

Ruijie Reyee Devices

MIB Node Instruction Manual ReyeeOS 1.230



Document Version: V1.0
Date: September 11, 2023
Copyright © 2023 Ruijie Networks

Copyright

Copyright © 2023 Ruijie Networks

All rights are reserved in this document and this statement.

Any reproduction, excerption, backup, modification, transmission, translation or commercial use of this document or any portion of this document, in any form or by any means, without the prior written consent of Ruijie Networks is prohibited.



All other trademarks or registered trademarks mentioned in this document are owned by their respective owners.

Disclaimer

The products, services, or features you purchase are subject to commercial contracts and terms. Some or all of the products, services or features described in this document may not be within the scope of your purchase or use. Unless otherwise agreed in the contract, Ruijie Networks does not make any express or implied statement or guarantee for the content of this document.

Due to product version upgrades or other reasons, the content of this document will be updated from time to time. Ruijie Networks reserves the right to modify the content of the document without any notice or prompt.

This manual is for reference only. Ruijie Networks endeavors to ensure content accuracy and will not shoulder any responsibility for losses and damages caused due to content omissions, inaccuracies or errors.

Preface

Intended Audience

This document is intended for:

- Network engineers
- Technical support and servicing engineers
- Network administrators

Technical Support

- Official website of Ruijie Reyee: https://www.ruijienetworks.com/products/reyee
- Technical Support Website: https://ruijienetworks.com/support
- Case Portal: https://caseportal.ruijienetworks.com
- Community: https://community.ruijienetworks.com
- Technical Support Email: service rj@ruijienetworks.com

Conventions

1. GUI Symbols

Interface symbol	Description	Example
Boldface	Button names Window names, tab name, field name and menu items Link	 Click OK. Select Config Wizard. Click the Download File link.
>	Multi-level menus items	Select System > Time.

2. Signs

The signs used in this document are described as follows:



Warning

An alert that calls attention to important rules and information that if not understood or followed can result in data loss or equipment damage.



Caution

An alert that calls attention to essential information that if not understood or followed can result in function failure or performance degradation.



Note

An alert that contains additional or supplementary information that if not understood or followed will not lead to serious consequences.

I

S S

Specification

An alert that contains a description of product or version support.

3. Note

The manual offers configuration information (including model, description, port type, software interface) for indicative purpose only. In case of any discrepancy or inconsistency between the manual and the actual version, the actual version prevails.

Download mib:

https://www.ruijienetworks.com/resources/preview/smb-mib

1. SYSTEM-MIB

1.1 Function Introduction

The system node in the MIB is usually used to provide information related to the device system, such as the name, model, serial number, and time of the device.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).system(1)

1.2 Detailed description of single node

1.2.1 sysDescr detailed description

OIDs	node name	meaning	maxim um access	type	actual size
1.3.6.1.2.1 .1.1.0	sysDescr	Description of the device	read- only	DisplaySt ring (SIZE (0255))	Consist ent with MIB file definitio n

1.2.2 Detailed description of sysObjectID

OIDs	node name	meaning	maxim um access	type	actual size
1.3.6.1.2.1 .1.2.0	sysObject ID	Device identifier OID, the value of the node is always 1.3.6.1.4.1.8072.3.2.1	read- only	OBJECT IDENTIFI ER	Consist ent with MIB file definitio n

1.2.3 Detailed description of sysUpTime

OIDs	node name	meaning	maxim um access	type	actual size
1.3.6.1.2.1 .1.3.0	sysUpTim e	the device has been running since it was powered on	read- only	Timeticks	Consist ent with MIB file definitio n

1.2.4 sysContact detailed description

OIDs	node name	meaning	maxim um access	type	actual size
1.3.6.1.2.1 .1.4.0	sysConta ct	The name and contact information of the person responsible for the device, such as email: 12345@163.com	read- write	DisplaySt ring (SIZE (164))	Consist ent with MIB file definitio n

1.2.5 sysName detailed description

OIDs	node name	meaning	maxim um access	type	actual size
1.3.6.1.2.1 .1.5.0	sysName	device name	read- write	DisplaySt ring (SIZE (164))	Consist ent with MIB file definitio n

1.2.6 Detailed description of sysLocation

OIDs	node name	meaning	maxim um access	type	actual size
1.3.6.1.2.1	sysLocati	the physical location	read-	DisplaySt ring	Consist ent with

.1.6.0	on	of the device	write	(SIZE (164))	MIB file definitio
					n

1.2.7 Detailed description of sysServices

OIDs	node name	meaning	maxim um access	type	actual size
1.3.6.1.2.1 .1.7.0	sysServic es	Indicates the type of service provided by the device, such as the data link layer, network layer	read- only	INTEGE R (0127)	Consist ent with MIB file definitio n

2. IF-MIB

2.1 Function Introduction

IF-MIB is a type of standard MIB and is usually used to provide information related to network interfaces. It can provide information such as the name, type, status, rate, and bandwidth of the interface. It can also provide interface statistics, such as the number of received and sent data packets, the number of errors, and the number of lost packets. In addition, IF-MIB can also be used to monitor and manage the status and performance of network interfaces, such as enabling or disabling a specific interface by setting the interface status.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).interfaces(2) iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ifMIB(31)

2.2 Detailed description of single node

2.2.1 detailed description of ifNumber

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2	ifNumber	The number of network	read-	Integer3	Consist

.1.2.1.0	interfaces in the system (the current state of the	only	2	ent with MIB file
	interface is not			definitio
	concerned)			n

2.2.2 detailed description of ifTableLastChange

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.31.1.5 .0	ifTableLa stChang e	The system startup time when ifTable entries were last created or deleted. This value is zero if the number of entries has not changed since the local networking subsystem was initialized.	read- only	TimeTick s	Consist ent with MIB file definitio n

2.3 Detailed description of MIB Table

2.3.1 detailed description of ifTable

if Table is a table under the interfaces node, which is used to describe the configuration and status information of the network device interface.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2	ifIndex	interface index. The value is greater than zero and globally unique. It is recommended that the value be a consecutive number starting from 1. The value of each interface sublayer shall remain unchanged between at least two reinitializations of the	read-only	Interface Index	Consist ent with MIB file definitio n

		entity's network management system.			
1.3.6.1.2 .1.2.2.1. 2	ifDescr	A string describing the interface, usually the interface name.	read-only	DisplayS tring (SIZE (0255))	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 3	ifType	Interface Type. The extra value of ifType must be assigned by the Internet Assigned Addresses Organization (IANA) to upgrade the semantics agreed in the original text of IANAifType, 6 is the Ethernet port, and 24 is the software loopback port.	read-only	IANAifTy pe	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 4	ifMtu	Interface MTU. The maximum packet size that can be transmitted on the interface, the unit is octet. For interfaces that transmit network datagrams, this is the size of the largest datagram that the interface can transmit.	read-only	Integer3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 5	ifSpeed	Interface rate (unit: bit/s). For interfaces whose bandwidth cannot be changed or accurately estimated, this item is the rated bandwidth value. If the bandwidth of the interface is greater than the value of this entry, the value of this entry is	read-only	Gauge32	Consist ent with MIB file definitio n

		its maximum value (4294967295), and the value of ifHighSpeed is the speed of the interface. For a sublayer interface without the concept of rate, the value of this entry is zero.			
1.3.6.1.2 .1.2.2.1. 6	ifPhysAd dress	Interface physical address. The interface address corresponding to the protocol sublayer of the interface. For example, for an 802.x interface, this item is generally the MAC address. The interface's media-specific MIB must define the order of bits and bytes and the format of the value of this entry. For an interface without such an address (such as a serial port), the value of this entry is a zero-length octet string (octet string)	read-only	PhysAdd ress	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 7	ifAdminS tatus	Interface management status: When the system is initialized, all interfaces are started in the state of node down(2); after operation or configuration, the interface will enter the state of up(1) or testing(3) (or remain in the state of down(2)). testing(3) indicates that the current interface	read- write	INTEGE R { up(1), down(2), testing(3)	Current ly only up(1) and down(2) are support ed

1.3.6.1.2 .1.2.2.1. 8	ifOperSt atus	cannot forward any packets in the running state. The current state of the interface: If ifAdminStatus is down(2), the status of ifOperStatus is also down(2). If ifAdminStatus becomes up(1) and the interface is ready to transmit data, then ifOperStatus will become up(1). ifOperStatus will remain down(2) if there is an error preventing up(1). testing(3) indicates that the current interface cannot forward any packets in the running state.	read-only	INTEGE R { up(1), down(2), testing(3), unknown (4), dormant(5), notPrese nt(6), lowerLay erDown(7) }	Current ly only up(1) and down(2) are support ed
1.3.6.1.2 .1.2.2.1. 9	ifLastCh ange	The last status update time of the interface. If the current state was entered before the most recent restart of the local network management subsystem, the value of this entry will remain 0.	read-only	TimeTick s	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 10	ifInOctet s	Interface input bytes.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2	ifInUcast Pkts	Interface input unicast packets.	read-only	Counter3	Consist ent with

1					MIB file definitio n
1.3.6.1.2 .1.2.2.1. 12	ifInNUca stPkts	Interface input non- unicast packets.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 13	ifInDisca rds	The number of interface input packets discarded.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 14	ifInErrors	interface input packet errors .	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 15	ifInUnkn ownProt os	Interface input unknown protocol packets. For interfaces that do not support protocol multiplexing, this item is 0.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 16	ifOutOct ets	Interface output bytes.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 17	ifOutUca stPkts	The number of unicast packets output by the interface.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 18	ifOutNUc astPkts	The number of non- unicast packets output by the interface.	read-only	Counter3	Consist ent with MIB file

					definitio n
1.3.6.1.2 .1.2.2.1. 19	ifOutDisc ards	The number of output packets discarded by the interface.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 20	ifOutErro rs	interface output packet errors.	read-only	Counter3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.2.2.1. 21	ifOutQLe n	Interface Output Captain	read-only	Gauge32	not support
1.3.6.1.2 .1.2.2.1. 22	ifSpecific	MIB definition reference for identifying interface-specific media	read-only	OBJECT IDENTIF IER	not support

2.3.2 detailed description of ifXTable

ifXTable is a table under the ifMIB node, which is used to describe the interface information of the network device.

OIDs	node name	meaning	maximu m access	type	actual size
.1.3.6.1.2 .1.31.1.1 1.1	ifName	The interface name assigned by the local device. The interface name can be entered through the device terminal command line. The value may be a textual name, such as "le0", or a simple port number, such as "1". This depends on the definition of the interface name on the	read-only	DisplaySt ring	Consist ent with the MIB file definitio n.

		device.			
.1.3.6.1.2 .1.31.1.1. 1.2	ifInMultic astPkts	The number of multicast packets input by the interface.	read-only	Counter3 2	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1 1.3	ifInBroad castPkts	The number of broadcast packets received by the interface.	read-only	Counter3 2	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1. 1.4	ifOutMulti castPkts	The number of multicast packets output by the interface.	read-only	Counter3 2	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1. 1.5	ifOutBroa dcastPkt s	The number of broadcast packets output by the interface.	read-only	Counter3 2	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1. 1.6	ifHCInOc tets	The number of bytes entered by the higher-level interface. This node has 64 bits and is an extension of ifInOctets.	read-only	Counter6 4	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1. 1.7	ifHCInUc astPkts	The number of unicast packets input by the upper layer interface. This node is an extension of ifInUcastPkts, with 64 bits.	read-only	Counter6 4	Consist ent with the MIB file definitio n.

.1.3.6.1.2 .1.31.1.1 1.8	ifHCInMu IticastPkt s	The number of multicast packets input by the higher-level interface. This node is an extension of ifInMulticastPkts, with 64 bits.	read-only	Counter6 4	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1. 1.9	ifHCInBr oadcastP kts	The number of broadcast packets input by the high-level interface. This node is an extension of ifInBroadcastPkts, with 64 bits.	read-only	Counter6 4	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1 1.10	ifHCOut Octets	Higher-level interface output bytes. This node is an extension of ifOutOctets, with 64 bits.	read-only	Counter6 4	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1. 1.11	ifHCOut UcastPkt s	The number of unicast data packets output by the high-level interface, including discarded packets or unsent packets. This node is an extension of ifOutUcastPkts, with 64 bits.	read-only	Counter6 4	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1. 1.12	ifHCOut Multicast Pkts	The number of multicast data packets output by the high-level interface, including discarded packets or unsent packets. This node is an extension of ifOutMulticastPkts, with 64 bits.	read-only	Counter6 4	Consist ent with the MIB file definitio n.
.1.3.6.1.2	ifHCOutB	The number of	read-only	Counter6	Consist

.1.31.1.1. 1.13	roadcast Pkts	broadcast data packets output by the high-level interface, including discarded packets or unsent packets. This node is an extension of ifOutBroadcastPkts, with 64 bits.		4	ent with the MIB file definitio n .
.1.3.6.1.2 .1.31.1.1. 1.14	ifLinkUp DownTra pEnable	Whether to enable alarms when linkUp/linkDown events occur on this interface: 1: enabled 2: disabled	read-only	Counter6 4	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1 1.15	ifHighSp eed	Estimated current bandwidth of the interface (in Mbs). Since the interface bandwidth does not change, and it is difficult to make an accurate estimate, this node contains a nominal bandwidth. For sublayers that have no notion of bandwidth, the value of this node is 0.	read-only	Gauge32	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1 1.16	ifPromisc uousMod e	Mixed port model: true (1) means that the interface can recognize all packets or frames, only legal in some specific media packets or frames addressed to the device	read-only	TruthValu e	Consist ent with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1 1.17	ifConnect orPresen t	Does the interface sublayer have physical connectors: true (1) has a physical	read-only	TruthValu e	Consist ent with the MIB file definitio

		connector false (2) no physical connector			n.
.1.3.6.1.2 .1.31.1.1. 1.18	ifAlias	Interface alias. Configuration saving can be realized. When a value is written in the ifAlias instance through the network management set operation, the interface alias obtained by the node will not change when all network management systems are re-initialized or restarted.	read- write	DisplaySt ring (SIZE(0 64))	with the MIB file definitio n.
.1.3.6.1.2 .1.31.1.1 1.19	ifCounter Discontin uityTime	The last time the system was powered up when the interface count was interrupted. If there have been no counter interruptions since the last reinitialization of the local management subsystem, then the value of this node is 0.	read-only	Timeticks	Consist ent with the MIB file definitio n.

