

Network Management & Monitoring Commands

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1 SNMP Commands

1.1 no snmp-server

Use this command to disable the SNMP agent function.

```
no snmp-server
```

Parameter Description	Parameter	Description
	N/A	N/A

Defaults SNMP agent is enabled by default.

Command mode Global configuration mode.

Usage Guide This command disables the SNMP agent services of all versions supported on the device.

Configuration The following example disables the SNMP agent.

```
Orion Alpha A28X(config) # no snmp-server
```

Related Commands	Command	Description
	N/A	N/A

Platform N/A

Description

1.2 show snmp

Use this command to display the SNMP configuration.

```
show snmp [ mib | user | view | group | host | locked-ip | process-mib-time ]
```

Parameter Description	Parameter	Description
	mib	Displays the SNMP MIBs supported.
	user	Displays the SNMP user information.
	view	Displays the SNMP view information.
	group	Displays the SNMP user group information.
	host	Displays the explicit host configuration.
	locked-ip	Displays the source IP addresses locked after continuous SNMP authentication failures.
	process-mib-time	Displays the MIB node requiring the longest processing time.

Defaults N/A

Command Privileged EXEC mode.

mode

Usage Guide N/A

Configuration The example below displays the SNMP configuration:

Examples

```
Orion Alpha A28X# show snmp
Chassis: 60FF60
0 SNMP packets input
    0 Bad SNMP version errors
    0 Unknown community name
    0 Illegal operation for community name supplied
    0 Encoding errors
    0 Number of requested variables
    0 Number of altered variables
    0 Get-request PDUs
    0 Get-next PDUs
    0 Set-request PDUs
0 SNMP packets output
    0 Too big errors (Maximum packet size 1472)
    0 No such name errors
    0 Bad values errors
    0 General errors
    0 Response PDUs
    0 Trap PDUs
SNMP global trap: disabled
SNMP logging: disabled
SNMP agent: enabled
```

Related Commands

Command	Description
snmp-server chassis-id	Specifies the SNMP system sequence number.

Platform N/A

Description

1.3 snmp trap link-status

Use this command to enable the interface to send link traps. Use the **no** form of this command to disable the interface to send link traps.

snmp trap link-status

no snmp trap link-status

Parameter Description

Parameter	Description
N/A	N/A

Defaults	Sending link traps on the interface is enabled by default. If the interface link status changes, SNMP link traps will be sent.
Command mode	Interface configuration mode
Usage Guide	This command can be configured on the Ethernet interface, aggregate ports and SVI interfaces.
Configuration Examples	<p>The following example disables the interface to send link traps.</p> <pre>Orion Alpha A28X(config) # interface gigabitEthernet 1/1 Orion Alpha A28X(config-if-GigabitEthernet 1/1) # no snmp trap link-status</pre>

The following example enables the interface to send link traps.

```
Orion Alpha A28X(config) # interface gigabitEthernet 1/1
Orion Alpha A28X(config-if-GigabitEthernet 1/1) # snmp trap link-status
```

Related Commands	Command	Description
	N/A	N/A
Platform Description	N/A	

1.4 snmp-server chassis-id

Use this command to specify the SNMP chassis ID. Use the **no** form of this command to restore the default chassis ID.

```
snmp-server chassis-id text
no snmp-server chassis-id
```

Parameter Description	Parameter	Description
	<i>text</i>	SNMP chassis ID: numerals or characters.

Defaults	The default is 60FF60.
Command mode	Global configuration mode.
Usage Guide	The SNMP chassis ID is generally the serial number of the device to facilitate identification. The SNMP chassis ID can be displayed through the show snmp command.
Configuration Examples	<p>The following example specifies the SNMP chassis ID as 123456:</p> <pre>Orion Alpha A28X(config) # snmp-server chassis-id 123456</pre>

Related Commands	Command	Description
	show snmp	Displays the SNMP configuration.

Platform N/A

Description

1.5 snmp-server community

Use this command to specify the SNMP community access string. Use the **no** form of this command to remove the SNMP community access string.

```
snmp-server community [ 0 | 7 ] string [ view view-name ] [ [ ro | rw ] [ host ipaddr ] [ ipv6 ipv6-aclname ] [ aclnum ] [ aclname ] ]  
no snmp-server community [ 0 | 7 ] string
```

Parameter Description	Parameter	Description
0		Indicates that the community string is in plaintext.
7		Indicates that the community string is in ciphertext.
<i>string</i>		Community string, which is the communication password between the NMS and the SNMP agent
<i>view-name</i>		View name
ro		Indicates that the NMS can only read the variables of the MIB.
rw		Indicates that the NMS can read and write the variables of the MIB.
<i>aclnum</i>		Access list number (1 to 199, and 1300 to 2699), which specifies the IPV4 addresses that are permitted to access the MIB.
<i>aclname</i>		Access list name, which specifies the IPV4 addresses that are permitted to access the MIB.
<i>ipv6-aclname</i>		IPv6 access list name, which specifies the IPv6 addresses that are permitted to access the MIB.
<i>ipaddr</i>		Specifies the IP address of the NMS to access the MIB.

Defaults All communities are read only by default.

Command mode Global configuration mode.

Usage Guide This command is an essential command to enable the SNMP agent function, such as specifying the community attribute and IP addresses of NMS to access the MIB.
To disable the SNMP agent function, use the **no snmp-server** command.

Configuration Examples The following example defines a SNMP community access string named public, which can be read-only.

```
Orion Alpha A28X(config) # snmp-server community public ro
```

Related Commands	Command	Description
	access-list	Defines an access list.

Platform N/A

Description

1.6 snmp-server contact

Use this command to specify the system contact string. Use the **no** form of this command to remove the system contact string.

snmp-server contact *text*

no snmp-server contact

Parameter Description	Parameter	Description
	<i>text</i>	Defines a system contact string.
Defaults	No system contact string is set by default.	
Command mode	Global configuration mode.	
Usage Guide	N/A	
Configuration Examples	The following example specifies the SNMP system contract i-net800@i-net.com.cn: Orion Alpha A28X(config) # snmp-server contact i-net800@i-net.com.cn	
Related Commands	Command	Description
	show snmp-server	Displays the SNMP configuration.
	no snmp-server	Disables the SNMP agent function.
Platform Description	N/A	

1.7 snmp-server enable traps

Use this command to enable the SNMP agent to send the SNMP trap message to NMS. Use the **no** form of this command to disable the SNMP agent to send the SNMP trap message to NMS.

snmp-server enable traps [*notification-type*]

no snmp-server enable traps

Parameter Description	Parameter	Description
	<i>notification-type</i>	Specifies the type of trap messages. snmp: SNMP trap message bridge: Bridge trap message. mac-notification: MAC trap message. ospf: OSPF trap message. vrrp: VRRP trap message. web-auth: Web authentication trap message.
Defaults	Sending trap message to the NMS is disabled by default.	
Command	Global configuration mode.	

mode

Usage Guide This command must be used together with the **snmp-server host** command to send the trap message. Specifying no trap type indicates all trap messages are sent.

