpLocPortId	1.3.6.1.4.1.21839.2.2.1.100.3.7.1.3
axslldpLocPortDesc	1.3.6.1.4.1.21839.2.2.1.100.3.7.1.4
axslldpLocManAddrTable	1.3.6.1.4.1.21839.2.2.1.100.3.8
axslldpLocManAddrEntry	1.3.6.1.4.1.21839.2.2.1.100.3.8.1
axslldpLocManAddrType	1.3.6.1.4.1.21839.2.2.1.100.3.8.1.1
axslldpLocManAddr	1.3.6.1.4.1.21839.2.2.1.100.3.8.1.2
axslldpLocManAddrIfSubtype	1.3.6.1.4.1.21839.2.2.1.100.3.8.1.3
axslldpLocManAddrIfId	1.3.6.1.4.1.21839.2.2.1.100.3.8.1.4
axslldpLocManAddrOID	1.3.6.1.4.1.21839.2.2.1.100.3.8.1.5
axslldpRemoteSystemData	1.3.6.1.4.1.21839.2.2.1.100.4
axslldpRemTable	1.3.6.1.4.1.21839.2.2.1.100.4.1
axslldpRemEntry	1.3.6.1.4.1.21839.2.2.1.100.4.1.1
axslldpRemTimeMark	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.1
axslldpRemLocalPortNum	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.2
axslldpRemIndex	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.3
axslldpRemRemoteChassisType	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.4
axslldpRemRemoteChassis	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.5
axslldpRemRemotePortType	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.6
axslldpRemRemotePort	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.7
axslldpRemPortDesc	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.8
axslldpRemSysName	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.9
axslldpRemSysDesc	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.10
axslldpRemSysCapSupported	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.11
axslldpRemSysCapEnabled	1.3.6.1.4.1.21839.2.2.1.100.4.1.1.12
axslldpRemManAddrTable	1.3.6.1.4.1.21839.2.2.1.100.4.2
axslldpRemManAddrEntry	1.3.6.1.4.1.21839.2.2.1.100.4.2.1
axslldpRemManAddrType	1.3.6.1.4.1.21839.2.2.1.100.4.2.1.1
axslldpRemManAddr	1.3.6.1.4.1.21839.2.2.1.100.4.2.1.2
axslldpRemManAddrIfSubtype	1.3.6.1.4.1.21839.2.2.1.100.4.2.1.3
axslldpRemManAddrIfId	1.3.6.1.4.1.21839.2.2.1.100.4.2.1.4

MIB name	Object ID
axslldpRemManAddrOID	1.3.6.1.4.1.21839.2.2.1.100.4.2.1.5
axslldpRemOrgDefInfoTable	1.3.6.1.4.1.21839.2.2.1.100.4.3
axslldpRemOrgDefInfoEntry	1.3.6.1.4.1.21839.2.2.1.100.4.3.1
axslldpRemOrgDefInfoOUI	1.3.6.1.4.1.21839.2.2.1.100.4.3.1.1
axslldpRemOrgDefInfoSubtype	1.3.6.1.4.1.21839.2.2.1.100.4.3.1.2
axslldpRemOrgDefInfoIndex	1.3.6.1.4.1.21839.2.2.1.100.4.3.1.3
axslldpRemOrgDefInfo	1.3.6.1.4.1.21839.2.2.1.100.4.3.1.4
axslldpRemoteOriginInfoData	1.3.6.1.4.1.21839.2.2.1.100.20
axslldpRemOriginInfoTable	1.3.6.1.4.1.21839.2.2.1.100.20.1
axslldpRemOriginInfoEntry	1.3.6.1.4.1.21839.2.2.1.100.20.1.1
axslldpRemOriginInfoPortNum	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.1
axslldpRemOriginInfoIndex	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.2
axslldpRemOriginInfoLowerVlanList	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.3
axslldpRemOriginInfoHigherVlanList	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.4
axslldpRemOriginInfoIPv4Address	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.5
axslldpRemOriginInfoIPv4PortType	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.6
axslldpRemOriginInfoIPv4VlanId	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.7
axslldpRemOriginInfoIPv6Address	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.8
axslldpRemOriginInfoIPv6PortType	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.9
axslldpRemOriginInfoIPv6VlanId	1.3.6.1.4.1.21839.2.2.1.100.20.1.1.10

(17) axsAxrpMIB group

The MIB names in the axsAxrpMIB group and their corresponding object ID values are given below.

