

# **AX3600S**

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AX3640S/AX3630S

Software Manual Corrections

(For Version 11.10 and later)

## ■ Preface

This document contains corrections that have been made to the AX3640S/AX3630S software manuals (All Rights Reserved, Copyright(C), 2005, 2012, ALAXALA Networks, Corp.). When you read a manual listed in the following table, please also read this document. The table below lists the software manuals to which the corrections in this document apply.

No.	Manual name	Manual number	Editions history
1	AX3640S/AX3630S Software Manual Configuration Guide Vol. 1 (for Version 11.10)	AX36S-S001X-H0	December 2012
2	AX3640S/AX3630S Software Manual Configuration Guide Vol. 2 (for Version 11.10)	AX36S-S002X-H0	December 2012
3	AX3640S/AX3630S Software Manual Configuration Guide Vol. 3 (for Version 11.10)	AX36S-S003X-H0	December 2012
4	AX3640S/AX3630S Software Manual Configuration Command Reference Vol. 1 (for Version 11.10)	AX36S-S004X-H0	December 2012
5	AX3640S/AX3630S Software Manual Configuration Command Reference Vol. 2 (for Version 11.10)	AX36S-S005X-H0	December 2012
6	AX3640S/AX3630S Software Manual Operation Command Reference Vol. 1 (for Version 11.10)	AX36S-S006X-H0	December 2012
7	AX3640S/AX3630S Software Manual Operation Command Reference Vol. 2 (for Version 11.10)	AX36S-S007X-H0	December 2012
8	AX3640S/AX3630S Software Manual Message and Log Reference (for Version 11.10)	AX36S-S008X-H0	December 2012
9	AX3640S/AX3630S Software Manual MIB Reference (for Version 11.10)	AX36S-S009X-H0	December 2012

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## ■ Notes

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## ■ Editions history

May 14, 2013 (Edition 2)

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## Summary of Amendments

### Changes in Edition 2

Item	Changes
1. Configuration Guide Vol. 1 (For Version 11.10) (AX36S-S001X-H0)	3.2.8 High reliability function based on redundant configurations [Change]
	3.2.9 High reliability function based on network failure detection [Change]
	3.2.10 Managing information about neighboring devices (LLDP/OADP) [Change]
	24.5 Notes on IGMP snooping and MLD snooping usage [Change]
2. Configuration Guide Vol. 2 (For Version 11.10) (AX36S-S002X-H0)	3.4.1 Bandwidth monitoring [Change]
	3.10.1 Changing which frames are subject to priority determination [Change]
	3.10.2 CoS values and queuing priority [Change]
	13.1.7 Notes on using DHCP snooping [Change]
	14.4.1 Overview [Change] [Addition]
	14.6 Notes on using GSRP [Change]
	15.1.1 List of configuration commands [Change]
	15.1.4 Configuring Layer 3 redundancy switching [Change]
3. Configuration Guide Vol. 3 (For Version 11.10) (AX36S-S003X-H0)	15.2.2 Checking the GSRP state [Change]
	7.4.2 Load balancing specifications [Change]
	7.4.3 Notes on using load balancing [Addition]
	7.6.1 Checking the maximum number of multipaths handled by the Switch [Change]
	14.4.2 IPv4 PIM-SM [Addition]
	15.1.1 List of configuration commands [Change]
	22.4.2 Load balancing specifications [Change]
4. Configuration Command Reference Vol. 1 (For Version 11.10) (AX36S-S004X-H0)	22.4.3 Notes on using load balancing [Addition]
	22.6.1 Checking the maximum number of multipaths handled by the Switch [Change]
	[17] flow action-change cos [Change]
	[27] virtual-mac-learning-interval [Addition]
	40.1.9 VLAN information [Change]
5. Configuration Command Reference Vol. 2 (For Version 11.10) (AX36S-S005X-H0)	40.1.15 Access list information [Change]
	[15] ip pim accept-bootstrap [Addition]
6. Operation Command Reference Vol. 1 (For Version 11.10) (AX36S-S006X-H0)	[8] show system [Change]
	[29] show gsrp [Change]
7. Operation Command Reference Vol. 2 (For Version 11.10) (AX36S-S007X-H0)	[7] show ip pim interface [Change]
	[9] traceroute ipv6 [Change]
8. Message and Log Reference (For Version 11.10) (AX36S-S008X-H0)	3.3.4 Event location = VLAN (GSRP) [Addition]

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# 1. Changes in Configuration Guide Vol. 1 (For Version 11.10) (AX36S-S001X-H0)

## 3. Capacity Limit

### (1) 3.2.8 High reliability function based on redundant configurations [Change]

(1) GSRP has been changed.

Change:

**Corrected** → The following table describes the capacity limits for GSRP.

Table 3-90 Capacity limits for GSRP

Model	Maximum number of VLAN groups	Maximum number of VLANs per VLAN group
All models	64	1024

**Added**

Also, when using Layer 3 redundancy switching functionality, the maximum total number of VLAN ports that belong to VLAN group must not exceed 5000. Each channel group is counted as one VLAN port.

Table 3-92 Capacity limits for uplink redundancy has been changed.

Change:

Table 3-92 Capacity limits for uplink redundancy

Model	Number of uplink ports	Number of interfaces allowed per uplink port
All models	25 <sup>#</sup>	2

**Added**

#

Each channel group is counted as one port.

## (2) 3.2.9 High reliability function based on network failure detection [Change]

Table 3-95 L2 loop detection frame transmission rate has been changed.