2.4 Detailed description of alarm nodes

2.4.1 Detailed description of linkDown

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 6.3.1.1. 5.3	linkDown	[Description] IfOperStatus sends a trap message when the operation status of the interface changes from UP to DOWN.	ifIndex ifDescr ifAdminStatus ifOperStatus	The implem entation is consist ent with

[Status Control] Enabled: Set ifLinkUpDownTrapEn able to true (1). Off: Set ifLinkUpDownTrapEn able to false (2).	the MIB file definitio n.
---	------------------------------------

2.4.2 Detailed description of linkUp

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 6.3.1.1. 5.4 _	linkUp	sends a trap message when the operation status of the interface changes from DOWN to UP. [Status Control] Enabled: Set ifLinkUpDownTrapEn able to true (1). Off: Set ifLinkUpDownTrapEn able to false (2).	ifIndex ifDescr ifAdminStatus ifOperStatus	The implem entation is consist ent with the MIB file definitio n.

3. AT-MIB

3.1 Function Introduction

AT-MIB is a standard MIB module. Contains information about ARP (Address Resolution Protocol).

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).at(3)

3.2 Detailed description of MIB Table

3.2.1 Detailed description of atTable

The network address mapping table (Address Translation Table) of the device records the mapping relationship between the IP address and the MAC address.

OIDs	node name	meaning	maximu m access	type	actual size
.1.3.6.1. 2.1.3.1.1 .1	atlfIndex	Interface index of the ARP entry	read- only	INTEGE R	Consist ent with MIB file definitio n
.1.3.6.1. 2.1.3.1.1 .2	atPhysA ddress	MAC address of the ARP entry	read- only	PhysAdd ress	Consist ent with MIB file definitio n
.1.3.6.1. 2.1.3.1.1 .3	atNetAd dress	IP address of the ARP entry	read- only	Network Address	Consist ent with MIB file definitio n

4. IP-MIB

4.1 Function Introduction

IP-MIB is a standard MIB module that represents basic information and packet statistics related to IP (Internet Protocol). It includes IP address, subnet mask, routing table, interface table statistics, etc. This information can be used by a network management system (NMS) to monitor and manage IP communications in the network.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).ip(4)

4.2 Detailed description of single node

4.2.1 Detailed description of ipForwarding

OIDs	node name	meaning	maximu m	type	actual size	
------	--------------	---------	-------------	------	----------------	--

			access		
1.3.6.1.2 .1.4.1.0	ipForwar ding	Does the device support IP Layer 3 forwarding?	read- only	INTEGE R { forwardin g(1), notForw arding(2) }	Consist ent with MIB file definitio n

4.2.2 Detailed description of ipDefaultTTL

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.2	ipDefault TTL	The default time to live (Time To Live, TTL) of IP packets	read- only	INTEGE R	Consist ent with MIB file definitio n

4.2.3 Detailed description of ipInReceives

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.3.0	ipInRece ives	Number of IP packets received by the device	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.4 Detailed description of ipInHdrErrors

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2	ipInHdrE rrors	Number of packets received by the device	read- only	Counter3	Consist ent with

that contain incorrect IP headers	MIB file definitio n
-----------------------------------	----------------------

4.2.5 Detailed description of ipInAddrErrors

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.5.0	ipInAddr Errors	Number of packets containing wrong IP addresses received by the device	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.6 Detailed description of ipForwDatagrams

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.6.0	ipForwD atagram s	Number of IP packets forwarded by the device	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.7 Detailed description of ipInUnknownProtos

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.7.0	ipInUnkn ownProt os	protocol IP packets received by the device	read- only	Counter3 2	with MIB file definitio n

4.2.8 Detailed description of ipInDiscards

OIDs	node	meaning	maximu	type	actual	
------	------	---------	--------	------	--------	--

	name		m access		size
1.3.6.1.2 .1.4.8.0	ipInDisca rds	The number of IP packets received by the device without errors but discarded, for example, due to insufficient memory	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.9 Detailed description of ipInDelivers

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.9.0	ipInDeliv ers	The IP packet received by the device and delivered to the upper layer protocol of the device	read- only	Gauge32	Consist ent with MIB file definitio n

4.2.10 Detailed description of ipOutRequests

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.10.0	ipOutRe quests	The IP packet sent by the device from the upper layer protocol of the device	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.11 Detailed description of ipOutDiscards

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.11.0	ipOutDis cards	The number of IP packets sent by the device without errors but	read- only	Counter3 2	with MIB file definitio

discarded, for examp	ole, n	
due to insufficient		
memory		

4.2.12 Detailed description of ipOutNoRoutes

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.12.0	ipOutNo Routes	The number of IP packets discarded because no route could be found, including packets sent and forwarded by the local machine.	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.13 Detailed description of ipReasmTimeout

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.13.0	ipReasm Timeout	The maximum time for the device to wait for the reassembly of IP fragmented packets, after which the fragmented packets will be discarded	read- only	Integer3 2	Consist ent with MIB file definitio n

4.2.14 Detailed description of ipReasmReqds

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.14.0	ipReasm Reqds	Number of IP fragments received by the device that need to be reassembled	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.15 Detailed description of ipReasmOKs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.15.0	ipReasm OKs	Number of successfully reassembled IP packets received by the device	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.16 Detailed description of ipReasmFails

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.16.0	ipReasm Fails	Number of IP packets that failed to be reassembled	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.17 Detailed description of ipFragOKs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.17.0	ipFragO Ks	Number of IP packets successfully fragmented	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.18 Detailed description of ipFragFails

OIDs	node name	meaning	maximu m	type	actual size	
------	--------------	---------	-------------	------	----------------	--

			access		
1.3.6.1.2 .1.4.18.0	ipFragFa ils	Number of IP packets that failed to be fragmented	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.19 Detailed description of ipFragCreates

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.19.0	ipFragCr eates	Number of IP fragmented packets generated by device fragmentation	read- only	Counter3 2	Consist ent with MIB file definitio n

4.2.20 Detailed description of ipRoutingDiscards

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.23.0	ipRoutin gDiscard s	The number of routing entries chosen to be discarded, even if they are valid. One possible reason for dropping such entries might be to free up buffer space for other routing entries.	read- only	Counter3 2	Consist ent with MIB file definitio n

4.3 Detailed description of MIB Table

4.3.1 Detailed description of ipAddrTable

The IP address table of the device is a table used to record IP address information, including all IP addresses on the network interface.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2. 1.4.20.1.1	ipAdEnt Addr	IP address	read- only	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.20.1.2	ipAdEntIf Index	The index of the network interface where the IP address resides	read- only	INTEGE R (12147 483647)	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.20.1.3	ipAdEnt NetMask	IP address mask	read- only	lpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.20.1.4	ipAdEnt BcastAd dr	The broadcast address corresponding to the IP address	read- only	INTEGE R (01)	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.20.1.5	ipAdEnt ReasmM axSize	The maximum IP packet length that can be reassembled by the network interface	read- only	INTEGE R (06553 5)	not support

4.3.2 Detailed description of ipRouteTable

The IP routing table of the device is a table used to record routing information, including all routing information on the device.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2. 1.4.21.1.1	ipRouteD est	Destination address of IP routing	read- only	IpAddres s	Consist ent with

					MIB file definitio n
1.3.6.1.2. 1.4.21.1.2	ipRouteIfI ndex	Interface index of IP route egress	read- only	INTEGE R	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.21.1.3	ipRouteM etric1	The first metric value of the IP route	read- only	INTEGE R	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.21.1.4	ipRouteM etric2	The second metric value of the IP route	read- write	INTEGE R	not support
1.3.6.1.2. 1.4.21.1.5	ipRouteM etric3	The third metric value of IP routing	read- write	INTEGE R	not support
1.3.6.1.2. 1.4.21.1.6	ipRouteM etric4	The fourth metric value of IP routing	read- write	INTEGE R	not support
1.3.6.1.2. 1.4.21.1.7	ipRouteN extHop	The next hop of the IP route	read- only	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.21.1.8	ipRouteTy pe	Types of IP Routing	read- only	INTEGE R { other(1), invalid(2), direct(3), indirect(4)	with MIB file definitio n

1.3.6.1.2. 1.4.21.1.9	ipRouteProto	Protocol for IP Routing	read- only	INTEGE R { other(1), local(2), netmgmt (3), icmp(4), egp(5), ggp(6), hello(7), rip(8), is-is(9), es- is(10), ciscolgrp (11), bbnSpflg p(12), ospf(13), bgp(14) }	Consist ent with MIB file definition
1.3.6.1.2. 1.4.21.1.1 0	ipRouteA ge	Generation time of IP route	read- write	INTEGE R	not support
1.3.6.1.2. 1.4.21.1.1 1	ipRouteM ask	Mask for IP routing	read- only	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2. 1.4.21.1.1 2	ipRouteM etric5	The fifth metric value of IP routing	read- write	INTEGE R	not support
1.3.6.1.2. 1.4.21.1.1	ipRouteInf o	IP Routing Information	read- only	OBJECT IDENTIF	Consist ent with

3	IER	MIB file
		definitio
		n

4.3.3 Detailed description of ipNetToMediaTable

The ARP table of the device is a table that records the mapping relationship between IP addresses and MAC addresses.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.22.1 .1	ipNetTo MedialfIn dex	Interface index of the ARP entry	read- only	INTEGE R (12147 483647)	Consist ent with MIB file definitio n
1.3.6.1.2 .1.4.22.1 .2	ipNetTo MediaPh ysAddre ss	MAC address of the ARP entry	read- only	PhysAdd ress (SIZE(0 65535))	Consist ent with MIB file definitio n
1.3.6.1.2 .1.4.22.1 .3	ipNetTo MediaNe tAddress	IP address of the ARP entry	read- only	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2 .1.4.22.1 .4	ipNetTo MediaTy pe	Type of ARP entry	read- only	INTEGE R { other(1), invalid(2), , dynamic(3), static(4) }	Consist ent with MIB file definitio n

4.3.4 Detailed description of ipNetToPhysicalTable

The IP network address and physical address mapping table of the device is used to record the mapping relationship between the IP address and the physical address.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.4.35.1 .1	ipNetToP hysicalIfI ndex	interface index	not- accessibl e	Interface Index	not support
1.3.6.1.2 .1.4.35.1 .2	ipNetToP hysicalN etAddres sType	network address type	not- accessibl e	InetAddr essType	not support
1.3.6.1.2 .1.4.35.1 .3	ipNetToP hysicalN etAddres s	website address	not- accessibl e	InetAddr ess	not support
1.3.6.1.2 .1.4.35.1 .4	ipNetToP hysicalP hysAddr ess	physical address	read- only	PhysAdd ress (SIZE(0 65535))	Consist ent with MIB file definitio n
1.3.6.1.2 .1.4.35.1 .5	ipNetToP hysicalL astUpdat ed	last updated	read- only	TimeSta mp	Consist ent with MIB file definitio n
1.3.6.1.2 .1.4.35.1 .6	ipNetToP hysicalTy pe	Mapping type (dynamic, static, etc.)	read- only	INTEGE R { other(1), invalid(2), , dynamic(3), static(4), local(5)	Consist ent with MIB file definitio n

				}	
1.3.6.1.2 .1.4.35.1 .7	ipNetToP hysicalSt ate	neighbor reachability	read- only	INTEGE R { reachabl e e(1), stale(2), delay(3), probe(4), invalid(5) , unknown (6), incomple te(7) }	with MIB file definitio n
1.3.6.1.2 .1.4.35.1 .8	ipNetToP hysicalR owStatus	The state of the current row of the mapping table	read- only	RowStat us	Consist ent with MIB file definitio n

5. TCP-MIB

5.1 Function Introduction

TCP-MIB is a standard MIB module and a management information base for managing the TCP protocol. It provides statistical information about TCP connections, including the number of connections, connection status, and error counts. By using TCP-MIB, administrators can monitor the TCP connections of devices to ensure the stability and security of the network.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).tcp(6)

5.2 Detailed description of single node

5.2.1 Detailed description of tcpRtoAlgorithm

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.1.0	tcpRtoAl	Types of RTO (Retransmission Timeout) algorithm: other(1) indicates that the TCP retransmission timeout algorithm is unknown or not applicable. constant(2) means to use a fixed retransmission timeout, that is, the same time interval is used for each timeout. rsre(3) means to use the Jacobson/Karels algorithm, which calculates the timeout time based on the RTT average and deviation in the most recent period. vanj(4) means to use the Van Jacobson/Karels algorithm, which calculates the timeout period based on the RTT average value and deviation in the most recent period, and adjusts it according to the congestion of the TCP connection. rfc2988(5) indicates that the Karn/Partridge algorithm defined by the RFC 2988 standard is used, that is, the timeout period is calculated	read- only	INTEGE R { other(1), constant(2), rsre(3), vanj(4), rfc2988(5) }	with MIB file definition

according to the RTT average value and deviation in the most recent period, and the exponentially weighted moving average method is used for smoothing. Among them, the rsre and vanj algorithms are improved versions based on the Jacobson/Karels algorithm, which mainly consider the congestion of the TCP connection. The RFC 2988 algorithm is a standardized TCP retransmission timeout algorithm, which has been widely used in various TCP implementations.