Table A-17: MIB names in the axsAxrpMIB group and their corresponding object ID values

MIB name	Object ID
axsAxrp	1.3.6.1.4.1.21839.2.2.1.200
axsAxrpGroupTable	1.3.6.1.4.1.21839.2.2.1.200.1
axsAxrpGroupEntry	1.3.6.1.4.1.21839.2.2.1.200.1.1
axsAxrpGroupRingId	1.3.6.1.4.1.21839.2.2.1.200.1.1.1
axsAxrpGroupRowStatus	1.3.6.1.4.1.21839.2.2.1.200.1.1.2
axsAxrpGroupMode	1.3.6.1.4.1.21839.2.2.1.200.1.1.3
axsAxrpGroupRingAttribute	1.3.6.1.4.1.21839.2.2.1.200.1.1.4
axsAxrpGroupMonitoringState	1.3.6.1.4.1.21839.2.2.1.200.1.1.5
axsAxrpGroupRingport1	1.3.6.1.4.1.21839.2.2.1.200.1.1.6

MIB name	Object ID
axsAxrpGroupRingport1Shared	1.3.6.1.4.1.21839.2.2.1.200.1.1.7
axsAxrpGroupRingport2	1.3.6.1.4.1.21839.2.2.1.200.1.1.8
axsAxrpGroupRingport2Shared	1.3.6.1.4.1.21839.2.2.1.200.1.1.9
axsAxrpGroupTransitionToFaultCounts	1.3.6.1.4.1.21839.2.2.1.200.1.1.10
axsAxrpGroupTransitionToNormalCounts	1.3.6.1.4.1.21839.2.2.1.200.1.1.11
axsAxrpGroupLastTransitionTime	1.3.6.1.4.1.21839.2.2.1.200.1.1.12
axsAxrpGroupMultiFaultDetectionState	1.3.6.1.4.1.21839.2.2.1.200.1.1.22
axsAxrpVlanGroupTable	1.3.6.1.4.1.21839.2.2.1.200.2
axsAxrpVlanGroupEntry	1.3.6.1.4.1.21839.2.2.1.200.2.1
axsAxrpVlanGroupRingId	1.3.6.1.4.1.21839.2.2.1.200.2.1.1
axsAxrpVlanGroupId	1.3.6.1.4.1.21839.2.2.1.200.2.1.2
axsAxrpVlanGroupRingport1	1.3.6.1.4.1.21839.2.2.1.200.2.1.3
axsAxrpVlanGroupRingport1Role	1.3.6.1.4.1.21839.2.2.1.200.2.1.4
axsAxrpVlanGroupRingport1OperState	1.3.6.1.4.1.21839.2.2.1.200.2.1.5
axsAxrpVlanGroupRingport2	1.3.6.1.4.1.21839.2.2.1.200.2.1.6
axsAxrpVlanGroupRingport2Role	1.3.6.1.4.1.21839.2.2.1.200.2.1.7
axsAxrpVlanGroupRingport2OperState	1.3.6.1.4.1.21839.2.2.1.200.2.1.8

(18) ax3640sSwitch group

The MIB names in the ax3640sSwitch group and their corresponding object ID values are given below.

Table A-18: MIB names in the ax3640sSwitch group and their corresponding object ID values

MIB name	Object ID
ax3640sSwitch	1.3.6.1.4.1.21839.2.2.11.1
ax3640sModelType	1.3.6.1.4.1.21839.2.2.11.1.1
ax3640sSoftware	1.3.6.1.4.1.21839.2.2.11.1.2
ax3640sSoftwareName	1.3.6.1.4.1.21839.2.2.11.1.2.1
ax3640sSoftwareAbbreviation	1.3.6.1.4.1.21839.2.2.11.1.2.2
ax3640sSoftwareVersion	1.3.6.1.4.1.21839.2.2.11.1.2.3
ax3640sSystemMsg	1.3.6.1.4.1.21839.2.2.11.1.3
ax3640sSystemMsgText	1.3.6.1.4.1.21839.2.2.11.1.3.1
ax3640sSystemMsgType	1.3.6.1.4.1.21839.2.2.11.1.3.2
ax3640sSystemMsgTimeStamp	1.3.6.1.4.1.21839.2.2.11.1.3.3
ax3640sSystemMsgLevel	1.3.6.1.4.1.21839.2.2.11.1.3.4
ax3640sSystemMsgEventPoint	1.3.6.1.4.1.21839.2.2.11.1.3.5