Configuration The following example enables the SNMP agent to send the SNMP trap message.

Examples

```
Orion Alpha A28X(config) # snmp-server enable traps snmp  
Orion Alpha A28X(config) # snmp-server host 192.168.12.219 public snmp
```

Related Commands

Command	Description
snmp-server host	Specifies the SNMP host to send the SNMP trap message.

Platform N/A

Description

1.8 snmp-server flow-control

Use this command to configure the SNMP flow control. Use the **no** form of this command to restore the default setting.

snmp-server flow-control pps [count]

no snmp-server flow-control pps

Parameter Description

Parameter	Description
<i>count</i>	Indicates the number of SNMP requests processed per second, ranging from 50 to 65,535.

Defaults The default count is 300.

Command mode Global configuration mode.

Usage Guide N/A

Configuration The following example configures the number of SNMP requests processed per second to 200.

Examples

```
Orion Alpha A28X(config) # snmp-server flow-control pps 200
```

Related Commands

Command	Description
N/A	N/A

Platform N/A

Description

1.9 snmp-server group

Use this command to configure a new SNMP group. Use the **no** form of this command to remove a specified SNMP group.

```
snmp-server group groupname { v1 | v2c | v3 { auth | noauth | priv } } [ read readview ] [ write writeview ] [ access { [ ipv6 ipv6_aclname | aclnum | aclname } ]  
no snmp-server group groupname {v1 | v2c | v3 { auth | noauth | priv } }
```

Parameter Description	Parameter	Description
	v1 v2c v3	Specifies the SNMP version
	auth	Specifies authentication of a packet without encrypting it. This applies to SNMPv3 only.
	noauth	Specifies no authentication a packet. This applies to SNMPv3 only.
	priv	Specifies authentication of a packet with encryption. This applies to SNMPv3 only.
	<i>readview</i>	Specifies a read-only view for the SNMP group. This view enables you to view only the contents of the agent.
	<i>writeview</i>	Specifies a write view for the SNMP group. This view enables you to enter data and configure the contents of the agent.
	<i>aclnum</i>	Access list number, which specifies the IPV4 addresses that are permitted to access the MIB.
	<i>aclname</i>	Name of the access list, which specifies the IPV4 addresses that are permitted to access the MIB.
	<i>ipv6_aclname</i>	Name of the IPv6 access list, which specifies the IPv6 addresses that are permitted to access the MIB.

Defaults No SNMP groups are configured by default.

Command mode Global configuration mode.

Usage Guide N/A

Configuration The following example configures a new SNMP group.

Examples Orion Alpha A28X(config) # snmp-server group mib2user v3 priv read mib2

Related Commands	Command	Description
	show snmp group	Displays the SNMP group configuration.

Platform N/A

Description

1.10 snmp-server host

Use this command to specify the SNMP host (NMS) to send the trap message. Use the **no** form of

this command to remove the specified SNMP host.

```
snmp-server host{ host-addr | ipv6 ipv6-addr } [ traps | informs ] [ version { 1 | 2c | 3 [ auth | noauth | priv ] } ] community-string [ udp-port port-num ] [ notification-type ]
no snmp-server host { host-addr | ipv6 ipv6-addr } [ traps | informs ] [ version { 1 | 2c | 3 { auth | noauth | priv } } ] community-string [ udp-port port-num ]
```

Parameter Description	Parameter	Description
	<i>host-addr</i>	SNMP host address
	<i>ipv6-addr</i>	SNMP host address(ipv6)
	trap informs	Enables the host to send the SNMP notification as traps or informs.
	version	SNMP version: V1, V2C or V3
	auth noauth priv	Security level of SNMPv3 users
	<i>community-string</i>	Community string or username (SNMPv3 version)
	<i>port-num</i>	Port of the SNMP host
	<i>notification-type</i>	The type of the SNMP trap message, such as snmp . If no type of the SNMP trap message is specified, all types of the SNMP trap message will be included.

Defaults No SNMP host is specified by default.

Command mode Global configuration mode.

Usage Guide This command must be used together with the **snmp-server enable traps** command to send the SNMP trap messages to NMS.

Multiple SNMP hosts can be configured to receive the SNMP trap messages. One host can use different combinations of the types of the SNMP trap message, but the last configuration for the same host will overwrite the previous configurations. In other words, to send different SNMP trap messages to the same host, different combination of SNMP trap messages can be configured.

Configuration The following example specifies an SNMP host to receive the SNMP event trap:

Examples Orion Alpha A28X(config) # **snmp-server host 192.168.12.219 public snmp**

Related Commands	Command	Description
	snmp-server enable traps	Enables the SNMP agent to send the SNMP trap message.

Platform N/A

Description

1.11 snmp-server inform

Use this command to configure the resend times for inform requests and the inform request timeout.

Use the **no** form of this command to restore the default settings.

```
snmp-server inform [ retries retry-time | timeout time ]
```

no snmp-server inform

Parameter Description	Parameter	Description
	<i>retry-num</i>	Specifies the resend times for inform requests, ranging from 0 to 255.
	<i>time</i>	Specifies the inform request timeout, ranging from 0 to 21,474,836.

Defaults The default *retry-num* is 3, and the default **timeout** *time* is 15 seconds.

Command mode Global configuration mode.

Usage Guide N/A

Configuration Examples The following example configures the resend times of inform requests to 5.

```
Orion Alpha A28X(config) # snmp-server inform retries 5
```

The following example configures the inform request timeout to 20 seconds.

```
Orion Alpha A28X(config) # snmp-server inform timeout 20
```

Related Commands	Command	Description
	N/A	N/A

Platform Description N/A

1.12 snmp-server location

Use this command to set the system location string. Use the **no** form of this command to remove the system location string.

snmp-server location *text*

no snmp-server location

Parameter Description	Parameter	Description
	<i>text</i>	String that describes the system location information.

Defaults No system location string is set by default.

Command mode Global configuration mode.

Usage Guide N/A

Configuration Examples The following example sets the system location information:

```
Orion Alpha A28X(config) # snmp-server location start-technology-city 4F of  
A Buliding
```

Related Commands	Command	Description
	snmp-server contact	Sets the system contact information.

Platform N/A
Description

1.13 snmp-server net-id

Use this command to configure the network element coding information of the device. Use the **no** form of this command to remove the network element coding information.

snmp-server net-id text

no snmp-server net-id

Parameter Description	Parameter	Description
	text	Configures the network element coding information of the device. The text length ranges from 1 to 255. The text is case-sensitive, and may contain spaces.