5.2.2 Detailed description of tcpRtoMin

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.2.0	tcpRtoMi n	The minimum value of RTO (Retransmission Timeout), in milliseconds;	read- only	Integer3 2 (02147 483647)	Consist ent with MIB file definitio n

5.2.3 Detailed description of tcpRtoMax

OIDs	node name	meaning	maximu m access	type	actual size
------	--------------	---------	-----------------------	------	----------------

1.3.6.1.2 .1.6.3.0	tcpRtoM ax	The maximum value of RTO (Retransmission Timeout), in	read- only	Integer3 2 (02147	Consist ent with MIB file	
		milliseconds;		483647)	definitio n	

5.2.4 Detailed description of tcpMaxConn

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.4.0	tcpMaxC onn	The maximum number of connections allowed by TCP, -1 means no limit;	read- only	Integer3 2 (-1 021474 83647)	Consist ent with MIB file definitio n

5.2.5 Detailed description of tcpActiveOpens

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.5.0	tcpActive Opens	The number of active connections established by TCP	read- only	Counter3 2	Consist ent with MIB file definitio n

5.2.6 Detailed description of tcpPassiveOpens

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.6.0	tcpPassi veOpens	The number of passive connections established by TCP	read- only	Counter3 2	Consist ent with MIB file definitio n

5.2.7 Detailed description of tcpAttemptFails

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.7.0	tcpAttem ptFails	The number of failed TCP connection attempts	read- only	Counter3 2	Consist ent with MIB file definitio n

5.2.8 Detailed description of tcpEstabResets

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.8.0	tcpEstab Resets	The number of times a TCP established connection has been reset	read- only	Counter3 2	Consist ent with MIB file definitio n

5.2.9 Detailed description of tcpCurrEstab

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.9.0	tcpCurrE stab	The number of connections currently established by TCP	read- only	Gauge32	Consist ent with MIB file definitio n

5.2.10 Detailed description of tcplnSegs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2	tcpInSeg	The number of TCP	read-	Counter3	Consist

.1.6.10.0	S	segments received by TCP	only	2	ent with MIB file definitio
					n

5.2.11 Detailed description of tcpOutSegs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.11.0	tcpOutS egs	Number of TCP segments sent by TCP	read- only	Counter3 2	Consist ent with MIB file definitio n

5.2.12 Detailed description of tcpRetransSegs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2	tcpRetra nsSegs	Number of TCP segments retransmitted by TCP	read- only	Counter3 2	Consist ent with MIB file definitio n

5.2.13 Detailed description of tcpInErrs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.14.0	tcpInErrs	The number of incorrect TCP packets received	read- only	Counter3 2	Consist ent with MIB file definitio n

5.2.14 Detailed description of tcpOutRsts

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.15.0	tcpOutR sts	Number of reset packets sent by TCP	read- only	Counter3 2	Consist ent with MIB file definitio n

5.3 Detailed description of MIB Table

5.3.1 Detailed description of tcpConnTable

TCP connection table

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.6.13.1 .1	tcpConn State	TCP connection state closed(1), the connection is closed listen(2), is listening for incoming connections synSent(3), the connection request has been sent and is waiting for the response from the other party synReceived(4), the connection request has been received and is waiting for a response established (5), the connection has been established finWait1(6), has sent a connection close request and is waiting for the response from	read- only	INTEGE R { closed(1), listen(2), synSent(3), synRecei ved(4), establish ed(5), finWait1(6), finWait2(7), closeWai t(8), lastAck(9), closing(1 0), timeWait (11),	with MIB file definitio n

		finWait2(7), the other party has responded to the connection close request and is waiting to close the connection closeWait(8), the other party has closed the connection, and the local is waiting to close the connection lastAck(9), closing the connection closing(10), the request to close the connection has been sent and is waiting for the response from the other party timeWait(11), the connection is closed, but wait for a period of time to ensure that the other party has received the request to close the connection deleteTCB(12), the connection has been deleted and no longer exists		deleteTC B(12) }	
1.3.6.1.2 .1.6.13.1 .2	tcpConn LocalAd dress	local IP address	read- only	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2 .1.6.13.1 .3	tcpConn LocalPor t	local port number	read- only	Integer3 2	Consist ent with MIB file definitio n

1.3.6.1.2 .1.6.13.1 .4	tcpConn RemAdd ress	remote IP address	read- only	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2 .1.6.13.1 .5	tcpConn RemPort	remote port number	read- only	Integer3 2	Consist ent with MIB file definitio n

6. UDP-MIB

6.1 Function Introduction

UDP-MIB is a standard MIB module and a management information base for managing the UDP protocol. It provides statistical information about UDP connections, including the number of connections, connection status, and error counts. By using UDP-MIB, administrators can monitor UDP connections of devices to ensure network stability and security.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).udp(7)

6.2 Detailed description of single node

6.2.1 Detailed description of udplnDatagrams

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.7.1.0	udpInDat agrams	Number of UDP datagrams received	read- only	Counter3 2	Consist ent with MIB file definitio n

6.2.2 Detailed description of udpNoPorts

OIDs node meaning	maximu m	type	actual	
-------------------	-------------	------	--------	--

	name		access		size
1.3.6.1.2 .1.7.2.0	udpNoP orts	The received UDP datagram has no available port number	read- only	Counter3 2	Consist ent with MIB file definitio n

6.2.3 Detailed description of udpInErrors

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.7.3.0	udplnErr ors	The number of errors that occurred while receiving UDP datagrams	read- only	Counter3 2	Consist ent with MIB file definitio n

6.2.4 Detailed description of udpOutDatagrams

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.7.4.0	udpOutD atagram s	Number of UDP datagrams sent	read- only	Counter3 2	Consist ent with MIB file definitio n

6.2.5 Detailed description of udpHClnDatagrams

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.7.8.0	udpHCIn Datagra ms	The number of UDP datagrams received has a larger value range than udpInDatagrams.	read- only	Counter6 4	not support

6.2.6 Detailed description of udpHCOutDatagrams

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.7.9.0	udpHCO utDatagr ams	The number of UDP datagrams sent has a larger value range than udpOutDatagrams.	read- only	Counter6 4	not support

6.3 Detailed description of MIB Table

6.3.1 Detailed description of udpTable

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.7.5.1. 1	udpLocal Address	UDP local address	read- only	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2 .1.7.5.1. 2	udpLocal Port	UDP local port	read- only	INTEGE R	Consist ent with MIB file definitio n

6.3.2 Detailed description of udpEndpointTable

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.7.7.1. 1 _	udpEndp ointLocal Address Type	Local IP address type, such as IPv4 or IPv6	not- accessibl e	InetAddr essType	with MIB file definitio n
1.3.6.1.2	udpEndp	local IP address	not-	IpAddres	Consist

.1.7.7.1. 2	ointLocal Address		accessibl e	S	ent with MIB file definitio n
1.3.6.1.2 .1.7.7.1. 3	udpEndp ointLocal Port	local port number	not- accessibl e	InetPort Number	Consist ent with MIB file definitio n
1.3.6.1.2 .1.7.7.1. 4	udpEndp ointRem oteAddre ssType	Remote IP address type, such as IPv4 or IPv6	not- accessibl e	InetAddr essType	Consist ent with MIB file definitio n
1.3.6.1.2 .1.7.7.1. 5	udpEndp ointRem oteAddre ss	remote IP address	not- accessibl e	IpAddres s	Consist ent with MIB file definitio n
1.3.6.1.2 .1.7.7.1. 6	udpEndp ointRem otePort	remote port number	not- accessibl e	InetPort Number	Consist ent with MIB file definitio n
1.3.6.1.2 .1.7.7.1. 7	udpEndp ointInsta nce	The instance number of the endpoint	not- accessibl e	Unsigne d32	Consist ent with MIB file definitio n
1.3.6.1.2 .1.7.7.1. 8	udpEndp ointProc ess	The process number to which the UDP endpoint belongs	read- only	Unsigne d32	Consist ent with MIB file definitio n

7. ICMP-MIB

7.1 Function Introduction

ICMP-MIB is a management information base for monitoring ICMP communications between network devices and hosts. It provides a series of objects that can be used to obtain ICMP communication statistics, error information, delay time, etc. By analyzing this data, administrators can understand the quality of connections between devices on the network, as well as diagnose and resolve potential network failures. ICMP-MIB is a very useful tool that can help administrators better manage and optimize ICMP communication in the network.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).icmpMIB(5)

7.2 Detailed description of single node

7.2.1 Detailed description of icmplnMsgs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.1	icmpInMsg s	The number of received ICMP messages	read-only	Counter	Consistent with MIB file definition

7.2.2 Detailed description of icmplnErrors

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.2	icmpInErro rs	The number of incorrect ICMP messages received	read-only	Counter	Consistent with MIB file definition

7.2.3 Detailed description of icmplnDestUnreachs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.3	icmpInDes tUnreachs	Number of destination unreachab le messages received	read-only	Counter	Consistent with MIB file definition

7.2.4 Detailed description of icmplnTimeExcds

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.4	icmpInTim eExcds	The number of timeout messages received	read-only	Counter	Consistent with MIB file definition

7.2.5 Detailed description of icmplnParmProbs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.5	icmpInPar mProbs	Number of parameter error messages received	read-only	Counter	Consistent with MIB file definition

7.2.6 Detailed description of icmplnSrcQuenchs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1	icmplnSrc	s The number of	read-only	Counter	Consistent with MIB

.5.6 Quenchs	received ICMPs that are congested by the source	file definition
--------------	---	--------------------

7.2.7 Detailed description of icmplnRedirects

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.7	icmpInRed irects	The number of ICMP redirects received	read-only	Counter	Consistent with MIB file definition

7.2.8 Detailed description of icmplnEchos

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.8	icmpInEch os	The number of ICMP echo requests received	read-only	Counter	Consistent with MIB file definition

7.2.9 Detailed description of icmplnEchoReps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.9	icmpInEch oReps	The number of ICMP echo replies	read-only	Counter	Consistent with MIB file definition

	received		

7.2.10 Detailed description of icmplnTimestamps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.10	icmpInTim estamps	ICMP number of timestamp requests received	read-only	Counter	Consistent with MIB file definition

7.2.11 Detailed description of icmpInTimestampReps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.11	icmpInTim estampRe ps	The number of ICMP responses received with timestamp	read-only	Counter	Consistent with MIB file definition

7.2.12 Detailed description of icmplnAddrMasks

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.12	icmpInAdd rMasks	The number of received ICMP address mask requests	read-only	Counter	Consistent with MIB file definition

7.2.13 Detailed description of icmplnAddrMaskReps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.13	icmpInAdd rMaskRep s	The number of received ICMP address mask replies	read-only	Counter	Consistent with MIB file definition

7.2.14 Detailed description of icmpOutMsgs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.14	icmpOutM sgs	Number of ICMP messages sent	read-only	Counter	Consistent with MIB file definition

7.2.15 Detailed description of icmpOutErrors

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.15	icmpOutEr rors	Number of incorrect ICMP messages sent	read-only	Counter	Consistent with MIB file definition

7.2.16 Detailed description of icmpOutDestUnreachs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1	icmpOutD estUnreac	The number of	read-only	Counter	Consistent with MIB

s sent is unreachab le	.5.16	hs	unreachab	file definition
------------------------	-------	----	-----------	--------------------

7.2.17 Detailed description of icmpOutTimeExcds

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.17	icmpOutTi meExcds	The number of sent ICMP with TTL timeout	read-only	Counter	Consistent with MIB file definition

7.2.18 Detailed description of icmpOutParmProbs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.18	icmpOutP armProbs	ICMP number of parameter issues sent	read-only	Counter	Consistent with MIB file definition

7.2.19 Detailed description of icmpOutSrcQuenchs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.19	icmpOutSr cQuenchs	The number of ICMPs that are congested by the sending	read-only	Counter	Consistent with MIB file definition

	source		

7.2.20 Detailed description of icmpOutRedirects

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.20	icmpOutR edirects	The number of ICMP redirects sent	read-only	Counter	Consistent with MIB file definition

7.2.21 Detailed description of icmpOutEchos

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.21	icmpOutE chos	The number of ICMP echo requests sent	read-only	Counter	Consistent with MIB file definition

7.2.22 Detailed description of icmpOutEchoReps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.22	icmpOutE choReps	The number of ICMP echo replies sent	read-only	Counter	Consistent with MIB file definition

7.2.23 Detailed description of icmpOutTimestamps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.23	icmpOutTi mestamps	ICMP number of timestamp requests sent	read-only	Counter	Consistent with MIB file definition

7.2.24 Detailed description of icmpOutTimestampReps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.24	icmpOutTi mestampR eps	ICMP number of timestamp responses sent	read-only	Counter	Consistent with MIB file definition

7.2.25 Detailed description of icmpOutAddrMasks

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .5.25	icmpOutA ddrMasks	ICMP number of address mask requests sent	read-only	Counter	Consistent with MIB file definition

7.2.26 Detailed description of icmpOutAddrMaskReps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1	icmpOutA ddrMaskR	ICMP number of	read-only	Counter	Consistent with MIB

.5.26 eps address mask replies sent	file definition
-------------------------------------	--------------------

7.3 Detailed description of MIB Table

7.3.1 Detailed description of icmpStatsTable

OIDs	node name	meaning	maximum access	type	actual size
1.3.6.1.2. 1.5.29.1.1	icmpStats IPVersion	IP version of packet statistics.	not- accessible	INTEGER { unknown(0), ipv4(1), ipv6(2) }	with the MIB file definition .
1.3.6.1.2. 1.5.29.1.2	icmpStats InMsgs	Global statistics of input ICMP packets, including input error packets counted by the icmpStatsInE rrors node.	read-only	Integer(04 294967295)	Consisten t with the MIB file definition.
1.3.6.1.2. 1.5.29.1.3	icmpStats InErrors	Statistical count of globally input ICMP error packets. For example checksum error message, length error message.	read-only	Integer(04 294967295)	Consisten t with the MIB file definition.