MIB name	Object ID
ax3640sSystemMsgEventInterfaceID	1.3.6.1.4.1.21839.2.2.11.1.3.6
ax3640sSystemMsgEventCode	1.3.6.1.4.1.21839.2.2.11.1.3.7
ax3640sSystemMsgAdditionalCode	1.3.6.1.4.1.21839.2.2.11.1.3.8
ax3640sSnmpAgent	1.3.6.1.4.1.21839.2.2.11.1.4
ax3640sSnmpSendReceiveSize	1.3.6.1.4.1.21839.2.2.11.1.4.1
ax3640sSnmpReceiveDelay	1.3.6.1.4.1.21839.2.2.11.1.4.2
ax3640sSnmpContinuousSend	1.3.6.1.4.1.21839.2.2.11.1.4.3
ax3640sSnmpObjectMaxNumber	1.3.6.1.4.1.21839.2.2.11.1.4.4
ax3640sLicense	1.3.6.1.4.1.21839.2.2.11.1.6
ax3640sLicenseNumber	1.3.6.1.4.1.21839.2.2.11.1.6.1
ax3640sLicenseTable	1.3.6.1.4.1.21839.2.2.11.1.6.2
ax3640sLicenseEntry	1.3.6.1.4.1.21839.2.2.11.1.6.2.1
ax3640sLicenseIndex	1.3.6.1.4.1.21839.2.2.11.1.6.2.1.1
ax3640sLicenseSerialNumber	1.3.6.1.4.1.21839.2.2.11.1.6.2.1.2
ax3640sLicenseOptionNumber	1.3.6.1.4.1.21839.2.2.11.1.6.2.1.3
ax3640sLicenseOptionTable	1.3.6.1.4.1.21839.2.2.11.1.6.3
ax3640sLicenseOptionEntry	1.3.6.1.4.1.21839.2.2.11.1.6.3.1
ax3640sLicenseOptionIndex	1.3.6.1.4.1.21839.2.2.11.1.6.3.1.1
ax3640sLicenseOptionNumberIndex	1.3.6.1.4.1.21839.2.2.11.1.6.3.1.2
ax3640sLicenseOptionSoftwareName	1.3.6.1.4.1.21839.2.2.11.1.6.3.1.3
ax3640sLicenseOptionSoftwareAbbreviation	1.3.6.1.4.1.21839.2.2.11.1.6.3.1.4

(19) ax3640sDevice group

The MIB names in the ax3640sDevice group and their corresponding object ID values are given below.

Table A-19: MIB names in the ax3640sDevice group and their corresponding object ID values

MIB name	Object ID
ax3640sDevice	1.3.6.1.4.1.21839.2.2.11.2
ax3640sChassis	1.3.6.1.4.1.21839.2.2.11.2.1
ax3640sChassisMaxNumber	1.3.6.1.4.1.21839.2.2.11.2.1.1
ax3640sChassisTable	1.3.6.1.4.1.21839.2.2.11.2.1.2
ax3640sChassisEntry	1.3.6.1.4.1.21839.2.2.11.2.1.2.1
ax3640sChassisIndex	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.1
ax3640sChassisType	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.2
ax3640sChassisStatus	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.3