Defaults No network element coding information is configured by default.

Command mode Global configuration mode.

Usage Guide N/A

Configuration The following example configures the network element coding text to FZ_CDMA_MSC1.

Examples	Orion Alpha A28X(config) # snmp-server net-id FZ_CDMA_MSC1
-----------------	--

Related Commands	Command	Description
	N/A	N/A

Platform N/A
Description

1.14 snmp-server packetsize

Use this command to specify the largest size of the SNMP packet. Use the **no** form of this command to restore the default value.

snmp-server packetsize byte-count

no snmp-server packetsize

Parameter Description	Parameter	Description

<i>byte-count</i>	Packet size. The range is from 484 to 17,876 bytes
-------------------	--

Defaults The default is 1,472 bytes.

Command mode Global configuration mode.

Usage Guide The following example specifies the largest size of SNMP packet as 1,492 bytes:

```
Orion Alpha A28X(config) # snmp-server packetsize 1492
```

Configuration N/A

Examples

Related Commands	Command	Description
	snmp-server queue-length	Specifies the length of the message queue for each SNMP trap host.

Platform N/A

Description

1.15 snmp-server queue-length

Use this command to specify the length of the message queue for each SNMP trap host. Use the **no** form of this command to restore the default value.

snmp-server queue-length *length*

no snmp-server queue-length

Parameter Description	Parameter	Description
	<i>length</i>	Queue length. The range is from 1 to 1000.

Defaults The default is 10.

Command mode Global configuration mode.

Usage Guide Use this command to adjust the length of message queue for each SNMP trap host for the purposes of controlling the speed of sending the SNMP trap messages.

Configuration The following example specifies the length of message queue as 100.

Examples

```
Orion Alpha A28X(config) # snmp-server queue-length 100
```

Related Commands	Command	Description
	snmp-server packetsize	Specifies the largest size of the SNMP packet.

Platform N/A

Description

1.16 snmp-server system-shutdown

Use this command to enable the SNMP message reload function. Use the **no** form of this command to disable the SNMP message reload function.

snmp-server system-shutdown
no snmp-server system-shutdown

Parameter Description	Parameter	Description
	N/A	N/A

Defaults The SNMP message reload function is disabled by default.

Command mode Global configuration mode.

Usage Guide Use this command to enable the SNMP message reload function which may enable the system to send the device reload traps to the NMS before the device is reloaded or rebooted.

Configuration The following example enables the SNMP message reload function:

Examples Orion Alpha A28X(config) # snmp-server system-shutdown

Related Commands	Command	Description
	N/A	N/A

Platform N/A

Description

1.17 snmp-server trap-format private

Use this command to configure the SNMP traps with private fields. Use the **no** form of this command to restore the default trap format.

snmp-server trap-format private
no snmp-server trap-format private

Parameter Description	Parameter	Description
	N/A	N/A

Defaults The private field is not carried in the SNMP trap by default.

Command mode Global configuration mode.

Usage Guide Use this command to configure the SNMP trap format with the private field. Currently, the supported data in the private field is alarm occurrence time. For the specific data type and range of each field, refer to Orion Alpha A28X-TRAP-FORMAT-MIB.mib file.

This command does not work if the traps are sent with SNMPv1.

Configuration The following example configures the SNMP trap format with the private field.

Examples Orion Alpha A28X(config) # snmp-server trap-format private

Related Commands

Command	Description
N/A	N/A

Platform N/A

Description

1.18 snmp-server trap-source

Use this command to specify the source interface of the SNMP trap message. Use the **no** form of this command to restore the default value.

snmp-server trap-source interface

no snmp-server trap-source

Parameter Description

Parameter	Description
<i>interface</i>	Specifies the source interface of the SNMP trap messages.

Defaults By default, the IP address of the interface from which the SNMP packet is sent is just the source address.

Command mode Global configuration mode.

Usage Guide For easy management and identification, you can use this command to fix a local IP address as the SNMP source address.

Configuration Examples The following example specifies the IP address of Ethernet interface 0/1 as the source address of the SNMP trap message:

Orion Alpha A28X(config) # snmp-server trap-source fastethernet 0/1

Related Commands

Command	Description
snmp-server enable traps	Enables the SNMP agent to send the SNMP trap message to NMS.
snmp-server host	Specifies the NMS host to send the SNMP trap message.

Platform N/A

Description

1.19 snmp-server trap-timeout

Use this command to define the retransmission timeout time of the SNMP trap message. Use the **no** form of this command to restore the default value.

snmp-server trap-timeout *seconds*

no snmp-server trap-timeout

Parameter Description	Parameter	Description
	<i>seconds</i>	Timeout (in seconds) of retransmit the SNMP trap message. The range is from 1 to 1,000.

Defaults The default is 30 seconds.

Command mode Global configuration mode.

Usage Guide N/A

Configuration The following example specifies the timeout period as 60 seconds.

Examples Orion Alpha A28X(config) # **snmp-server trap-timeout 60**

Related Commands	Command	Description
	snmp-server queue-length	Specifies the length of message queue for the SNMP trap host.
	snmp-server host	Specifies the NMS host to send the SNMP trap message.
	snmp-server trap-source	Specifies the source address of the SNMP trap message.

Platform N/A

Description

1.20 snmp-server udp-port

Use this command to specify a port to receive SNMP packets. Use the **no** form of this command to restore the default setting.

snmp-server udp port *port-number*

no snmp-server udp port

Parameter Description	Parameter	Description
	<i>port-number</i>	Specifies a port to receive the SNMP packets.

Defaults	The default is 161.				
Command mode	Global configuration mode.				
Usage Guide	N/A				
Configuration Examples	The following example specifies port 15000 to receive the SNMP packets. Orion Alpha A28X(config) # snmp-server udp-port 15000				
Related Commands	<table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>	Command	Description	N/A	N/A
Command	Description				
N/A	N/A				
Platform Description	N/A				

1.21 snmp-server user

Use this command to configure a new user to an SNMP group. Use the **no** form of this command to remove a user from an SNMP group.

```
snmp-server user username groupname { v1 | v2c | v3 [ encrypted ] [ auth { md5 | sha } auth-password ] [ priv des56 priv-password ] } [ access { [ ipv6 ipv6_aclname ] [ aclnum | aclname ] } ]  
no snmp-server user username groupname { v1 | v2c | v3 }
```