1.3.6.1.2. 1.5.29.1.4	icmpStats OutMsgs	ICMP packet statistics output globally, including output error packets counted by the icmpStatsOut Errors node.	read-only	Integer(04 294967295)	Consisten t with the MIB file definition.
1.3.6.1.2. 1.5.29.1.5	icmpStats OutErrors	Statistical count of ICMP error packets exported globally. For example insufficient cache.	read-only	Integer(04 294967295)	Consisten t with the MIB file definition.
		This count does not include non-ICMP error packets, such as error packets for which no route can be found. In some implementati ons no error type is provided.			

7.3.2 Detailed description of icmpMsgStatsTable

OIDs	node name	meaning	maximum access	type	actual size
1.3.6.1.2.	icmpMsg	IP version of	not-	INTEGER {	not

1.5.30.1.1	StatsIPVe rsion	packet statistics.	accessible	unknown(0), ipv4(1), ipv6(2) }	support
1.3.6.1.2. 1.5.30.1.2	icmpMsg StatsType	Type of ICMP packets.	not- accessible	Integer32 (0255)	not support
С	icmpMsg StatsInPkt s	Statistics based on ICMP input packets of this type.	read-only	Integer(04 294967295)	Consisten t with the MIB file definition.
1.3.6.1.2. 1.5.30.1.4	icmpMsg StatsOutP kts	Statistics based on ICMP output packets of this type.	read-only	Integer(04 294967295)	The implement ation is consistent with the MIB file definition.

8. SNMP-MIB

8.1 Function Introduction

SNMP-MIB is a management information base for managing network devices. It provides various information about devices, including device configuration information, performance information, and operating status. By using SNMP-MIB, administrators can monitor and manage network devices to ensure network stability and security. SNMP-MIB provides many configurable parameters, including the SNMP version of the device, authentication mode, access rights, etc., which can be configured and adjusted by the administrator as required.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).snmp(11)

8.2 Detailed description of single node

8.2.1 Detailed description of snmplnPkts

OIDs node	meaning	maximu	type	actual	
-----------	---------	--------	------	--------	--

	name		m access		size
1.3.6.1.2.1 .11.1.0	snmpInPkt s	Count the number of packets received	read-only	Counter32	Consistent with MIB file definition

8.2.2 Detailed description of snmpOutPkts

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.2.0	snmpOutP kts	Count the number of packets sent	read-only	Counter32	Consistent with MIB file definition

8.2.3 Detailed description of snmplnBadVersions

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.3.0	snmpInBa dVersions	Count the number of packets with wrong version numbers	read-only	Counter32	Consistent with MIB file definition

8.2.4 Detailed description of snmplnBadCommunityNames

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.4.0	snmpInBa dCommuni tyNames	the number of packets containing unknown	read-only	Counter32	Consistent with MIB file definition

public	
bodies	

8.2.5 Detailed description of snmplnBadCommunityUses

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.5.0	snmpInBa dCommuni tyUses	Statistics of the number of wrong packets used by the common body	read-only	Counter32	Consistent with MIB file definition

8.2.6 Detailed description of snmplnASNParseErrs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.6.0	snmpInAS NParseErr s	Count the number of packets with ASN1 parsing errors	read-only	Counter32	Consistent with MIB file definition

8.2.7 Detailed description of snmplnTooBigs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.8.0	snmpInTo oBigs	Count the number of received messages whose	read-only	Counter32	not support

error- status is tool	
-----------------------------	--

8.2.8 Detailed description of snmplnNoSuchNames

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.9.0	snmpInNo SuchNam es	Count the number of received messages whose errorstatus field is noSuchNa me	read-only	Counter32	not support

8.2.9 Detailed description of snmplnBadValues

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.10.0	snmpInBa dValues	Count the number of received messages whose errorstatus field is readOnly	read-only	Counter32	not support

8.2.10 Detailed description of snmplnReadOnlys

OIDs	node name	meaning	maximu m access	type	actual size
------	--------------	---------	-----------------------	------	----------------

1.3.6.1.2.1 .11.11.0	snmpInRe adOnlys	Count the number of received messages whose errorstatus field is badValue	read-only	Counter32	not support
-------------------------	---------------------	---	-----------	-----------	----------------

8.2.11 Detailed description of snmplnGenErrs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.12.0	snmpInGe nErrs	Count the number of received messages whose errorstatus field is genErr	read-only	Counter32	not support

8.2.12 Detailed description of snmplnTotalReqVars

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.13.0	snmpInTot alReqVars	Count the number of variables received in the get/get-next operation	read-only	Counter32	Consistent with MIB file definition

8.2.13 Detailed description of snmplnTotalSetVars

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.14.0	snmpInTot alSetVars	Count the received set and the number of successful ly set variables	read-only	Counter32	Consistent with MIB file definition

8.2.14 Detailed description of snmplnGetRequests

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.15.0	snmpInGe tRequests	Count the number of get request packets received	read-only	Counter32	Consistent with MIB file definition

8.2.15 Detailed description of snmplnGetNexts

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.16.0	snmpInGe tNexts	Count the number of received get-next request packets "	read-only	Counter32	Consistent with MIB file definition

8.2.16 Detailed description of snmplnSetRequests

OIDs node meaning maximu m	type	actual
----------------------------	------	--------

	name		access		size
1.3.6.1.2.1 .11.17.0	snmpInSet Requests	Count the number of set request packets received	read-only	Counter32	Consistent with MIB file definition

8.2.17 Detailed description of snmplnGetResponses

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.18.0	snmpInGe tResponse s	Count the number of response packets received "	read-only	Counter32	not support

8.2.18 Detailed description of snmplnTraps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.19.0	snmpInTra ps	Count the number of traps received "	read-only	Counter32	not support

8.2.19 Detailed description of snmpOutTooBigs

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.20.0	snmpOutT ooBigs	Count the number of sent messages whose	read-only	Counter32	Consistent with MIB file definition

error- status field is tooBig	
-------------------------------------	--

8.2.20 Detailed description of snmpOutNoSuchNames

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1	snmpOutN oSuchNa mes	Count the number of sent messages whose errorstatus field is noSuchNa me	read-only	Counter32	Consistent with MIB file definition

8.2.21 Detailed description of snmpOutBadValues

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.22.0	snmpOutB adValues	Count the number of sent messages whose error-status field is badValue	read-only	Counter32	Consistent with MIB file definition

8.2.22 Detailed description of snmpOutGenErrs

OIDs	node name	meaning	maximu m access	type	actual size
------	--------------	---------	-----------------------	------	----------------

1.3.6.1.2.1 .11.24.0	snmpOutG enErrs	Count the number of sent messages whose error-status field is genErr	read-only	Counter32	Consistent with MIB file definition
-------------------------	--------------------	--	-----------	-----------	--

8.2.23 Detailed description of snmpOutGetRequests

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.25.0	snmpOutG etRequest s	Count the number of get request packets generated by snmp entities	read-only	Counter32	not support

8.2.24 Detailed description of snmpOutGetNexts

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.26.0	snmpOutG etNexts	Count the number of get-next request packets generated by snmp entities	read-only	Counter32	not support

8.2.25 Detailed description of snmpOutSetRequests

OIDs node meaning maximu m	type	actual
----------------------------	------	--------

	name		access		size
1.3.6.1.2.1 .11.27.0	snmpOutS etRequest s	Count the number of set request packets generated by snmp entities	read-only	Counter32	not support

8.2.26 Detailed description of snmpOutGetResponses

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.28.0	snmpOutG etRespons es	Count the number of response packets generated by snmp entities	read-only	Counter32	Consistent with MIB file definition

8.2.27 Detailed description of snmpOutTraps

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.29.0	snmpOutT raps	Count the number of trap packets sent	read-only	Counter32	Consistent with MIB file definition

8.2.28 Detailed description of snmpEnableAuthenTraps

OIDs	node name	meaning	maximu m access	type	actual size
------	--------------	---------	-----------------------	------	----------------

1.3.6.1.2.1 .11.30.0	snmpEnab leAuthenT raps	Identifies whether to allow sending traps for authentica tion failures	read-only	INTEGER	Consistent with MIB file definition
-------------------------	-------------------------------	--	-----------	---------	--

8.2.29 Detailed description of snmpSilentDrops

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.31.0	snmpSilen tDrops	the number of packets dropped because the reply size of the "tooBig" response PDU is larger than the local limit or the maximum message size associated with the requester	read-only	Counter32	Consistent with MIB file definition

8.2.30 Detailed description of snmpProxyDrops

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .11.32.0	snmpProx yDrops	statistic failed	read-only	Counter32	not support

because
the
message
was
delivered
to the
broker
target in a
non-timed-
out
manner

9. BRIDGE-MIB

9.1 Function Introduction

BRIDGE-MIB is a management information base in the SNMP protocol, used to manage bridge devices. It contains various information related to the bridge, such as MAC address table, port information, Spanning Tree Protocol (STP) information, etc. By querying BRIDGE-MIB, you can monitor and manage bridge devices, including management of network traffic and network topology.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).dot1dBridge(17)

9.2 Detailed description of single node

9.2.1 Detailed description of dot1dStpPriority

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1	dot1dStpP riority	802.1d spanning tree priority, the value is [0,61440], and it is a multiple of 4096.	read- write	Integer32 (061440)	Consistent with MIB file definition

9.2.2 Detailed description of dot1dStpBridgeMaxAge

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.2.12.0	dot1dStpB ridgeMaxA ge	The maximum lifetime of the root bridge BPDU message, in seconds; the value is [6,40]. And need to meet (dot1dStp BridgeHell oTime > (dot1dStp BridgeMax Age / 2 - 1) or (dot1dStp BridgeMax Age / 2 + 1) > dot1dStpB ridgeForw ardDelay)	read- write	Timeout (640)	Consistent with MIB file definition

9.2.3 Detailed description of dot1dStpBridgeHelloTime

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.2.13.0	dot1dStpB ridgeHello Time	The interval at which the root bridge	read- write	Timeout (110)	Consistent with MIB file definition

regularly sends
BPDU
messages,
in
seconds;
the value
is [1,10].
And need
to satisfy
(2 *
(dot1dStp
BridgeHell
oTime + 1)
<=
dot1dStpB
ridgeMaxA
ge)

9.2.4 Detailed description of dot1dStpBridgeForwardDelay

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.2.14.0	dot1dStpB ridgeForw ardDelay	The time interval for the state change of the root bridge port, in seconds; the value is [4,30]. And need to satisfy (dot1dStp BridgeHell oTime <= 2 * (dot1dStp BridgeFor wardDelay	read- write	Timeout (430)	Consistent with MIB file definition

	– 1))			
--	--------------	--	--	--

9.3 Detailed description of MIB Table

9.3.1 Detailed description of dot1dTpFdbTable

The FDB table (Forwarding Database Table) of the device is a mapping table that records the MAC address and the port number.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.17.4.3 .1.1	dot1dTp FdbAddr ess	MAC address	read- only	MacAddr ess	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.4.3 .1.2	dot1dTp FdbPort	User ID of the port associated with the MAC address	read- only	Integer3 2	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.4.3 .1.3 _	dot1dTp FdbStatu s	the FDB entry other(1) indicates other states, which may be caused by errors or other unknown reasons invalid (2) indicates an invalid state, indicating that the switch cannot determine the MAC address and port mapping relationship learned (3) indicates the learned state, indicating that the switch is learning the new MAC address and port mapping relationship self(4) indicates its own	read- only	INTEGE R { other(1), invalid(2), learned(3), self(4), mgmt(5) }	with MIB file definitio n

state, indicating that the MAC address and port mapping relationship are related to the switch itself	
mgmt(5) indicates the management status, indicating that the MAC address and port mapping relationship is related to switch management	