MIB name	Object ID
ax3640sStsLedStatus	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.4
ax3640sCpuName	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.5
ax3640sCpuClock	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.6
ax3640sMemoryTotalSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.7
ax3640sMemoryUsedSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.8
ax3640sMemoryFreeSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.9
ax3640sRomVersion	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.10
ax3640sCpuLoad1m	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.11
ax3640sFlashTotalSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.12
ax3640sFlashUsedSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.13
ax3640sFlashFreeSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.14
ax3640sSdCardStatus	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.15
ax3640sSdCardTotalSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.16
ax3640sSdCardUsedSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.17
ax3640sSdCardFreeSize	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.18
ax3640sPhysLineNumber	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.19
ax3640sTemperatureStatusNumber	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.20
ax3640sPowerUnitNumber	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.21
ax3640sRedundantPsNumber	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.22
ax3640sFanNumber	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.23
ax3640sTotalAccumRunTime	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.24
ax3640sCriticalAccumRunTime	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.25
ax3640sModuleSlotNumber	1.3.6.1.4.1.21839.2.2.11.2.1.2.1.26
ax3640sTemperatureStatusTable	1.3.6.1.4.1.21839.2.2.11.2.1.3
ax3640sTemperatureStatusEntry	1.3.6.1.4.1.21839.2.2.11.2.1.3.1
ax3640sTemperatureStatusIndex	1.3.6.1.4.1.21839.2.2.11.2.1.3.1.1
ax3640sTemperatureStatusDescr	1.3.6.1.4.1.21839.2.2.11.2.1.3.1.2
ax3640sTemperatureStatusValue	1.3.6.1.4.1.21839.2.2.11.2.1.3.1.3
ax3640sTemperatureThreshold	1.3.6.1.4.1.21839.2.2.11.2.1.3.1.4
ax3640sTemperatureState	1.3.6.1.4.1.21839.2.2.11.2.1.3.1.5
ax3640sPowerUnitTable	1.3.6.1.4.1.21839.2.2.11.2.1.4
ax3640sPowerUnitEntry	1.3.6.1.4.1.21839.2.2.11.2.1.4.1
ax3640sPowerUnitIndex	1.3.6.1.4.1.21839.2.2.11.2.1.4.1.1
ax3640sPowerConnectStatus	1.3.6.1.4.1.21839.2.2.11.2.1.4.1.2

MIB name	Object ID
ax3640sPowerSupplyStatus	1.3.6.1.4.1.21839.2.2.11.2.1.4.1.3
ax3640sFanTable	1.3.6.1.4.1.21839.2.2.11.2.1.5
ax3640sFanEntry	1.3.6.1.4.1.21839.2.2.11.2.1.5.1
ax3640sFanIndex	1.3.6.1.4.1.21839.2.2.11.2.1.5.1.1
ax3640sFanStatus	1.3.6.1.4.1.21839.2.2.11.2.1.5.1.2
ax3640sRedundantPsTable	1.3.6.1.4.1.21839.2.2.11.2.1.6
ax3640sRedundantPsEntry	1.3.6.1.4.1.21839.2.2.11.2.1.6.1
ax3640sRedundantPsIndex	1.3.6.1.4.1.21839.2.2.11.2.1.6.1.1
ax3640sRedundantPsConnectStatus	1.3.6.1.4.1.21839.2.2.11.2.1.6.1.2
ax3640sRedundantPsStatus	1.3.6.1.4.1.21839.2.2.11.2.1.6.1.3
ax3640sModuleSlotTable	1.3.6.1.4.1.21839.2.2.11.2.1.7
ax3640sModuleSlotEntry	1.3.6.1.4.1.21839.2.2.11.2.1.7.1
ax3640sModuleSlotIndex	1.3.6.1.4.1.21839.2.2.11.2.1.7.1.1
ax3640sModuleSlotStatus	1.3.6.1.4.1.21839.2.2.11.2.1.7.1.2
ax3640sModuleSlotType	1.3.6.1.4.1.21839.2.2.11.2.1.7.1.3
ax3640sPhysLine	1.3.6.1.4.1.21839.2.2.11.2.2
ax3640sPhysLineTable	1.3.6.1.4.1.21839.2.2.11.2.2.1
ax3640sPhysLineEntry	1.3.6.1.4.1.21839.2.2.11.2.2.1.1
ax3640sPhysLineIndex	1.3.6.1.4.1.21839.2.2.11.2.2.1.1.1
ax3640sPhysLineConnectorType	1.3.6.1.4.1.21839.2.2.11.2.2.1.1.2
ax3640sPhysLineOperStatus	1.3.6.1.4.1.21839.2.2.11.2.2.1.1.3
ax3640sPhysLineIfIndexNumber	1.3.6.1.4.1.21839.2.2.11.2.2.1.1.4
ax3640sPhysLineTransceiverStatus	1.3.6.1.4.1.21839.2.2.11.2.2.1.1.5

(20) ax3640sManagementMIB group

The MIB names in the ax3640sManagementMIB group and their corresponding object ID values are given below.