Parameter Description	Parameter	Description
	<i>username</i>	Name of the user on the host that connects to the agent.
	<i>groupname</i>	Name of the group to which the user belongs.
	v1 v2c v3	Specifies the SNMP version. But only SNMPv3 supports the following security parameters.
	encrypted	Specifies whether the password appears in cipher text. In cipher text format, you need to enter continuous hexadecimal numeric characters. Note that the authentication password of MD5 has a length of 16 bytes, while that of SHA has a length of 20 bytes. Two characters make a byte. The encrypted key can be used only by the local SNMP engine on the switch.
	auth	Specifies which authentication level should be used.
	auth-password	Password string (no more than 32 characters) used by the

	authentication protocol. The system will change the password to the corresponding authentication key.
priv	Encryption mode. des56 refers to 56-bit DES encryption protocol. <i>priv-password</i> : password string (no more than 32 characters) used for encryption. The system will change the password to the corresponding encryption key.
md5	Enables the MD5 authentication protocol. While the sha enables the SHA authentication protocol.
<i>aclnumber</i>	Access list number, which specifies the IPV4 addresses that are permitted to access the MIB.
<i>aclname</i>	Name of the access list, which specifies the IPV4 addresses that are permitted to access the MIB.
<i>ipv6_aclname</i>	Name of the IPv6 access list, which specifies the IPv6 addresses that are permitted to access the MIB.

Defaults N/A

Command mode Global configuration mode.

Usage Guide N/A

Configuration Examples The following example configures an SNMPv3 user with MD5 authentication and DES encryption:

```
Orion Alpha A28X(config)# snmp-server user user-2 mib2user v3 auth md5
authpassstr priv des56 despassstr
```

Related Commands

Command	Description
show snmp user	Displays the SNMP user configuration.

Platform N/A

Description

1.22 snmp-server view

Use this command to configure an SNMP view. Use the **no** form of this command to remove an SNMP view.

```
snmp-server view view-name oid-tree { include | exclude }
no snmp-server view view-name [ oid-tree ]
```

Parameter Description

Parameter	Description
<i>view-name</i>	View name
<i>oid-tree</i>	Specifies the MIB object to associate with the view.
include	Includes the sub trees of the MIB object in the view.
exclude	Excludes the sub trees of the MIB object from the view.

Defaults By default, a view is set to access all MIB objects.

Command Global configuration mode.
mode

Usage Guide N/A

Configuration The following example sets a view that includes all MIB-2 sub-trees (oid is 1.3.6.1).

Examples Orion Alpha A28X(config) # snmp-server view mib2 1.3.6.1 include

Related Commands

Command	Description
show snmp view	Displays the SNMP view configuration.

Platform N/A

Description

2 RMON Commands

2.1 rmon alarm

Use this command to monitor a MIB variable. Use the **no** form of this command to remove the alarm entry.

```
rmon alarm number variable interval {absolute | delta } rising-threshold value [event-number]
falling-threshold value [event-number] [owner ownername]
no rmon alarm number
```

Parameter description	Parameter	Description
	<i>number</i>	Alarm number. The value ranges from 1-65,535.
	<i>variable</i>	Alarm variable. The value is a character string consisting of 1 to 255 characters in OID dotted format (the format is entry.integer.instance or a leaf node named .instance, for example. 1.3.6.1.2.1.2.1.10.1).
	<i>interval</i>	Sampling interval. The value ranges from 1 to 2,147,483,647 in the unit of second.
	absolute	Absolute sampling. In this mode, when the sampling time arrives, the system directly invokes the variable value.
	delta	Delta sampling. In this mode, when the sampling time arrives, the system invokes the delta value of the variable within the sampling interval.
	rising-threshold value	Rising threshold and the corresponding event number when the threshold is reached. The threshold ranges from -2,147,483,648 to +2,147,483,647.
	event-number	The event number ranges from 1 to 65,535.
	falling-threshold value	Falling threshold and the corresponding event number when the threshold is reached. The threshold ranges from -2,147,483,648 to +2,147,483,647
	owner ownername	Owner of an entry. The value is a character string consisting of 1 to 63 characters that are case sensitive.

Default N/A.

Command mode Global configuration mode.

Usage guidelines The switch allows you to modify the configured history information of the Ethernet network, including variable, absolute/delta, owner, rising-threshold/falling-threshold, and the corresponding events. However, the modification does not take effect immediately until the system triggers the monitoring event at the next time.

The example below monitors the MIB variable instance ifInNUcastPkts.6.

Examples

```
Orion Alpha A28X(config)# rmon alarm 10 1.3.6.1.2.1.2.2.1.12.6 30
delta rising-threshold 20 1 falling-threshold 10 1 owner zhangsan
```

Related commands	Command	Description
	rmon event number [log] [trap community] description string [owner owner-string]	Adds an event definition.

2.2 rmon collection history

Use this command to enable history statistics on the Ethernet interface. Use the **no** form of this command to remove the history entry.

rmon collection history index [owner ownername] [buckets bucket-number] [interval seconds]

no rmon collection history index

Parameter description	Parameter	Description
	<i>index</i>	Index of a history entry. The value ranges from 1 to 65,535.
	owner	Owner of an entry. The value is a character string consisting of 1 to 63 characters that are case sensitive.
	<i>ownername</i>	
	buckets	Capacity of a history entry (that is, the maximum number of history entries).
	<i>bucket-number</i>	The value ranges from 1 to 65,535. The default value is 10.
	interval	Statistics period. The unit is second. The value ranges from 1 to 3,600. The default value is 1,800 seconds.
	<i>seconds</i>	

Default N/A.

Command mode Interface configuration mode.

Usage guidelines The configured history control entry parameters cannot be modified. And the history entry cannot be removed from the interface where the entry configured.

The example below enables log statistics on interface GigabitEthernet 0/1.

```
Orion Alpha A28X# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Orion Alpha A28X(config)#interface gigabitEthernet 0/1
Orion Alpha A28X(config-GigabitEthernet0/1)#rmon history 1 owner UserA
buckets 5 interval 60
```

Examples

Related commands

Command	Description
rmon collection stats index [owner owner-name]	Adds a statistical entry on the Ethernet interface.

2.3 rmon collection stats

Use this command to monitor an Ethernet interface. Use the **no** form of this command to remove the configuration.

rmon collection stats *index* [**owner** *owner-string*]

no rmon collection stats *index*

Parameter description	Parameter	Description
	<i>index</i>	Index of the statistic table. The value ranges from 1 to 65,535.
	owner <i>ownername</i>	Owner of an entry. The value is a character string consisting of 1 to 63 characters that are case sensitive and do not contain spaces.

Default N/A.

Command mode Interface configuration mode.

Usage guidelines The configured history control entry parameters cannot be modified. And the history entry cannot be removed from the interface where the entry configured.