10. Q-BRIDGE-MIB

10.1 Function Introduction

The qBridgeMIB node is a MIB node based on the IEEE 802.1Q VLAN protocol and is used to manage VLAN information in the switch. The qBridgeMIB node includes VLAN configuration, status and statistical information, such as VLAN name, ID, port membership, MAC address table, etc. By querying the qBridgeMIB node, you can obtain the status and configuration information of the VLAN in the switch, helping the administrator to optimize the network topology and troubleshoot.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).dot1dBridge(17).qBridgeMIB(7)

10.2 Detailed description of single node

10.2.1 Detailed description of dot1qVlanVersionNumber

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.7.1.1.1 .0	dot1qVlan VersionNu mber	802.1q version of the device	read-only	INTEGER { version1(1) }	Consistent with MIB file definition

10.2.2 Detailed description of dot1qMaxVlanId

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.7.1.1.2 .0	dot1qMax VlanId	Maximum VLAN ID	read-only	VlanId	Consistent with MIB file definition

10.2.3 dot1qMaxSupportedVlans detailed description

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.7.1.1.3 .0	dot1qMax Supported Vlans	The maximum number of supported VLAN configurations	read-only	Unsigned32	Consistent with MIB file definition

10.2.4 Detailed description of dot1qNumVlans

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.7.1.1.4 .0	dot1qNum Vlans	Number of current VLAN configurati ons	read-only	Unsigned32	Consistent with MIB file definition

10.2.5 dot1qGvrpStatus detailed description

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.7.1.1.5	dot1qGvrp	Status of the GVRP	read-only	EnabledStatus	Consistent with MIB

.0	Status	Protocol enabled(1)	file definition
		supported disabled(2), not supported	

10.2.6 Detailed description of dot1qVlanNumDeletes

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .17.7.1.4.1 .0	dot1qVlan NumDelet es	Number of VLANs deleted	read-only	Counter32	Consistent with MIB file definition

10.3 Detailed description of MIB Table

10.3.1 Detailed description of dot1qFdbTable

The number of entries in the FDB table (Forwarding Database Table) describing the VLAN ID of the device

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.17.7.1 .2.1.1.1	dot1qFd bld	VLAN ID	not- accessibl e	Unsigne d32	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .2.1.1.2	dot1qFd bDynami cCount	Number of dynamically learned MAC addresses	read- only	Counter3 2	Consist ent with MIB file definitio n

10.3.2 Detailed description of dot1qTpFdbTable

The FDB table (Forwarding Database Table) of the device is a mapping table that records VLAN IDs, MAC addresses, and port numbers.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.17.7.1 .2.2.1.1	dot1qTp FdbAddr ess	MAC address	not- accessibl e	MacAddr ess	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .2.2.1.2	dot1qTp FdbPort	The user interface ID of the port associated with the VLAN ID and MAC address	read- only	INTEGE R (06553 5)	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .2.2.1.3	dot1qTp FdbStatu s	Status of the FDB entry: other(1) indicates other states, which may be caused by errors or other unknown reasons invalid (2) indicates an invalid state, indicating that the switch cannot determine the MAC address and port mapping relationship learned (3) indicates the learned state, indicating that the switch is learning the new MAC address and port mapping relationship self(4) indicates its own state, indicating that the MAC address and port mapping relationship are related to the switch itself mgmt(5) indicates the	read- only	INTEGE R { other(1), invalid(2), learned(3), self(4), mgmt(5) }	Consist ent with MIB file definition

10.3.3 Detailed description of dot1qVlanStaticTable

VLAN information statically configured on the device

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.17.7.1 .4.3.1.1	dot1qVla nStaticN ame	VLAN name	read- only	SnmpAd minStrin g (SIZE (032))	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .4.3.1.2	dot1qVla nStaticE gressPor ts	List of ports added to the VLAN	read- only	PortList	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .4.3.1.3	dot1qVla nForbidd enEgres sPorts	List of ports prohibited from joining VLAN	read- only	PortList	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .4.3.1.4	dot1qVla nStaticU ntagged Ports	UNTAG port list added to VLAN	read- only	PortList	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .4.3.1.5	dot1qVla nStaticR owStatus	The state of the entry	read- only	RowStat us	Consist ent with MIB file definitio n

10.3.4 Detailed description of dot1qPortVlanTable

Device VLAN configuration port status information

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.17.7.1 .4.5.1.1	dot1qPvi d	Default VLAN for the interface	read- only	VlanInde x	Consist ent with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .4.5.1.2	dot1qPor tAccepta bleFram eTypes	The interface can receive frame types: 0, the port can only receive TAG frames. 1. The port can receive TAG/UNTAG frames.	read- only	INTEGE R { admitAl I(1), admitOnl yVlanTag ged (2) }	with MIB file definitio n
1.3.6.1.2 .1.17.7.1 .4.5.1.3	dot1qPor tIngress Filtering	Interface filtering function: 0, the port disables the ingress filtering function. 1. The port has enabled the ingress filtering function.	read- only	TruthVal ue	Consist ent with MIB file definitio n

11. HOST-RESOURCES-MIB

11.1 Function Introduction

HOST-RESOURCES-MIB is a management information base used to monitor the resource utilization of hosts. It provides a series of objects that can be used to obtain CPU, memory, disk, network, process and system information on the host. By analyzing this data, administrators can understand host resource utilization and identify and resolve potential performance bottlenecks and failures. HOST-RESOURCES-MIB is a very useful tool that can help administrators better manage and optimize host resources in the network.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).resourcesMIB(25)

11.2 Detailed description of single node

11.2.1 Detailed description of hrSystemUptime

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.1.1	hrSystem Uptime	The time since this host was last run to initialize	read-only	TimeTicks	Consistent with the MIB file definition.

11.2.2 Detailed description of hrSystemDate

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.1.2	hrSystem Date	The host's local date and time	read-only	DateAndTime	Consistent with the MIB file definition.

11.2.3 Detailed description of hrSystemInitialLoadDevice

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.1.3	hrSystemI nitialLoad Device	This host is configured to load the initial operating system configurati on from	read-only	Integer32 (12147483647)	Consistent with the MIB file definition.

11.2.4 Detailed description of hrSystemInitialLoadParameters

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.1.4	hrSystemI nitialLoad Parameter s	This object contains the parameter s provided to the load device when initial OS configurati on was requested from the load device	read-only	InternationalDis playString (SIZE (01024))	Consistent with the MIB file definition.

11.2.5 Detailed description of hrSystemNumUsers

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.1.5	hrSystem NumUsers	The number of user sessions for which this host stores state informatio n	read-only	Gauge32	Consistent with MIB file definition

11.2.6 Detailed description of hrSystemProcesses

OIDs	node name	meaning	maximu m	type	actual size
------	--------------	---------	-------------	------	----------------

			access		
1.3.6.1.2.1 .25.1.6	hrSystem Processes	The current number of process contexts for this system	read-only	Gauge32	Consistent with MIB file definition

11.2.7 Detailed description of hrSystemMaxProcesses

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.1.7	hrSystem MaxProce sses	maximum number of process contexts this system can support	read-only	Integer (02147483647)	Consistent with MIB file definition

11.2.8 Detailed description of hrMemorySize

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.2.2	hrMemory Size	The amount of physical reads and writes to main memory, usually RAM	read-only	KBytes	Consistent with MIB file definition

11.3 Detailed description of MIB Table

11.3.1 Detailed description of hrStorageTable

hrStorageTable is a table node in HOST-RESOURCES-MIB, which is used to describe the storage resource information on the device

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.2.3.1.1	hrStorageI ndex	A unique value for each logical store contained by the host.	read-only	Integer32 (12147483647)	Consistent with MIB file definition
1.3.6.1.2.1 .25.2.3.1.2	hrStorage Type	The storage type of this logical storage	read-only	AutonomousTyp e	Consistent with MIB file definition
1.3.6.1.2.1 .25.2.3.1.3	hrStorage Descr	A description of the logical store	read-only	DisplayString	Consistent with MIB file definition
1.3.6.1.2.1 .25.2.3.1.4	hrStorage Allocation Units	The allocation unit size (in bytes) of this logical storage	read-only	Integer32 (12147483647)	Consistent with MIB file definition
1.3.6.1.2.1 .25.2.3.1.5	hrStorage Size	The total storage size of this logical store	read-only	Integer32 (12147483647)	Consistent with MIB file definition
1.3.6.1.2.1	hrStorage	Storage	read-only	Integer32	Consistent

.25.2.3.1.6	Used	usage for this logical	(12147483647)	with MIB file
		store		definition

11.3.2 Detailed description of hrDeviceTable

hrDeviceTable is a table node in HOST-RESOURCES-MIB, which is used to describe the hardware resource information on the host where the management device (management station) is located.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.3.2.1.1	hrDeviceIn dex	A unique value for each device contained by the host	read-only	Integer32 (12147483647)	with MIB file definition
1.3.6.1.2.1 .25.3.2.1.2	hrDeviceT ype	Indication of device type	read-only	AutonomousTyp e	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.2.1.3	hrDeviceD escr	A textual description of this device, including the device manufactu rer and version, and optionally a serial number	read-only	DisplayString (SIZE (064))	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.2.1.4	hrDevicel D	Product ID for this device	read-only	ProductID	Consistent with MIB file

					definition
1.3.6.1.2.1 .25.3.2.1.5	hrDeviceS tatus	The current operating state of the device described by this row in the table	read-only	Integer { unknown(1) running (2) warning(3) testing(4) down(5) }	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.2.1.6	hrDeviceE rrors	The number of errors detected on this device.	read-only	Counter32	Consistent with MIB file definition

11.3.3 Detailed description of hrProcessorTable

hrProcessorTable is a table node in HOST-RESOURCES-MIB, which is used to describe the CPU resource information on the device

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.3.3.1.1	hrProcess orFrwID	Product ID of the firmware associated with the CPU	read-only	ProductID	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.3.1.2	hrProcess orLoad	The average CPU usage during the last minute	read-only	Integer32 (0100)	Consistent with MIB file definition

11.3.4 Detailed description of hrNetworkTable

hrNetworkTable is a table node in HOST-RESOURCES-MIB, which is used to describe the network interface information on the device.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.3.4.1.1	hrNetworkI fIndex	ifIndex value correspon ding to this network device	read-only	InterfaceIndexO rZero	Consistent with MIB file definition

11.3.5 Detailed description of hrFStable

hrFSTable is a table node in HOST-RESOURCES-MIB, which is used to describe the file system information on the host

•							
OIDs	node name	meaning	maximu m access	type	actual size		
1.3.6.1.2.1 .25.3.8.1.1	hrFSIndex	A unique value per filesystem local to this host	read-only	Integer32 (12147483647)	Consistent with MIB file definition		
1.3.6.1.2.1 .25.3.8.1.2	hrFSMoun tPoint	The pathname of the root directory of this file system.	read-only	InternationalDis playString (SIZE(0128)	Consistent with MIB file definition		
1.3.6.1.2.1 .25.3.8.1.3	hrFSRemo teMountPo int	A description of the name and/or address of the server on which	read-only	InternationalDis playString (SIZE(0128)	Consistent with MIB file definition		

		this filesystem is mounted			
1.3.6.1.2.1 .25.3.8.1.4	hrFSType	The value of this object identifies the type of this file system.	read-only	AutonomousTyp e	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.8.1.5	hrFS Access	Indicates whether this filesystem is configured by the operating system logic to be read-write or read- only	read-only	Integer { readWrite(1), readOnly(2) }	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.8.1.6	hrFS Bootable	Flag indicating whether this filesystem is bootable 1. Bootable 2. Not bootable	read-only	TruthValue	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.8.1.7	hrFSStora geIndex	Index of the hrStorage Entry representi	read-only	Integer32 (02147483647)	Consistent with MIB file definition

		informatio n for this file system			
1.3.6.1.2.1 .25.3.8.1.8	hrFSLastF ullBackup Date	The last date this full file system was copied to another storage device for backup	read-only	DateAndTime	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.8.1.9	hrFS LastPartial BackupDa te	The last date on which a portion of this file system was copied to another storage device for backup.	read-only	DateAndTime	Consistent with MIB file definition

11.3.6 Detailed description of hrSWRunTable

hrSWRunTable is a table node in HOST-RESOURCES-MIB, which is used to describe the software process information running on the device.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.4.2.1.1	hrSWRunI ndex	An index number describing a software process	read-only	Integer32 (12147483647)	Consistent with MIB file definition
1.3.6.1.2.1	hrSWRun	Describes the name	read-only	InternationalDis playString (SIZE	Consistent with MIB