Table A-20: MIB names in the ax3640sManagementMIB group and their corresponding object ID values

MIB name	Object ID
ax3640sManagementMIB	1.3.6.1.4.1.21839.2.2.11.3
ax3640sOperationCommand	1.3.6.1.4.1.21839.2.2.11.3.1
ax3640sFdbClearMIB	1.3.6.1.4.1.21839.2.2.11.3.1.1
ax3640sFdbClearSet	1.3.6.1.4.1.21839.2.2.11.3.1.1.1
ax3640sFdbClearReqTime	1.3.6.1.4.1.21839.2.2.11.3.1.1.2
ax3640sFdbClearSuccessTime	1.3.6.1.4.1.21839.2.2.11.3.1.1.3

(21) ax3630sSwitch group

The MIB names in the ax3630sSwitch group and their corresponding object ID values are given below.

Table A-21: MIB names in the ax3630sSwitch group and their corresponding object ID values

MIB name	Object ID
ax3630sSwitch	1.3.6.1.4.1.21839.2.2.7.1
ax3630sModelType	1.3.6.1.4.1.21839.2.2.7.1.1
ax3630sSoftware	1.3.6.1.4.1.21839.2.2.7.1.2
ax3630sSoftwareName	1.3.6.1.4.1.21839.2.2.7.1.2.1
ax3630sSoftwareAbbreviation	1.3.6.1.4.1.21839.2.2.7.1.2.2
ax3630sSoftwareVersion	1.3.6.1.4.1.21839.2.2.7.1.2.3
ax3630sSystemMsg	1.3.6.1.4.1.21839.2.2.7.1.3
ax3630sSystemMsgText	1.3.6.1.4.1.21839.2.2.7.1.3.1
ax3630sSystemMsgType	1.3.6.1.4.1.21839.2.2.7.1.3.2
ax3630sSystemMsgTimeStamp	1.3.6.1.4.1.21839.2.2.7.1.3.3
ax3630sSystemMsgLevel	1.3.6.1.4.1.21839.2.2.7.1.3.4
ax3630sSystemMsgEventPoint	1.3.6.1.4.1.21839.2.2.7.1.3.5
ax3630sSystemMsgEventInterfaceID	1.3.6.1.4.1.21839.2.2.7.1.3.6
ax3630sSystemMsgEventCode	1.3.6.1.4.1.21839.2.2.7.1.3.7
ax3630sSystemMsgAdditionalCode	1.3.6.1.4.1.21839.2.2.7.1.3.8
ax3630sSnmpAgent	1.3.6.1.4.1.21839.2.2.7.1.4
ax3630sSnmpSendReceiveSize	1.3.6.1.4.1.21839.2.2.7.1.4.1
ax3630sSnmpReceiveDelay	1.3.6.1.4.1.21839.2.2.7.1.4.2
ax3630sSnmpContinuousSend	1.3.6.1.4.1.21839.2.2.7.1.4.3
ax3630sSnmpObjectMaxNumber	1.3.6.1.4.1.21839.2.2.7.1.4.4
ax3630sLicense	1.3.6.1.4.1.21839.2.2.7.1.6
ax3630sLicenseNumber	1.3.6.1.4.1.21839.2.2.7.1.6.1
ax3630sLicenseTable	1.3.6.1.4.1.21839.2.2.7.1.6.2
ax3630sLicenseEntry	1.3.6.1.4.1.21839.2.2.7.1.6.2.1
ax3630sLicenseIndex	1.3.6.1.4.1.21839.2.2.7.1.6.2.1.1
ax3630sLicenseSerialNumber	1.3.6.1.4.1.21839.2.2.7.1.6.2.1.2
ax3630sLicenseOptionNumber	1.3.6.1.4.1.21839.2.2.7.1.6.2.1.3
ax3630sLicenseOptionTable	1.3.6.1.4.1.21839.2.2.7.1.6.3
ax3630sLicenseOptionEntry	1.3.6.1.4.1.21839.2.2.7.1.6.3.1
ax3630sLicenseOptionIndex	1.3.6.1.4.1.21839.2.2.7.1.6.3.1.1

MIB name	Object ID
ax3630sLicenseOptionNumberIndex	1.3.6.1.4.1.21839.2.2.7.1.6.3.1.2
ax3630sLicenseOptionSoftwareName	1.3.6.1.4.1.21839.2.2.7.1.6.3.1.3
ax3630sLicenseOptionSoftwareAbbreviation	1.3.6.1.4.1.21839.2.2.7.1.6.3.1.4

(22) ax3630sDevice group

The MIB names in the ax3630sDevice group and their corresponding object ID values are given below.