The example below enables monitoring the statistics of interface GigabitEthernet 0/1.

```
Orion Alpha A28X# configure terminal  
Enter configuration commands, one per line. End with CNTL/Z.  
Orion Alpha A28X(config)#interface gigabitEthernet 0/1  
Orion Alpha A28X(config-GigabitEthernet0/1)# rmon stats 1 owner UserA
```

Related commands	Command	Description
	rmon collection history <i>index</i> [owner <i>owner-name</i>] [buckets <i>bucket-number</i>] [interval <i>seconds</i>]	Adds a history control entry.

2.4 rmon event

Use this command to define an event. Use the **no** form of this command to remove the event entry.

rmon event *number* [**log**] [**trap** *community*] [**description-string**] [**description** *description-string*] [**owner** *owner-name*]

no rmon event *number*

Parameter description	Parameter	Description
	<i>number</i>	Event number. The value ranges from 1 to 65,535.
	log	(Optional) Log event. When a log event is triggered, the system records a log.
	trap <i>community</i>	(Optional) Trap event. When a trap event is triggered, the system sends trap with the group named "community".

description	(Optional) Description of the event. The value is a character string consisting of 1 to 127 characters.
owner <i>owner-name</i>	(Optional) Owner of an entry. The value is a character string consisting of 1 to 63 characters that are case sensitive.

Default	N/A.
Command mode	Global configuration mode.
Usage guidelines	The switch allows you to modify the configured history information of the Ethernet network, including variable, absolute/delta, owner, rising-threshold/falling-threshold, and the corresponding events. However, the modification does not take effect immediately until the system triggers the monitoring event at the next time.
Examples	<p>The example below defines the event actions: log event and send trap message.</p> <pre>Orion Alpha A28X#configure terminal Enter configuration commands, one per line. End with CNTL/Z. Orion Alpha A28X(config)#rmon event 1 log trap public description "ifInNUcastPkts is abnormal" owner UserA</pre>

Related commands	Command	Description
	rmon alarm <i>number variable interval {absolute delta }</i> rising-threshold <i>value [event-number]</i> falling-threshold <i>value [event-number]</i> [owner <i>ownername</i>]	Adds an alarm entry.

2.5 show rmon

Default	Use this command to display the RMON configuration. show rmo
Default	N/A.
Command mode	Privileged EXEC mode.
Usage guidelines	N/A.

Examples	<p>The example below displays the RMON configuration.</p> <pre>Orion Alpha A28X#show rmon ether statistic table: index = 1 interface = GigabitEthernet 0/1 owner = admin status = 0</pre>
-----------------	---

```
dropEvents = 61
octets = 170647461
pkts = 580375
broadcastPkts = 2135
multiPkts = 3615
crcAlignErrors = 0
underSizePkts = 0
overSizePkts = 0
fragments = 0
jabbers = 0
collisions = 0
packets64Octets = 3254668
packets65To127Octets = 1833370
packets128To255Octets = 2098146
packets256To511Octets = 126716
packets512To1023Octets = 363621
packets1024To1518Octets = 1077865

rmon history control table:
    index = 1
    interface = GigabitEthernet 0/1
    bucketsRequested = 5
    bucketsGranted = 5
    interval = 60
    owner = UserA
    stats = 1

rmon history table:
    index = 1
    sampleIndex = 2485
    intervalStart = 7d:22h:56m:38s
    dropEvents = 0
    octets = 5840
    pkts = 27
    broadcastPkts = 0
    multiPkts = 0
    crcAlignErrors = 0
    underSizePkts = 0
    overSizePkts = 0
    fragments = 0
    jabbers = 0
    collisions = 0
    utilization = 0

rmon alarm table:
    index: 1
    interval: 60
```

```

        oid = 1.3.6.1.2.1.2.2.1.12.6
        sampleType: 2
        alarmValue: 0
        startupAlarm: 3
        risingThreshold: 20
        fallingThreshold: 10
        risingEventIndex: 1
        fallingEventIndex: 1
        owner: UserA
        status: 1

rmon event table:
        index = 1
        description = ifInNUcastPkts is abnormal
        type = 4
        community = public
        lastTimeSent = 0d:0h:0m:0s
        owner =UserA
        status = 1

rmon log table:
        eventIndex = 1
        index = 1
        logTime = 6 d:19 h:21 m:48 s
        logDescription = ifInNUcastPkts is abnormal

```

Related commands

Command	Description
N/A	N/A

2.6 show rmon alarm

Default Use this command to display the RMON alarm table.
show rmon alarm

Default N/A.

Command mode Privileged EXEC mode.

Usage guidelines N/A.

The example below displays the RMON alarm table.

Examples

```

Orion Alpha A28X#show rmon alarm
rmon alarm table:
        index: 1

```

```

interval: 60
oid = 1.3.6.1.2.1.2.2.1.12.6
sampleType: 2
alarmValue: 0
startupAlarm: 3
risingThreshold: 20
fallingThreshold: 10
risingEventIndex: 1
fallingEventIndex: 1
owner: UserA
status: 1

```

Related commands

Command	Description
rmon alarm <i>number variable</i> <i>interval {absolute delta }</i> rising-threshold <i>value</i> <i>[event-number] falling-threshold</i> <i>value</i> <i>[event-number] [owner</i> <i>ownername]</i>	Adds an alarm entry.

2.7 show rmon event

Use this command to display the event configuration.

show rmon event

Default

N/A.

Command mode

Privileged EXEC mode.

Usage guidelines

N/A.

The example below displays the event configuration.

```

Orion Alpha A28X#show rmon event
rmon event table:
    index = 1
    description = ifInNUcastPkts is abnormal
    type = 4
    community = public
    lastTimeSent = 0d:0h:0m:0s
    owner =UserA
    status = 1

rmon log table:
    eventIndex = 1
    index = 1

```

Examples

```
logTime = 6d:19h:21m:48s
logDescription = ifInNUcastPkts is abnormal
```

Related commands

Command	Description
rmon event <i>number</i> [log] [trap community] [description <i>description-string</i>] [owner <i>ownername</i>]	Adds an event entry.

2.8 show rmon history

Use this command to display the history information.

show rmon history

Default

N/A.

Command mode

Privileged EXEC mode.

Usage guidelines

N/A.

The example below displays the history information.

```
Orion Alpha A28X#show rmon history
rmon history control table:
    index = 1
    interface = GigabitEthernet 0/1
    bucketsRequested = 5
    bucketsGranted = 5
    interval = 60
    owner = UserA
    stats = 1

rmon history table:
    index = 1
    sampleIndex = 2485
    intervalStart = 7d:22h:56m:38s
    dropEvents = 0
    octets = 5840
    pkts = 27
    broadcastPkts = 0
    multiPkts = 0
    crcAlignErrors = 0
    underSizePkts = 0
    overSizePkts = 0
    fragments = 0
    jabbers = 0
    collisions = 0
```

Examples

```
utilization = 0
```

Related commands

Command	Description
rmon collection history index [owner <i>ownername</i>] [buckets <i>bucket-number</i>] [interval <i>seconds</i>]	Adds a history control entry.