.25.4.2.1.2	Name	of the software process		(064))	file definition
1.3.6.1.2.1 .25.4.2.1.3	hrSWRunI D	unique identifier describing a software process	read-only	ProductID	Consistent with MIB file definition
1.3.6.1.2.1 .25.4.2.1.4	hrSWRun Path	Describes the execution path of a software process	read-only	InternationalDis playString (SIZE(0128)	Consistent with MIB file definition
1.3.6.1.2.1 .25.4.2.1.5	hrSWRun Parameter s	Describes the operating parameter s of a software process	read-only	InternationalDis playString (SIZE(0128)	Consistent with MIB file definition
1.3.6.1.2.1 .25.4.2.1.6	hrSWRun Type	Describes the type of software process, such as application , daemon, etc.	read-only	Integer { unknown(1), operatingSyste m(2), deviceDriver(3), application(4) }	Consistent with MIB file definition
1.3.6.1.2.1 .25.3.8.1.7	hrSWRun Status	Describes the state of a software process, such as running, stopped, etc.	read-only	INTEGER { running(1), runnable(2), notRunnable(3), invalid(4) }	Consistent with MIB file definition

11.3.7 Detailed description of hrSWRunPerfTable

hrSWRunPerfTable is a table node in HOST-RESOURCES-MIB, which is used to describe the performance information of software processes running on the device.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .25.5.1.1.1	hrSWRun PerfCPU	Percentag e of CPU in the entire system The resources consumed by this process	read-only	Integer32 (02147483647)	Consistent with MIB file definition
1.3.6.1.2.1 .25.4.2.1.2	hrSWRun PerfMem	The total amount of actual system memory allocated to this process is used to obtain the memory usage of each process in the system	read-only	KBytes	Consistent with MIB file definition

12. DNS-MIB

12.1 Function Introduction

DNS-MIB is a management information base used to monitor the operation of DNS

servers and Domain Name System. It provides a series of objects that can be used to obtain DNS server statistics, domain name resolution status information, etc. By analyzing this data, administrators can understand the operation of DNS servers, as well as identify and resolve potential DNS failures and security issues. DNS-MIB is a very useful tool that can help administrators better manage and optimize DNS services in the network.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).dnsMIB(31)

12.2 Detailed description of single node

12.2.1 Detailed description of dnsResConfigImplementIdent

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .32.2.1.1.1	dnsResCo nfigImple mentIdent	The implement ation identificati on string for the parser software used on the system	read-only	DisplayString	Consistent with MIB file definition

12.2.2 Detailed description of dnsResConfigUpTime

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .32.2.1.1.5	dnsResCo nfigUpTim e	The time since the first DNS process was started, in seconds	read-only	DnsTime	Consistent with MIB file definition

12.2.3 Detailed description of dnsResConfigResetTime

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .32.2.1.1.6	dnsResCo nfigResetT ime	The time since the last reset of the DNS process, in seconds	read-only	DnsTime	Consistent with MIB file definition

12.2.4 Detailed description of dnsResConfigReset

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .32.2.1.1.7	dnsResCo nfigReset	Get running status or perform a reset	read- write	INTEGER { other(1), reset(2), initializing(3), running (4) }	The implement ation is consistent with the MIB file definition.

13. ENTITY-MIB

13.1 Function Introduction

entity-MIB is a standard MIB used to manage device entities on the network. It contains the basic information of the device entity, such as device type, manufacturer information, hardware and software version, etc. By querying and modifying the nodes in entity-MIB, the management and monitoring of device entities can be realized. entity-MIB is one of the commonly used MIBs in network management, and is widely used in network device management and monitoring systems.

RFC2037 defines entity-MIB, which is mainly used to describe multiple entities, which can be supported by a single agent. This MIB can provide entity-wise queries.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).entityMIB(47)

13.2 Detailed description of single node

13.2.1 Detailed description of entLastChangeTime

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .47.1.4.1	entLastCh angeTime	sysUpTim e when the entity MIB content changes	read-only	TimeTicks	Consistent with MIB file definition

13.3 Detailed description of MIB Table

13.3.1 Detailed description of entPhysicalTable

This table lists each physical entity, along with some types and information about the entity.

The index of this table is entPhysicalIndex

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .47.1.1.1.1 .1	entPhysic alIndex	Physical entity index.	read-only	PhysicalIndex	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1 .2	entPhysic alDescr	Physical entity description informatio n, including device model, board, and interface informatio	read-only	SnmpAdminStri ng	Consistent with the MIB file definition.

		n.			
1.3.6.1.2.1 .47.1.1.1.1 .3	entPhysic alVendorT ype	Concrete type of physical entity.	read-only	AutonomousTyp e	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1 .4	entPhysic alContaine dIn	Contains the index of the immediate parent entity of this physical entity. Range: 0~214748 3647 Default: 1	read-only	PhysicalIndexOr Zero	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1.1 .5	entPhysic alClass	Generic type for physics entities.	read-only	PhysicalClass	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1.1 .6	entPhysic alParentR elPos	Relative number among all child entities in its parent entity. Range: -1 ~ 21474836 47 Default: 1	read-only	Integer32 (- 12147483647)	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1.1 .7	entPhysic alName	Physical entity name.	read-only	SnmpAdminStri ng	Consistent with the MIB file

					definition.
1.3.6.1.2.1 .47.1.1.1.1 .8	entPhysic alHardwar eRev	Hardware version number. It is consistent with the Pcb Version displayed in the output of the display version command. If the version number does not exist in the entity, it is displayed as NA.	read-only	SnmpAdminStri	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1.1 .9	entPhysic alFirmwar eRev	Firmware version number.	read-only	SnmpAdminStri ng	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1.1 .10	entPhysic alSoftware Rev	Software version number.	read-only	SnmpAdminStri ng	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1.1 .11	entPhysic alSerialNu m	SN serial number	read-only	SnmpAdminStri ng (SIZE (032))	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.1.1.1 .12	entPhysic alMfgNam e	Manufactu rer name.	read-only	SnmpAdminStri ng	Consistent with the MIB file

					definition.
1.3.6.1.2.1 .47.1.1.1.1 .13	entPhysic alModelNa me	The model name identifier string associated with the physical componen t	read-only	SnmpAdminStri ng	not support
1.3.6.1.2.1 .47.1.1.1.1 .14 _	entPhysic alAlias	Physical Entity Alias The model name identifier string associated with the physical componen t	read-only	SnmpAdminStri ng (SIZE (032))	not support
1.3.6.1.2.1 .47.1.1.1.1 .15	entPhysic alAssetid	physical entity tracking id	read-only	SnmpAdminStri ng (SIZE (032))	not support
1.3.6.1.2.1 .47.1.1.1.1 .16	entPhysic allsFRU	Indicates whether it can be plugged or unplugged	read-only	TruthValue	Consistent with the MIB file definition.

13.3.2 Detailed description of entAliasMappingTable

This table describes the relationship between logical entities and physical entities corresponding to extended MIB information.

The indexes for this table are entPhysicalInedx, entAliasLogicalIndexOrZero.

OIDs	node	meaning	maximu	type	actual
------	------	---------	--------	------	--------

	name		m access		size
1.3.6.1.2.1 .47.1.3.2.1 .1	entAliasLo gicalIndex OrZero	Logical entity index.	read-only	Integer32 (02147483647)	Consistent with the MIB file definition.
1.3.6.1.2.1 .47.1.3.2.1 .2	entAliasM appingIde ntifier	Extended mib informatio n identifier.	read-only	RowPointer	Consistent with the MIB file definition.

13.3.3 Detailed description of entPhysicalContainsTable

This table describes containment relationships between physical entities.

The indexes of this table are entPhysicalInedx, entPhysicalChildIndex.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2.1 .47.1.3.3.1 .1	entPhysica IChildInde x	Subphysic al entity index.	read-only	PhysicalIndex	Consistent with MIB file definition

14. PING-MIB

14.1 Function Introduction

DISMAN-PING-MIB is a Management Information Base for monitoring network connectivity and latency between network devices and hosts. It provides a set of objects that can be used to measure and monitor ICMP ping tests on the network. These objects include ping source and destination addresses, ping results and delay times, and ping test status information. By analyzing this data, administrators can understand the quality of connections between devices on the network, and diagnose and resolve potential network failures.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).pingMIB(80)

14.2 Detailed description of MIB Table

14.2.1 Detailed description of pingCtlTable

Defines the ability to perform Ping tests via SNMP. The result of the operation is stored in the pingResults table and the pingProbeHistory table.

The indexes for this table are pingCtlOwnerIndex and pingCtlTestName.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.80.1.2 .1.1	pingCtlOwn erIndex	This node represents a security administrator using the view-based access control model (VACM in RFC2575) to provide access control for tables .	not- accessibl e	SnmpAd minStrin g(SIZE(0 32)	not support
1.3.6.1.2 .1.80.1.2 .1.2	pingCtlTest Name	Test name description, together with the previous object as the index of the table.	not- accessibl e	SnmpAd minStrin g(SIZE(0 32)	not support
1.3.6.1.2 .1.80.1.2 .1.3	pingCtlTarge tAddressTyp e	Destination address type, specify whether it is IPv4 or IPv6	read- create	Integer { unknown (0),ipv4(1) }	Consistent with the MIB file definition.
1.3.6.1.2	pingCtlTarge	Destination	read-	Octet	Consistent with

.1.80.1.2 .1.4	tAddress	address	create	String (0255))	the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.5	pingCtlData Size	The byte length of the ICMP message body to be forwarded	read-only	Unsigne d32 (06550 7)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.6	pingCtlTime Out	Specifies that the total timeout for a ping operation cannot exceed this time	read-only	Unsigne d32 (160)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.7	pingCtlProb eCount	Indicates how many probes need to be sent for a ping operation	read-only	Unsigne d32 (115)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.8	pingCtlAdmi nStatus	The enable switch of the probe meter	read- create	Integer { enabled(1), disabled(2) }	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.9 _	pingCtlData Fill	message body byte content to be forwarded	read- create	Octet String (SIZE(0 1024))	with the MIB file definition .
1.3.6.1.2 .1.80.1.2 .1.10	pingCtlFreq uency	The interval at which a ping probe is sent regularly	read- create	Integer (04294 967295)	Consistent with the MIB file definition.

1.3.6.1.2 .1.80.1.2 .1.11	pingCtlMax Rows	number of probe table records that can be saved	read- create	Integer (04294 967295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.12	pingCtlStora geType	specify a storage type	read- create	Integer { other(1), volatile(2), nonVolat ile(3), permane nt(4), readOnly (5)}	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.13	pingCtlTrap Generation	Indicate the type of trap sent	read- create	Bits { probeFai lure(0), testFailu re(1), testCom pletion(2) }	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.14	pingCtlTrap ProbeFailur eFilter	Indicates how many consecutive failed probes there are	read- create	Unsigne d32 (015)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.15 _	pingCtlTrapT estFailureFil ter	Indicate how many failed probes	read- create	Unsigne d32 (015)	with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.16	pingCtlType	The implementati on method can be one	read- create	Object Identifier	Consistent with the MIB file definition.

		of ICMP UDP TCP SNMP			
1.3.6.1.2 .1.80.1.2 .1.17	pingCtlDesc r	descriptive name for the PING test	read- create	Octet String (0255))	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.18	pingCtlSour ceAddressT ype	Source address type, specify whether it is IPv4 or IPv6	read- create	Integer { unknown (0),ipv4(1) }	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.19	pingCtlSour ceAddress	source address	read- create	Octet String (0255))	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.20	pingCtllfInde x	Specify the interface index value to send	read- create	Integer3 2 (02147 483647)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.21	pingCtlByPa ssRouteTabl e	Specifies whether the PING operation is set to bypass	read- create	Integer {true(1),f alse(2)}	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.22	pingCtlDSFi eld	Specifies whether the PING operation sets the DS flag of the socket	read- create	Unsigne d32 (0255)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.2 .1.23 _	pingCtlRow Status	The status value of this control record	read- create	Integer { active(1) , createAn dGo(4), destroy(with the MIB file definition.

	6)	
	}	

14.2.2 Detailed description of pingResultsTable

Defines the capabilities of different SNMP entities to perform Ping operations. The results of the tests are stored in the pingResultsTable and the pingProbeHistoryTable.

This table is used to save test results. The index uses the index of the pingCtlTable table, and each row of pingCtlTable uniquely generates a row of pingResultsTable. When the test row starts testing, a corresponding record of the test result is created. Test results only retain the latest test results.

The indexes for this table are pingCtlOwnerIndex and pingCtlTestName.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.80.1.3 .1.1	pingResults OperStatus	The final result status of a PING operation	read-only	Integer { enabled(1), disabled(2), complete d(3)}	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.2	pingResultsI pTargetAddr essType	Destination address type, specify whether it is IPv4 or IPv6	read-only	InetAddre ssType { unknown(0), ipv4(1), ipv6(2), ipv4z(3), ipv6z(4), dns(16) }	with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.3	pingResultsI pTargetAddr ess	Destination address	read-only	InetAddre ss (SIZE	Consistent with the MIB file definition.

				(0255))	
1.3.6.1.2 .1.80.1.3 .1.4	pingResults MinRtt	A PING operation sends a probe with the fastest return time	read-only	Unsigned 32 (042949 67295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.5	pingResults MaxRtt	A PING operation sends a probe with the slowest return time	read-only	Unsigned 32 (042949 67295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.6	pingResultsA verageRtt	Average return time for a PING operation to send probes	read-only	Unsigned 32 (042949 67295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.7	pingResultsP robeRespons es	The number of replies received for a PING operation	read-only	Unsigned 32 (042949 67295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.8	pingResultsS entProbes	The number of probe packets sent by a PING operation	read-only	Unsigned 32 (042949 67295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.9	pingResultsR ttSumOfSqu ares	The total time spent on all detections of a PING operation	read-only	Unsigned 32 (042949 67295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.3 .1.10	pingResultsL astGoodProb e	The time when the last reply	read-only	DateAnd Time (SIZE (8	with the MIB file definition.

was	11))	
received		

14.2.3 Detailed description of pingProbeHistoryTable

This table is used to store the historical record information of the HWPing service test. The index of the table uses the index of the pingCtlTable table and a gradually increasing object as the index.