Table A-22: MIB names in the ax3630sDevice group and their corresponding object ID values

MIB name	Object ID
ax3630sDevice	1.3.6.1.4.1.21839.2.2.7.2
ax3630sChassis	1.3.6.1.4.1.21839.2.2.7.2.1
ax3630sChassisMaxNumber	1.3.6.1.4.1.21839.2.2.7.2.1.1
ax3630sChassisTable	1.3.6.1.4.1.21839.2.2.7.2.1.2
ax3630sChassisEntry	1.3.6.1.4.1.21839.2.2.7.2.1.2.1
ax3630sChassisIndex	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.1
ax3630sChassisType	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.2
ax3630sChassisStatus	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.3
ax3630sStsLedStatus	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.4
ax3630sCpuName	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.5
ax3630sCpuClock	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.6
ax3630sMemoryTotalSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.7
ax3630sMemoryUsedSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.8
ax3630sMemoryFreeSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.9
ax3630sRomVersion	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.10
ax3630sCpuLoad1m	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.11
ax3630sFlashTotalSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.12
ax3630sFlashUsedSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.13
ax3630sFlashFreeSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.14
ax3630sSdCardStatus	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.15
ax3630sSdCardTotalSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.16
ax3630sSdCardUsedSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.17
ax3630sSdCardFreeSize	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.18
ax3630sPhysLineNumber	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.19
ax3630sTemperatureStatusNumber	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.20
ax3630sPowerUnitNumber	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.21

MIB name	Object ID
ax3630sRedundantPsNumber	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.22
ax3630sFanNumber	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.23
ax3630sTotalAccumRunTime	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.24
ax3630sCriticalAccumRunTime	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.25
ax3630sModuleSlotNumber	1.3.6.1.4.1.21839.2.2.7.2.1.2.1.26
ax3630sTemperatureStatusTable	1.3.6.1.4.1.21839.2.2.7.2.1.3
ax3630sTemperatureStatusEntry	1.3.6.1.4.1.21839.2.2.7.2.1.3.1
ax3630sTemperatureStatusIndex	1.3.6.1.4.1.21839.2.2.7.2.1.3.1.1
ax3630sTemperatureStatusDescr	1.3.6.1.4.1.21839.2.2.7.2.1.3.1.2
ax3630sTemperatureStatusValue	1.3.6.1.4.1.21839.2.2.7.2.1.3.1.3
ax3630sTemperatureThreshold	1.3.6.1.4.1.21839.2.2.7.2.1.3.1.4
ax3630sTemperatureState	1.3.6.1.4.1.21839.2.2.7.2.1.3.1.5
ax3630sPowerUnitTable	1.3.6.1.4.1.21839.2.2.7.2.1.4
ax3630sPowerUnitEntry	1.3.6.1.4.1.21839.2.2.7.2.1.4.1
ax3630sPowerUnitIndex	1.3.6.1.4.1.21839.2.2.7.2.1.4.1.1
ax3630sPowerConnectStatus	1.3.6.1.4.1.21839.2.2.7.2.1.4.1.2
ax3630sPowerSupplyStatus	1.3.6.1.4.1.21839.2.2.7.2.1.4.1.3
ax3630sFanTable	1.3.6.1.4.1.21839.2.2.7.2.1.5
ax3630sFanEntry	1.3.6.1.4.1.21839.2.2.7.2.1.5.1
ax3630sFanIndex	1.3.6.1.4.1.21839.2.2.7.2.1.5.1.1
ax3630sFanStatus	1.3.6.1.4.1.21839.2.2.7.2.1.5.1.2
ax3630sRedundantPsTable	1.3.6.1.4.1.21839.2.2.7.2.1.6
ax3630sRedundantPsEntry	1.3.6.1.4.1.21839.2.2.7.2.1.6.1
ax3630sRedundantPsIndex	1.3.6.1.4.1.21839.2.2.7.2.1.6.1.1
ax3630sRedundantPsConnectStatus	1.3.6.1.4.1.21839.2.2.7.2.1.6.1.2
ax3630sRedundantPsStatus	1.3.6.1.4.1.21839.2.2.7.2.1.6.1.3
ax3630sModuleSlotTable	1.3.6.1.4.1.21839.2.2.7.2.1.7
ax3630sModuleSlotEntry	1.3.6.1.4.1.21839.2.2.7.2.1.7.1
ax3630sModuleSlotIndex	1.3.6.1.4.1.21839.2.2.7.2.1.7.1.1
ax3630sModuleSlotStatus	1.3.6.1.4.1.21839.2.2.7.2.1.7.1.2
ax3630sModuleSlotType	1.3.6.1.4.1.21839.2.2.7.2.1.7.1.3
ax3630sPhysLine	1.3.6.1.4.1.21839.2.2.7.2.2
ax3630sPhysLineTable	1.3.6.1.4.1.21839.2.2.7.2.2.1
ax3630sPhysLineEntry	1.3.6.1.4.1.21839.2.2.7.2.2.1.1