2.9 show rmon statistics

Use this command to display the RMON statistics.

show rmon statistics

Default

N/A.

Command mode Privileged EXEC mode.

Usage guidelines N/A.

The example below displays the RMON statistics.

```
Orion Alpha A28X#show rmon statistics
ether statistic table:
    index = 1
    interface = GigabitEthernet 0/1
    owner = admin
    status = 0
    dropEvents = 61
    octets = 170647461
    pkts = 580375
    broadcastPkts = 2135
    multiPkts = 3615
    crcAlignErrors = 0
    underSizePkts = 0
    overSizePkts = 0
    fragments = 0
    jabbers = 0
    collisions = 0
    packets64Octets = 3254668
    packets65To127Octets = 1833370
    packets128To255Octets = 2098146
    packets256To511Octets = 126716
    packets512To1023Octets = 363621
    packets1024To1518Octets = 1077865
```

Examples

Related commands	Command	Description
	rmon collection stats <i>index [owner owner-string]</i>	Adds a statistical entry.

3 NTP Commands

3.1 no ntp

Use this command to disable Network Time Protocol (NTP), and clear all NTP configuration.

no ntp

Parameter Description	Parameter	Description
	N/A	N/A
Defaults	NTP is disabled by default.	
Command mode	Global configuration mode.	
Usage Guide	By default, NTP is disabled. However, once the NTP server or the NTP authentication is configured, the NTP service will be enabled.	
Configuration Examples	The following example disables NTP. Orion Alpha A28X(config) # no ntp	
Related Commands	Command	Description
	ntp server	Specifies an NTP server.
Platform Description	N/A	

3.2 ntp access-group

Use this command to configure an access group to control NTP access. Use the **no** form of this command to remove the peer access group.

```
ntp access-group { peer | serve | serve-only | query-only } access-list-number | access-list-name  
no ntp access-group { peer | serve | serve-only | query-only } access-list-number | access-list-name
```

Parameter Description	Parameter	Description
	peer	Allows the device to receive time requests and NTP control queries to synchronize itself to the servers specified in the access list.
	serve	Allows the device to receive time requests and NTP control queries from the servers specified in the access list but not to synchronize itself to the specified servers.
	serve-only	Allows the device to receive only time requests from the servers

	specified in the access list.
query-only	Allows the device to receive only NTP control queries from servers specified in the access list.
<i>access-list-number</i>	Access control list number, ranging from 1 to 99 and 1300 to 1999.
<i>access-list-name</i>	Access control list name.

Defaults No access rule to control NTP access is configured by default, namely, NTP access is granted to all devices.

Command mode Global configuration mode.

Usage Guide Use this command to configure an access group to control NTP access, providing a minimal security measures (more secure way is to use the NTP authentication mechanism).
The NTP service enables the access group options to be scanned in the following order, from least restrictive to most restrictive: **peer, serve, serve-only, query-only**.
If you do not configure any access groups, NTP access is granted to all devices. However, once you configure the access rule, NTP access is granted only to the devices specified in the access list.



NTP control query is not supported in the current system. Although it matches with the order in accordance with the above rules, the related requests about the control and query are not supported.

Configuration Examples The following example shows how to allow the device to only receive time requests from the device of 192.168.1.1.

```
Orion Alpha A28X(config) # access-list 1 permit 192.168.1.1
Orion Alpha A28X(config) # ntp access-group serve-only 1
```

Related Commands

Command	Description
ip access-list	Creates an IP access control list.

Platform N/A

Description

3.3 ntp authenticate

Use this command to enable NTP authentication. Use the **no** form of this command to disable NTP authentication.

ntp authenticate

no ntp authenticate

Parameter Description

Parameter	Description
N/A	N/A

Defaults	Disabled.						
Command mode	Global configuration mode.						
Usage Guide	<p>If NTP authentication is disabled, the synchronization communication is not encrypted. To enable encrypted communication on the server, enable the NTP authentication and configure other keys globally.</p> <p>NTP authentication is implemented through the trusted key specified by the ntp authentication-key and ntp trusted-key commands.</p>						
Configuration Examples	<p>After an authentication key is configured and specified as the global trusted key, enable NTP authentication.</p> <pre>Orion Alpha A28X(config) #ntp authentication-key 6 md5 wooooop Orion Alpha A28X(config) #ntp trusted-key 6 Orion Alpha A28X(config) #ntp authenticate</pre>						
Related Commands	<table border="1"> <thead> <tr> <th>Command</th><th>Description</th></tr> </thead> <tbody> <tr> <td>ntp authentication-key</td><td>Sets the global authentication key.</td></tr> <tr> <td>ntp trusted-key</td><td>Configures the global trusted key.</td></tr> </tbody> </table>	Command	Description	ntp authentication-key	Sets the global authentication key.	ntp trusted-key	Configures the global trusted key.
Command	Description						
ntp authentication-key	Sets the global authentication key.						
ntp trusted-key	Configures the global trusted key.						
Platform Description	N/A						

3.4 ntp authentication-key

Use this command to configure an NTP authentication key. Use the **no** form of this command to remove the NTP authentication key.

```
ntp authentication-key key-id md5 key-string [enc-type]
no ntp authentication-key key-id
```

Parameter Description	Parameter	Description
	<i>key-id</i>	Key ID, ranging from 1 to 4294967295.
	<i>key-string</i>	Key string
	<i>enc-type</i>	(Optional) Whether this key is encrypted, where, 0 indicates the key is not encrypted, 7 indicates the key is encrypted simply. The key is not encrypted by default.
Defaults	NTP authentication key is not configured by default.	
Command mode	Global configuration mode.	
Usage Guide	Use this command to configure an NTP authentication key and enables the md5 algorithm for authentication. Each key presents a unique key ID, which can be configured as a trusted key using the ntp trusted-key command..	

You can configure up to 1024 NTP authentication keys. However, each server can support only one key.

Configuration The following example configures an NTP authentication key.

Examples

```
Orion Alpha A28X(config) ntp authentication-key 6 md5 wooooop
```

Related Commands	Command	Description
	ntp authenticate	Enables NTP authentication.
	ntp trusted-key	Configures an NTP trusted key.
	ntp server	Specifies an NTP server.

Platform N/A

Description

3.5 ntp disable

Use this command to disable the device to receive NTP packets on the specified interface.

ntp disable

Parameter Description	Parameter	Description
	N/A	N/A

Defaults All NTP packets can be received by default.

Command mode Interface configuration mode.