The indexes for this table are pingCtlOwnerIndex, pingCtlTestName, and pingProbeHistoryIndex.

pingi reserieteryindex.					
OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.80.1.4 .1.1	pingProbeHi storyIndex	Table entries are created when probe results are determined.	not- accessibl e	Unsigned 32 (1'ffffffff' h)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.4 .1.2	pingProbeHi storyRespon se	The time spent in the test operation.	read-only	Integer (042949 67295)	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.4 .1.3	pingProbeHi storyStatus	The result of a specific probe performed by the opposing host.	read-only	Integer 1-11	Consistent with the MIB file definition.
1.3.6.1.2 .1.80.1.4 .1.4	pingProbeHi storyLastRC	The last executed method-specific response code received.	read-only	Integer32	Consistent with the MIB file definition.

1.3.6.1.2 .1.80.1.4 .1.5	pingProbeHi storyTime	Timestamp when the probe result was determined.	read-only	Octet String (SIZE (8 11))	Consistent with the MIB file definition.
--------------------------------	--------------------------	---	-----------	---------------------------------------	--

14.3 Detailed Description of Alarm Nodes

14.3.1 Detailed description of pingProbeFailed

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.80.0 .1	pingProbeFailed	This probe fails, this entry depends on the value of the pingCtlTrapPro beFailureFilter entry. When pingCtlTrapPro beFailureFilter is set to probeFailure(0), it means that the probe failed. pingCtlTrapPro beFailureFilter can be used to specify the number of consecutive detection failures, and must be specified before generating the detection failure notification.	pingCtlTargetAddress pingResultsOperStatus pingResultsIpTargetAddres sType pingResultsIpTargetAddres s pingResultsMinRtt pingResultsMaxRtt pingResultsAverageRtt pingResultsProbeRespons es pingResultsSentProbes pingResultsRttSumOfSquar es pingResultsLastGoodProbe	Consist ent with the MIB file definitio n.

14.3.2 Detailed description of pingTestFailed

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.80.0 .2	pingTestFai led	When a ping test has failed, and the corresponding node pingCtlTrapGe neration is set to testFailure(1). In this example, pingCtlTrapTes tFailureFilter is used to specify the number of probes to use when the detection fails.	pingCtlTargetAddressType pingCtlTargetAddress pingResultsOperStatus pingResultsIpTargetAddres sType pingResultsIpTargetAddres s pingResultsMinRtt pingResultsMaxRtt pingResultsAverageRtt pingResultsProbeRespons es pingResultsSentProbes pingResultsRttSumOfSquar es pingResultsLastGoodProbe	with the MIB file definition.

14.3.3 Detailed description of pingTestCompleted

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.80.0 .3	pingTestCo mpleted	The ping operation is completed, and the corresponding node pingCtlTrapGe neration is set to testCompletion	pingCtlTargetAddressType pingCtlTargetAddress pingResultsOperStatus pingResultsIpTargetAddres sType pingResultsIpTargetAddres s	Consist ent with the MIB file definitio n.

(2).	pingResultsMinRtt
	pingResultsMaxRtt
	pingResultsAverageRtt
	pingResultsProbeRespons es
	pingResultsSentProbes
	pingResultsRttSumOfSquar es
	pingResultsLastGoodProbe

15. TRACEROUTE-MIB

15.1 Function Introduction

DISMAN-TRACEROUTE-MIB is a standard MIB module used to monitor and manage the traceroute function in the network. It provides a series of objects that can be used to measure and monitor trace routes on the network (Trace Route). These objects include traceroute source and destination addresses, traceroute results and delay times, and status information about traceroute tests. By analyzing these data, administrators can monitor and manage the traceroute function in the network.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).traceRouteMIB(81)

15.2 Detailed description of MIB Table

15.2.1 Detailed description of traceRouteCtlTable

TraceRoute operation configuration information table. The indexes of this table are traceRouteCtlOwnerIndex and traceRouteCtlTestName.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1. 2.1.81.1 .2.1.1	traceRoute CtlOwnerIn dex	The first index value of the routing control table, which can be used for authentication	not- accessibl e	SnmpAd minStrin g (SIZE(0 32))	The implementatio n is consistent with the MIB file definition.

		during operation			
.1.3.6.1. 2.1.81.1 .2.1.2	traceRoute CtlTestNam e	The second index value of the road control table, which can be used to distinguish different operations	not- accessibl e	SnmpAd minStrin g (SIZE(0 32))	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.3	traceRoute CtlTargetAd dressType	The type of host address to use in traceroute requests on remote hosts.	read- create	InetAddr essType	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .2.1.4	traceRoute CtlTargetAd dress	Destination address	read- create	InetAddr ess	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .2.1.5	traceRoute CtlByPassR outeTable	Indicate whether a bypass is required	read- create	TruthVal ue	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.6	traceRoute CtlDataSize	The byte length of the ICMP message body to be forwarded	read- create	Unsigne d32 (06550 7)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.7	traceRoute CtlTimeOut	Specifies that the total timeout for a traceroute operation cannot exceed	read- create	Unsigne d32 (160)	The implementatio n is consistent with the MIB file definition.

		this time			
.1.3.6.1. 2.1.81.1 .2.1.8	traceRoute CtlProbesP erHop	Indicates how many times a traceroute operation needs to send probes within a TTL	read- create	Unsigne d32 (110)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.9	traceRoute CtlPort	UDP destination port number	read- create	Unsigne d32 (16553 5)Gauge 32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.10	traceRoute CtlMaxTtl	maximum hop count	read- create	Unsigne d32 (1255)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.11	traceRoute CtlDSField	Specifies whether the traceroute operation sets the DS flag of the socket	read- create	Unsigne d32 (0255)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.12	traceRoute CtlSourceA ddressType	Source address type, specify whether it is IPv4 or IPv6	read- create	InetAddr essType	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .2.1.13	traceRoute CtlSourceA ddress	source address	read- create	InetAddr ess	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1	traceRoute CtllfIndex	Specify the interface index	read- create	Interface IndexOr	The implementatio n is consistent

.2.1.14		to send		Zero	with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.15	traceRoute CtlMiscOpti ons	Custom options	read- create	SnmpAd minStrin g	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.16	traceRoute CtlMaxFailu res	Indicate how many failed probes	read- create	Unsigne d32 (0255)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.17	traceRoute CtlDontFrag ment	Indicates whether to allow fragmentation when sending packets	read- create	TruthVal ue	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.18	traceRoute CtlInitialTtl	initial probe hop count	read- create	Unsigne d32 (1255)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.19	traceRoute CtlFrequenc y	The interval at which a traceroute probe is sent regularly	read- create	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.20	traceRoute CtlStorageT ype	record storage type	read- create	StorageT ype	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.21	traceRoute CtlAdminSt atus	The enable switch of the probe meter: 1: Attempt to	read- create	INTEGE R { enabled(1),	The implementatio n is consistent with the MIB

		activate the test defined by this traceRouteCtlE ntry. 2: Disable the test defined by this traceRouteCtlE ntry.		disabled(2) }	file definition.
.1.3.6.1. 2.1.81.1 .2.1.22	traceRoute CtlDescr	Add a descriptive name to the traceroute operation	read- create	SnmpAd minStrin g	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.23	traceRoute CtlMaxRow s	number of probe table records that can be saved	read- create	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.24	traceRoute CtlTrapGen eration	Ways to send trap messages: 0: generate a traceRoutePat hChange notification when the current path differs from the previously determined path; 1: Generate a traceRouteTest Failed notification when the complete path to the target cannot be	read- create	BITS { pathCha nge(0), testFailur e(1), testCom pletion(2) }	The implementatio n is consistent with the MIB file definition.

		determined;			
		2: A traceRouteTest Completed notification is generated when the path to the target has been determined. The default value for this object is the empty set, meaning that none of the above options is selected.			
.1.3.6.1. 2.1.81.1 .2.1.25	traceRoute CtlCreateH opsEntries	Is it necessary to generate a hop-by-hop table	read- create	TruthVal ue	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.26	traceRoute CtlType	detection method	read- create	OBJECT IDENTIF IER	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .2.1.27	traceRoute CtlRowStat us	This object allows creation and deletion of entries in the lookupCtlTable. When an entry in this table is created and activated via an SNMP SET request, the remote lookup operation is	read- create	RowStat us { active(1), notInSer vice(2), notRead y(3), createAn dGo(4), createAn dWait(5),	only support active(1), createAndGo(4)

initiated. This is	destroy(
accomplished	6)	
by setting the	0)	
_	}	
value of this		
object to		
CreateAndGo(
4) during row		
creation, or		
active(1) after		
row creation. A		
value must be		
specified for		
lookupCtlTarge		
tAddress		
before		
accepting a		
transition to the		
active(1) state.		
A remote		
lookup		
operation		
starts when its		
entry becomes		
_		
active(1) for		
the first time.		
Entering and		
exiting the		
active(1) state		
has no effect		
on the		
operational		
behavior of a		
remote lookup		
operation, but		
deleting an		
entry in this		
•		
table by setting its RowStatus		
object to		
destroy(6) will		
stop an active		
remote lookup		
operation. The		
operational		
status of a		

Status object.

15.2.2 Detailed description of traceRouteResultsTable

This table defines the status value of the result corresponding to the TraceRoute operation. This table is used to track the status of traceRouteCtlEntry. The indexes of this table are traceRouteCtlOwnerIndex and traceRouteCtlTestName.

OIDs	node name	meaning	maximu m access	type	actual size
.1.3.6.1. 2.1.81.1 .3.1.1	traceRouteR esultsOperSt atus	Final result status: 1: test is active; 2: The test has stopped; 3: The test is complete.	read- only	INTEGE R { enabled(1), disabled(2), complete d(3)}	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .3.1.2	traceRouteR esultsCurHo pCount	The TTL value of the current probe	read- only	Gauge32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .3.1.3	traceRouteR esultsCurPro beCount	The probe value where the current probe is located	read- only	Gauge32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .3.1.4	traceRouteR esultsIpTgtA ddrType	Destination address type, specify whether it is	read- only	InetAddr essType	Currently only IPv4 addresses are supported.

		IPv4 or IPv6			
.1.3.6.1. 2.1.81.1 .3.1.5	traceRouteR esultsIpTgtA ddr	Destination address	read- only	InetAddr ess	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .3.1.6	traceRouteR esultsTestAtt empts	total probe attempts	read- only	Gauge32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .3.1.7	traceRouteR esultsTestSu ccesses	The number of times the promise was successfully received	read- only	Gauge32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .3.1.8	traceRouteR esultsLastG oodPath	final completion time	read- only	DateAnd Time	The implementatio n is consistent with the MIB file definition.

15.2.3 traceRouteProbeHistoryTable detailed description

The status value in the result table corresponding to the TraceRoute operation is defined by saving the result of a TraceRoute operation. The indexes of this table are traceRouteCtlOwnerIndex, traceRouteCtlTestName, traceRouteProbeHistoryIndex and traceRouteProbeHistoryHopIndex, traceRouteProbeHistoryProbeIndex.

OIDs	node name	meaning	maximu m access	type	actual size
.1.3.6.1. 2.1.81.1 .4.1.1	traceRouteP robeHistoryI ndex	Probe table index value	not- accessibl e	Unsigne d32 (1' fffffffh)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1.	traceRouteP	hops value	not-	Unsigne	The

2.1.81.1 .4.1.2	robeHistory HopIndex		accessibl e	d32 (1255)	implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .4.1.3	traceRouteP robeHistoryP robeIndex	probe value	not- accessibl e	Unsigne d32 (110)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .4.1.4	traceRouteP robeHistory HAddrType	The source address type returned by the probe	read- only	InetAddr essType	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .4.1.5	traceRouteP robeHistory HAddr	The source address returned by the probe, that is, the path address	read- only	InetAddr ess	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .4.1.6	traceRouteP robeHistory Response	Sum of send and answer times for all probes	read- only	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .4.1.7	traceRouteP robeHistoryS tatus	final result status value	read- only	Operatio nRespon seStatus	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .4.1.8	traceRouteP robeHistoryL astRC	Implemented code type	read- only	Integer3 2	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .4.1.9	traceRouteP robeHistoryT ime	final completion time	read- only	DateAnd Time	The implementatio n is consistent

		with the MIB
		file definition.

15.2.4 Detailed description of traceRouteProbeHopsTable

TraceRoute statistics table for each hop. The indexes for this table are traceRouteCtlOwnerIndex, traceRouteCtlTestName, and traceRouteHopsHopIndex.