MIB name	Object ID
ax3630sPhysLineIndex	1.3.6.1.4.1.21839.2.2.7.2.2.1.1.1
ax3630sPhysLineConnectorType	1.3.6.1.4.1.21839.2.2.7.2.2.1.1.2
ax3630sPhysLineOperStatus	1.3.6.1.4.1.21839.2.2.7.2.2.1.1.3
ax3630sPhysLineIfIndexNumber	1.3.6.1.4.1.21839.2.2.7.2.2.1.1.4
ax3630sPhysLineTransceiverStatus	1.3.6.1.4.1.21839.2.2.7.2.2.1.1.5

(23) ax3630sManagementMIB group

The MIB names in the ax3630sManagementMIB group and their corresponding object ID values are given below.

Table A-23: MIB names in the ax3630sManagementMIB group and their corresponding object ID values

MIB name	Object ID
ax3630sManagementMIB	1.3.6.1.4.1.21839.2.2.7.3
ax3630sOperationCommand	1.3.6.1.4.1.21839.2.2.7.3.1
ax3630sFdbClearMIB	1.3.6.1.4.1.21839.2.2.7.3.1.1
ax3630sFdbClearSet	1.3.6.1.4.1.21839.2.2.7.3.1.1.1
ax3630sFdbClearReqTime	1.3.6.1.4.1.21839.2.2.7.3.1.1.2
ax3630sFdbClearSuccessTime	1.3.6.1.4.1.21839.2.2.7.3.1.1.3

A.2 HP private MIB

HP private MIB names and their corresponding object ID values are given in the table below.

Table A-24: HP private MIB names and their corresponding object ID values

MIB name	Object ID
icmp	1.3.6.1.4.1.11.2.7
icmpEchoReq	1.3.6.1.4.1.11.2.7.1

A.3 InMon private MIB

InMon private MIB names and their corresponding object ID values are given in the table below.

Table A-25: InMon private MIB names and their corresponding object ID values

MIB name	Object ID
sFlowMIB	1.3.6.1.4.1.4300.1
sFlowAgent	1.3.6.1.4.1.4300.1.1
sFlowVersion	1.3.6.1.4.1.4300.1.1.1
sFlowAgentAddressType	1.3.6.1.4.1.4300.1.1.2
sFlowAgentAddress	1.3.6.1.4.1.4300.1.1.3
sFlowTable	1.3.6.1.4.1.4300.1.1.4
sFlowEntry	1.3.6.1.4.1.4300.1.1.4.1

MIB name	Object ID
sFlowDataSource	1.3.6.1.4.1.4300.1.1.4.1.1
sFlowOwner	1.3.6.1.4.1.4300.1.1.4.1.2
sFlowTimeout	1.3.6.1.4.1.4300.1.1.4.1.3
sFlowPacketSamplingRate	1.3.6.1.4.1.4300.1.1.4.1.4
sFlowCounterSamplingInterval	1.3.6.1.4.1.4300.1.1.4.1.5
sFlowMaximumHeaderSize	1.3.6.1.4.1.4300.1.1.4.1.6
sFlowMaximumDatagramSize	1.3.6.1.4.1.4300.1.1.4.1.7
sFlowCollectorAddressType	1.3.6.1.4.1.4300.1.1.4.1.8
sFlowCollectorAddress	1.3.6.1.4.1.4300.1.1.4.1.9
sFlowCollectorPort	1.3.6.1.4.1.4300.1.1.4.1.10
sFlowDatagramVersion	1.3.6.1.4.1.4300.1.1.4.1.11

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