Usage Guide The NTP message received on any interface can be provided to the client to carry out the clock adjustment. The function can be set to shield the NTP message received from the corresponding interface.

By default, the device receives NTP packets on all interfaces, and adjust clock for the client. You can use this command to disable the device to receive NTP packets on the specified interface.



This command is configured only the interface that can receive and send IP packets.

Configuration The following example disables the device to receive the NTP packets.

Examples

```
Orion Alpha A28X(config-if)# no ntp disable
```

Related Commands	Command	Description
	N/A	N/A

Platform N/A

Description

3.6 ntp master

Use this command to configure the device to act as an authoritative NTP server, synchronizing time to other devices. Use the **no** form of this command to remove the device as an authoritative NTP server.

ntp master [stratum]

no ntp master

Parameter Description	Parameter	Description
	<i>stratum</i>	Stratum level. The range is from 1 to 15. The default is 8.

Defaults N/A

Command mode Global configuration mode.

Usage Guide In general, the local device synchronizes time from the external time source directly or indirectly. However, if the time synchronization fails due to network connection trouble, you can use this command to configure the local device to act as an authoritative NTP server to synchronize time to other devices. Once configured, the device will not perform time synchronization with the time source which is of a higher stratum.

⚠ Configuring the device to act as an authoritative NTP server (in particular, specify a lower stratum level), may be likely to overwrite the effective time. If multiple devices in the same network are configured with this command, the time synchronization may be unstable due to the time difference between the devices.

⚠ Before configuring this command, you need to manually correct the system clock to avoid too much bias if the device has never performed time synchronization with the external clock source.

Configuration Examples The following example configures the device to act as an authoritative NTP server, and sets the stratum level to 12:

```
Orion Alpha A28X(config) # ntp master 12
```

Related Commands	Command	Description
	N/A	N/A

Platform Description N/A

3.7 ntp server

Use this command to specify a NTP server for the NTP client. Use the **no** form of this command to delete the specified NTP server.

ntp server { ip-addr | domain | ip domain | ipv6 domain } [version version] [source if-name] [key

```
keyid] [ prefer ]
no ntp server ip-addr
```

Parameter Description	Parameter	Description
	<i>ip-addr</i>	Sets the IP address of the NTP server. The address can be in IPv4 or IPv6 format.
	<i>domain</i>	Sets the domain name of the NTP server, supporting IPv4 and IPv6.
	<i>version</i>	(Optional) Specifies the NTP version (1-3). The default is NTPv3.
	<i>if-name</i>	(Optional) Specifies the source interface from which the NTP message is sent (L3 interface).
	<i>keyid</i>	(Optional) Specifies the encryption key adopted when communication with the corresponding server. The key ID range is from 1 to 4,294,967,295.
	prefer	(Optional) Specifies the given NTP server as the preferred one.

Defaults No NTP server is configured by default.

Command mode Global configuration mode.

Usage Guide At present, switch system only supports clients other than servers. Up to 20 servers can be synchronized.
To carry out the encrypted communication with the server, set the global encryption key and global trusted key firstly, and then specify the corresponding key as the trusted key of the server to launch the encrypted communication of the server. It requires the server presents identical global encryption key and global trust key to complete the encrypted communication with the server.
In the same condition (for instance, precision), the prefer clock is used for synchronization.

⚠ The source interface of NTP packets must be configured with the IP address and can be communicated with the peer.

Configuration Examples The following example configures an NTP server.

For IPv4: Orion Alpha A28X(config)# ntp server 192.168.210.222
For IPv6: Orion Alpha A28X(config)# ntp server 10::2

Related Commands	Command	Description
	no ntp	Disables NTP.

Platform N/A

Description

3.8 ntp trusted-key

Use this command to set a global trusted key. Use the **no** form of this command to remove the global trusted key.

```
ntp trusted-key key-id
```

```
no ntp trusted-key key-id
```

Parameter Description	Parameter	Description								
	key-id	Global trusted key ID, ranging from 1 to 4294967295.								
Defaults	N/A									
Command mode	Global configuration mode.									
Usage Guide	The NTP communication parties must use the same trusted key. The key is identified by ID and is not transmitted to improve security.									
Configuration Examples	<pre>Orion Alpha A28X(config) #ntp authentication-key 6 md5 wooooop Orion Alpha A28X(config) #ntp trusted-key 6 Orion Alpha A28X(config) #ntp server 192.168.210.222 key 6</pre>									
Related Commands	<table border="1"><thead><tr><th>Command</th><th>Description</th></tr></thead><tbody><tr><td>ntp authenticate</td><td>Enables NTP authentication.</td></tr><tr><td>ntp authentication-key</td><td>Configures an NTP authentication key.</td></tr><tr><td>ntp server</td><td>Configures an NTP server.</td></tr></tbody></table>		Command	Description	ntp authenticate	Enables NTP authentication.	ntp authentication-key	Configures an NTP authentication key.	ntp server	Configures an NTP server.
Command	Description									
ntp authenticate	Enables NTP authentication.									
ntp authentication-key	Configures an NTP authentication key.									
ntp server	Configures an NTP server.									
Platform Description	N/A									

3.9 ntp update-calendar

Use this command to enable the NTP client to periodically update the device clock with the time synchronized from the external source clock. Use the **no** form of this command to remove this function.

```
ntp update-calendar
no ntp update-calendar
```

Parameter Description	Parameter	Description
	N/A	N/A
Defaults	By default, update the calendar periodically is not configured.	
Command mode	Global configuration mode.	
Usage Guide	By default, the NTP update-calendar is not configured. After configuration, the NTP client updates the calendar at the same time when the time synchronization of external time source is successful. It is recommended to enable this function for keeping the accurate calendar.	

Configuration The following example configures the NTP update calendar periodically.

Examples Orion Alpha A28X(config) # ntp update-calendar

Related Commands

Command	Description
N/A	N/A

Platform N/A

Description

3.10 show ntp server

Use this command to display the NTP server configuration.

show ntp server

Parameter Description

Parameter	Description
N/A	N/A

Defaults N/A

Command mode Privileged EXEC mode, global configuration mode, interface configuration mode, VLAN configuration mode

Usage Guide N/A

Configuration The following example displays the NTP server.

Examples Orion Alpha A28X# show ntp server

ntp-server	source	keyid	prefer	
version				-
-----	-----	-----	-----	-
-----	-----	-----	-----	-
10::2	None	None	FALSE	3
192.168.210.222	None	None	FALSE	3

Related Commands

Command	Description
N/A	N/A

Platform N/A

Description

3.11 show ntp status

Use this command to display the NTP configuration.

show ntp status

Parameter	Description
N/A	N/A

Defaults N/A

Command mode Privileged EXEC mode, global configuration mode, interface configuration mode, VLAN configuration mode

Usage Guide Use this command to display the NTP configuration. No configuration is displayed before the synchronization server is configured for the first time.