OIDs	node name	meaning	maximu m access	type	actual size
.1.3.6.1. 2.1.81.1 .5.1.1	traceRouteH opsHopInde x	Hop-by-hop table index value	not- accessibl e	Unsigne d32 (1' fffffffh)	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .5.1.2	traceRouteH opslpTgtAdd ressType	Source address type, specify whether it is IPv4 or IPv6	read- only	InetAddr essType	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .5.1.3	traceRouteH opslpTgtAdd ress	source address	read- only	InetAddr ess	Currently only IPv4 addresses are supported.
.1.3.6.1. 2.1.81.1 .5.1.4	traceRouteH opsMinRtt	Minimum probe response time under the same TTL	read- only	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .5.1.5	traceRouteH opsMaxRtt	Maximum probe response time under the same TTL	read- only	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .5.1.6	traceRouteH opsAverage Rtt	Average probe response time under the	read- only	Unsigne d32	The implementatio n is consistent with the MIB

		same TTL			file definition.
.1.3.6.1. 2.1.81.1 .5.1.7	traceRouteH opsRttSumO fSquares	The sum of all probe response times under the same TTL	read- only	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .5.1.8	traceRouteH opsSentProb es	Number of detection packets sent under the same TTL	read- only	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .5.1.9	traceRouteH opsProbeRe sponses	Number of probe packets received under the same TTL	read- only	Unsigne d32	The implementatio n is consistent with the MIB file definition.
.1.3.6.1. 2.1.81.1 .5.1.10	traceRouteH opsLastGoo dProbe	the last probe was received under the same TTL	read- only	DateAnd Time	The implementatio n is consistent with the MIB file definition.

15.3 Detailed Description of Alarm Nodes

15.3.1 Detailed description of traceRoutePathChange

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.81.0 .1	traceRoute PathChang e	Generate a trap message when the presence detection path is changed	traceRouteCtlTargetAddres sType traceRouteCtlTargetAddres s traceRouteResultsIpTgtAdd rType traceRouteResultsIpTgtAdd r	The impleme ntation is consiste nt with the MIB file definitio n.

15.3.2 Detailed description of traceRouteTestFailed

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.81.0 .2	traceRoute TestFailed	When a traceroute operation has the specified failure detection, generate a trap message	traceRouteCtlTargetAddres sType traceRouteCtlTargetAddres s traceRouteResultsIpTgtAdd rType traceRouteResultsIpTgtAdd r	The impleme ntation is consiste nt with the MIB file definitio n.

15.3.3 traceRouteTestCompleted detailed description

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.81.0 .3	traceRoute TestCompl eted	When a traceroute operation completes, generate a trap message	traceRouteCtlTargetAddres sType traceRouteCtlTargetAddres s traceRouteResultsIpTgtAdd rType traceRouteResultsIpTgtAdd r	The impleme ntation is consiste nt with the MIB file definitio n.

16. NSLOOKUP-MIB

16.1 Function Introduction

DISMAN-LOOKUP-MIB is a standard MIB module used to determine names corresponding to host addresses or addresses associated with hostnames on remote hosts. It provides a series of objects, including the source and destination address of Lookup, the result and delay time of Lookup, and the status information of Lookup test. By analyzing this data, administrators determine the names corresponding to

host addresses or addresses associated with hostnames on remote hosts.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).lookupMIB(82)

16.2 Detailed description of MIB Table

16.2.1 Detailed description of lookupCtlTable

This table describes the Lookup operation configuration information.

OIDs	node name	meaning	maximu m access	type	actual size
.1.3.6.1. 2.1.82.1. 3.1.1	lookupCtlO wnerIndex	Attribution information index.	not- accessibl e	SnmpAd minStrin g (SIZE(0 32))	The implementation is consistent with the MIB file definition.
.1.3.6.1. 2.1.82.1. 3.1.2	lookupCtlOp erationNam e	Action name.	not- accessibl e	SnmpAd minStrin g (SIZE(0 32))	The implementation is consistent with the MIB file definition.
.1.3.6.1. 2.1.82.1. 3.1.3	lookupCtlTar getAddressT ype	Destination address type.	read- create	InetAddr essType	Currently only DNS (16) is supported.
.1.3.6.1. 2.1.82.1. 3.1.4	lookupCtlTar getAddress	Destination address.	read- create	InetAddr ess	Currently only DNS (16) is supported.
.1.3.6.1. 2.1.82.1. 3.1.5	lookupCtlOp erStatus	operating state. Ranges: 1: Indicates that the operation is enabled. 2: Indicates that the operation	read- create	INTEGE R { enabled(1), notStarte d(2), complete d (3)	The implementation is consistent with the MIB file definition.

		has not started yet. 3: Indicates that the operation has been completed.		}	
.1.3.6.1. 2.1.82.1. 3.1.6	lookupCtlTi me	The number of milliseconds it took to complete a lookup operation.	read-only	Unsigne d32	The implementation is consistent with the MIB file definition.
.1.3.6.1. 2.1.82.1. 3.1.7	lookupCtIRc	The return value of the lookup operation.	read-only	Integer3 2	The implementation is consistent with the MIB file definition.
.1.3.6.1. 2.1.82.1. 3.1.8	lookupCtlRo wStatus	This object allows creation and deletion of entries in the lookupCtlTab le. When an entry in this table is created and activated via an SNMP SET request, the remote lookup operation is initiated. This is accomplishe d by setting the value of this object to CreateAndG	read- create	RowStat us { active(1) , notInSer vice(2), notRead y(3), createAn dGo(4), createAn dWait(5), destroy(6) }	Currently only supports CreateAndGo(4), Destroy(6), Active(1).

o(4) during row creation, or active(1) after row creation. A value must be specified for lookupCtlTar getAddress before accepting a transition to the active(1) state. A remote lookup operation starts when its entry becomes active(1) for the first time. Entering and exiting the active(1) state has no effect on the operational behavior of a remote lookup operation, but deleting an entry in this table by setting its RowStatus object to destroy(6) will stop an active remote lookup

operation. The operational status of a remote lookup operation can be determined by examini its lookupCtIC erStatus object.	d ing
---	----------

16.2.2 Detailed description of lookupResultsTable

This table saves the result information obtained after the operation defined in lookupCtlTable is executed.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.82.1.4 .1.1	lookupResult sIndex	The index of the operation result. The value range is 1 to 4294967295 , and the default value is 1.	not- accessibl e	Unsigned 32 (1' ffffffff'h)	The implementatio n is consistent with the MIB file definition.
1.3.6.1.2 .1.82.1.4 .1.2	lookupResult sAddressTyp e	The type of destination address.	read-only	InetAddre ssType	Currently only ipv4(1) is supported.
1.3.6.1.2 .1.82.1.4 .1.3	lookupResult sAddress	Destination address,	read-only	InetAddre ss	Currently only ipv4(1) is supported.

17. POE-MIB

17.1 Function Introduction

A POE node is a type of MIB (Management Information Base), which represents information related to Power over Ethernet (Power over Ethernet). It includes POE port table, POE power supply table, POE power supply status table, etc. This information can be used by the Network Management System (NMS) to monitor and manage the POE devices and power supply in the network.

Currently, it only supports some switches of Ruiyi 's NBS series and some gateways of EG series.

Root node: iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).powerEthernetMIB(105)

17.2 Detailed description of MIB Table

17.2.1 Detailed description of pethPsePortTable

A table of objects that displays and controls the power characteristics of the Power Ethernet ports on a Power Source Entity (PSE) device.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.105.1. 1.1.1	pethPsePort GroupIndex	PSE port group index	not- accessibl e	Integer3 2 (12147 483647)	Consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 1.1.2	pethPsePort Index	PSE port index	not- accessibl e	Integer3	Consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 1.1.3	pethPsePort AdminEnabl e	PSE enable	read- write	TruthVal ue	Consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 1.1.4	pethPsePort PowerPairs ControlAbilit y	PSE port control capability	read-only	TruthVal ue	not support

1.3.6.1.2 .1.105.1. 1.1.5	pethPsePort PowerPairs	PSE port capability, if pethPsePort PowerPairsC ontrol is true, this port is writable: 1: means that the signal pair is only in use. 2: Means the spare pair is only in use.	read- write	INTEGE R { signal(1) , spare(2) }	not support
1.3.6.1.2 .1.105.1. 1.1.6	pethPsePort DetectionSt atus	PSE port status detection: 1: Indicates that the PSE state diagram is in the DISABLED state; 2: Indicates that the PSE state diagram is in a state other than other states. 3: Indicates that the PSE state diagram is in a state other than other states.	read-only	INTEGE R { disabled(1),searc hing(2),d elivering Power(3) ,fault(4), test(5), otherFau lt(6)}	not support

		Std 802.3af Table 33-5 tlim); 4: Indicates that the PSE state diagram is in the TEST_ERR OR state; 5: Indicates that the PSE state diagram is in the TEST_MOD E state; 6: It shows that the PSE state diagram is in the IDLE state, because the variable error_conditi ons appears;			
1.3.6.1.2 .1.105.1. 1.1.7	pethPsePort PowerPriorit y	PSE port priority	read- write	INTEGE R { critical(1) , high(2), low(3) }	not support
1.3.6.1.2 .1.105.1. 1.1.8	pethPsePort MPSAbsent Counter	PSE missing port counter	read-only	Counter 32	not support
1.3.6.1.2 .1.105.1.	pethPsePort Type	PSE port type	read- write	SnmpAd minStrin	not support

1.1.9				g	
1.3.6.1.2 .1.10 5.1.1.1.1	pethPsePort PowerClassi fications	PSE port capability classification	read-only	INTEGE R { class0(1) , class1(2) , class2(3) , class3(4) , class4(5) }	Consistent with the MIB file definition.
1.3.6.1.2 .1.10 5.1.1.1.1	pethPsePort InvalidSigna tureCounter	PSE port invalid signal counter	read-only	Counter 32	not support
1.3.6.1.2 .1.10 5.1.1.1.1 2	pethPsePort PowerDenie dCounter	PSE deny port counter	read-only	Counter 32	not support
1.3.6.1.2 .1.105.1. 1.1.13	pethPsePort OverLoadC ounter	PSE port overload counter	read-only	Counter 32	not support
1.3.6.1.2 .1.105.1. 1.1.14	pethPsePort ShortCounte r	PSE port missing counter	read-only	Counter 32	not support

17.2.2 Detailed description of pethMainPseTable

Object table for displaying and controlling mains properties in PSE devices.

OIDs	node name	meaning	maximu m access	type	actual size
------	-----------	---------	-----------------------	------	-------------

1.3.6.1.2 .1.105.1. 3.1.1.1	pethMainPse GroupIndex	PSE Connection Ethernet Packet Index	not- accessibl e	Integer32 (121474 83647)	The implementatio n is consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 3.1.1.2	pethMainPse Power	PSE power in watts	read-only	Gauge32 (165535	Consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 3.1.1.3	pethMainPse OperStatus	PSE operating status:	read-only	INTEGE R { on(1), off(2), faulty (3) }	Consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 3.1.1.4	pethMainPse Consumption Power	PSE power consumptio n, in watts	read-only	Gauge32	Consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 3.1.1.5	pethMainPse UsageThres hold	PSE Usage Threshold	read- write	Integer32 (199)	Consistent with the MIB file definition.

17.2.3 detailed description of pethNotificationControlTable

Display and control Notification object table on PSE equipment.

OIDs	node name	meaning	maximu m access	type	actual size
1.3.6.1.2 .1.105.1. 4.1.1.1 _	pethNotificati onControlGr oupIndex	Notification Control Group Index	not- accessibl e	Integer32 (121474 83647)	The implementatio n is consistent with the MIB file definition.
1.3.6.1.2 .1.105.1. 4.1.1.2	pethNotificati onControlEn able	Notification Control Enable	read- write	TruthValu e	The implementatio n is consistent

		with the MIB file definition.

17.3 Detailed Description of Alarm Nodes

17.3.1 Detailed description of pethPsePortOnOffNotification

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.105 .0.1	pethPsePo rtOnOffNot ification	[Description] The status of the PSE power port. In addition to the search state (searching), other state changes will trigger this alarm. The interval between sending alarms by the same component instance is at least 500 milliseconds. [Status Control] Enabled: Set pethNotificationContro IEnable to true (1). Off: Set pethNotificationContro IEnable to false (2).	pethPsePortDetection Status	The implem entation is consist ent with the MIB file definitio n.

17.3.2 detailed description of pethMainPowerUsageOnNotification

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.105 .0.2	pethMainP owerUsag eOnNotific ation	[Description] An alarm is generated when the power usage of the PSE exceeds the	pethMainPseConsum ptionPower	The implem entation is

threshold. The interval between sending alarms by the same component instance is at least 500 milliseconds.	consist ent with the MIB file definitio n.
[Status Control] Enabled: Set pethNotificationContro IEnable to true (1). Off: Set pethNotificationContro IEnable to false (2).	

17.3.3 detailed description of pethMainPowerUsageOffNotification

OIDs	node name	meaning	bind variable	actual size
1.3.6.1. 2.1.105 .0.3	pethMainP owerUsag eOffNotific ation	[Description] The PSE power usage is lower than the threshold, and the alarm is restored. The interval between sending alarms by the same component instance is at least 500 milliseconds. [Status Control] Enabled: Set pethNotificationContro IEnable to true (1). Off: Set pethNotificationContro IEnable to false (2).	pethMainPseConsum ptionPower	The implem entation is consist ent with the MIB file definitio n.