Configuration Examples The following example displays the NTP configuration.

```
Orion Alpha A28X# show ntp status
Clock is synchronized, stratum 8, reference is 127.127.1.1
nominal freq is 250.0000 Hz, actual freq is 250.0000 Hz, precision is
2**24
reference time is D4BD819B.433892EE (01:27:55.000 UTC )
clock offset is 0.00000 sec, root delay is 0.00000 sec
root dispersion is 0.00002 msec, peer dispersion is 0.00002 msec
```

Related Commands

Command	Description
N/A	N/A

Platform N/A

Description

4 SNTP Commands

4.1 show sntp

Use this command to display the SNTP configuration.

show sntp

Parameter Description	Parameter	Description
	N/A	N/A

Defaults

Command mode Privileged EXEC mode, global configuration mode, interface configuration mode.

Usage Guide N/A

Configuration The following example displays the SNTP configuration.

Examples

```
Orion Alpha A28X# show sntp
SNTP state          : Enable
SNTP server         : 192.168.4.12
SNTP sync interval : 60
Time zone          : +8
```

Related Commands	Command	Description
	sntp enable	Enables SNTP.

Platform N/A

Description

4.2 sntp enable

Use this command to enable the SNTP function. Use the **no** form of this command to restore the default value.

sntp enable
no sntp enable

Parameter Description	Parameter	Description
	N/A	N/A

Defaults SNTP is disabled by default.

Command Global configuration mode.

mode

Usage Guide N/A

Configuration The following example enables SNTP.

Examples Orion Alpha A28X(config) # **sntp enable**

Related Commands

Command	Description
show sntp	Displays the SNTP configuration.

Platform N/A

Description

4.3 sntp interval

Use this command to set the interval for the SNTP client to synchronize its clock with the NTP/SNTP server. Use the **no** form of this command to restore the default synchronization interval.

sntp interval seconds

no sntp interval

Parameter Description

Parameter	Description
seconds	Synchronization interval. The unit is second, and the range is from 60 to 65,535.

Defaults The default synchronization interval is 1,800 seconds.

Command mode Global configuration mode.

Usage Guide To make the synchronization interval configuration effective, run the **sntp enable** command.

Configuration The following example configures the synchronization interval to 3,600 seconds.

Examples Orion Alpha A28X(config) # **sntp interval 3600**

Related Commands

Command	Description
sntp enable	Enables SNTP.
show sntp	Displays the SNTP configuration.

Platform N/A

Description

4.4 sntp server

Use this command to specify an SNTP server. Use the **no** form of this command to remove the SNTP server.

sntp server { ip- address | domain } [source source-ip-address]

no sntp server**Parameter Description**

Parameter	Description
<i>ip-address</i>	IP address of the SNTP server.
<i>domain</i>	Specifies the domain name of the SNTP server.
<i>source-ip-address</i>	(Optional) Indicates the specified source IP address.

Defaults No SNTP server is configured by default.**Command mode** Global configuration mode.**Usage Guide** As SNTP is fully compatible with NTP, the SNTP server can be used as an NTP server in Internet.**Configuration** The following example specifies an SNTP server in Internet.**Examples** Orion Alpha A28X(config) # sntp server 192.168.4.12**Related Commands**

Command	Description
show sntp	Displays the SNTP configuration.
sntp enable	Enables SNTP.

Platform N/A**Description**

5 SPAN Commands

5.1 monitor session

Use this command to configure the SPAN session and specify the source port (monitored port).

```
monitor session session-num source interface interface-id [ both | rx | tx ]
```

Use this command to configure the SPAN session and specify the destination port (monitoring port).

```
monitor session session-num destination interface interface-id [switch]
```

Use this command to remove the specified SPAN session, or remove the source port or destination port of the specified SPAN session.

```
no monitor session session-num [ source interface interface-id | destination interface interface-id ]
```

Use this command to remove the specified SPAN session, or remove the source port or destination port of the SPAN session.

```
default monitor session session-num { source interface interface-id | destination interface interface-id }
```

Parameter Description	Parameter	Description
session_number	SPAN session number	
interface-id	Interface name	
rx	Monitors the only received traffic.	
tx	Monitors the only transmitted traffic.	
both	Monitors both received and transmitted traffic. This is the default.	
switch	Enables switching on the destination port. Switching function is disabled by default.	

Defaults Port monitoring is disabled by default.

Command mode Global configuration mode.

Usage Guide Use this command to configure SPAN or remote SPAN, and specify the source port or destination port.

If the **both**, **rx** or **tx** is not specified for the source port, the **both** parameter is the default.

Configuring an access list for the source port indicates that only the traffic permitted by the access list is monitored.

The **switch** feature is disabled on the destination port.

Configuration Examples The following example configures the source port and destination port of the SPAN session.

```
Orion Alpha A28X(config)# monitor session 1 source interface
gigabitEthernet 0/1
```

```
Orion Alpha A28X(config) # monitor session 1 destination interface  
gigabitEthernet 0/2
```

The following example removes the SPAN session.

```
Orion Alpha A28X(config) # no monitor session 1
```

The following example removes the source port and destination port of the SPAN session.

```
Orion Alpha A28X(config) # no monitor session 1 source interface  
gigabitEthernet 0/18  
Orion Alpha A28X(config) # no monitor session 1 destination interface  
gigabitEthernet 0/18
```

Related Commands	Command	Description
	N/A	N/A

Platform N/A

Description

5.2 show monitor

Use this command to display the SPAN configurations.

```
show monitor [ session session_number ]
```

Parameter Description	Parameter	Description
	session_number	Displays the specified SPAN session.

Defaults N/A

Command mode Privileged EXEC mode, global configuration mode and interface configuration mode

Usage Guide N/A

Configuration Examples This following example displays all SPAN sessions.

```
Orion Alpha A28X(config) # show monitor  
sess-num: 2  
span-type: LOCAL_SPAN  
src-intf:  
TenGigabitEthernet 0/5      frame-type Both  
dest-intf:  
TenGigabitEthernet 0/6  
sess-num: 1  
span-type: LOCAL_SPAN  
src-intf:  
TenGigabitEthernet 0/3      frame-type Both
```

```
dest-intf:
```

The following example displays SPAN session 1.

```
Orion Alpha A28X(config)# show monitor session 1
sess-num: 1
span-type: LOCAL_SPAN
src-intf:
TenGigabitEthernet 0/3      frame-type Both
dest-intf:
TenGigabitEthernet 0/4
```

Related Commands

Command	Description
N/A	N/A

Platform N/A
Description