Change:

Table 3-95 L2 loop detection frame transmission rate

Model	L2 loop detection frame transmission rate (per switch) <sup>#1</sup>	
	When using Spanning Tree Protocols, GSRP, or Ring Protocol	When not using Spanning Tree Protocols, GSRP, or Ring Protocol
All models	30 pps (recommended) <sup>#2</sup>	200 pps (maximum) <sup>#3</sup>

- Formula for calculating L2 loop detection frame transmission rate:

$$\frac{\text{number-of-VLAN-ports-subject-to-L2-loop-detection}^{\#4}}{\text{frame-transmission-rate-(pps)} \leq \text{sending-interval-(sec.)}}$$

↑  
Corrected

#1

The transmission rate is automatically adjusted to within 200 pps in accordance with the above equation.

#2

When using either Spanning Tree Protocols, GSRP, or Ring Protocol, set the transmission rate to no more than 30 pps. If the transmission rate is any higher, normal operation of the functionality is not guaranteed.

#3

Frames that exceed 200 pps will not be sent. Loop failures cannot be detected on target ports or VLANs from which frames have not been sent. Make sure that you set the sending interval to achieve a transmission rate of no more than 200 pps.

Added { #4

Each channel group is counted as one port.

## (3) 3.2.10 Managing information about neighboring devices (LLDP/OADP) [Change]

Capacity limits for storing neighboring device information (LLDP/OADP) has been changed.

Change:

The following table describes the capacity limits for storing neighboring device information (LLDP/OADP).

Table 3-100 Capacity limits for storing neighboring device information (LLDP/OADP)

Item	Maximum capacity
LLDP neighboring device information	52
OADP neighboring devices information	100 <sup>#</sup> ← Corrected

Added { #

Each channel group is counted as one.

## 24. Description of IGMP Snooping and MLD Snooping

### (1) 24.5 Notes on IGMP snooping and MLD snooping usage [Change]

(10) When used with the QoS control functionality has been changed.

Before change:

(10) When used with the QoS control functionality

IGMP snooping, MLD snooping and the QoS control functionality (receiving side) cannot be configured together on the same port.

After change:

(10) When used with the QoS control functionality

IGMP snooping, MLD snooping and the QoS control functionality (receiving side) cannot be configured together on the same port.

For details of a concurrent operation with QoS, see (7) *Concurrent operation with other functionality* of 3.1.4 *Notes on using flow detection* in *Configuration Guide Vol. 2*.

## 2. Changes in Configuration Guide Vol. 2 (For Version 11.10) (AX36S-S002X-H0)

### 3. Flow Control

#### (1) 3.4.1 Bandwidth monitoring [Change]

Description after *Table 3-9* has been changed.

Before change:

Changing the queuing priority and updating DSCP do not work for the following frames:

- IPv4 and IPv6 packets exceeding the MTU
- Frames whose TTL is set to 1
- Frames whose hop limit is set to 1
- Frames with an IP option
- Frames with an IPv6 extension header
- IPv4 or IPv6 packets with an unknown receiver address

After change:

Penalties for updating DSCP do not work for the following frames:

- IPv4 and IPv6 packets exceeding the MTU
- Frames whose TTL is set to 1
- Frames whose hop limit is set to 1
- Frames with an IP option
- Frames with an IPv6 extension header
- IPv4 or IPv6 packets with an unknown receiver address

#### (2) 3.10.1 Changing which frames are subject to priority determination [Change]

*Changing which frames are subject to priority determination* has been changed.

Before change:

This functionality changes which frames are subject to priority determination. The following table describes the actions related to the setting for changing which frames are subject to priority determination.

After change:

This functionality omits frames that are sent to the Switch from being subject to priority determination. The default of this functionality subjects both frames that are sent to the Switch, and frames forwarded by the Switch to priority determination. The following table describes the actions related to the setting for changing which frames are subject to priority determination.



**(3) 3.10.2 CoS values and queuing priority [Change]**

Table 3-17 Frames whose values cannot be changed by priority determination has been changed.

Change:

Table 3-17 Frames whose values cannot be changed by priority determination

Frame type	CoS value	Queuing priority	
Frames spontaneously sent by the Switch	7	3	
The following frames received by the Switch:	5	--	}
<ul style="list-style-type: none"> <li>• ARP frames</li> <li>• Frames used for line test</li> </ul>			
The following frames received by the Switch:	2	--	}
<ul style="list-style-type: none"> <li>• Incoming frames for which the learned sender MAC addresses are determined to have been moved</li> </ul>			
Of the frames received by the Switch by Layer 3 forwarding, the following packets and frames:	2	--	} Corrected
<ul style="list-style-type: none"> <li>• IPv4 and IPv6 packets exceeding the MTU</li> <li>• Frames whose TTL is set to 1</li> <li>• Frames whose hop limit is set to 1</li> <li>• Frames with an IP option</li> <li>• Frames with an IPv6 extension header</li> </ul>			
Of the frames received on the Switch by Layer 3 forwarding, the following packets:	2	--	}
<ul style="list-style-type: none"> <li>• IPv4 or IPv6 packets with an unknown receiver address</li> </ul>			
The following frames for which the Switch perform Layer 3 forwarding:	3	--	}
<ul style="list-style-type: none"> <li>• Fragmented frames on the Switch</li> <li>• Frames with an IP option</li> <li>• Frames with an IPv6 extension header</li> <li>• Forwarding frames that are temporarily retained on the Switch due to unresolved ARP or NDP</li> </ul>			

Added →

Legend: --: Can be changed according to the priority determination for flow control.

## 13. DHCP Snooping

### (1) 13.1.7 Notes on using DHCP snooping [Change]

(2) When used with the QoS control functionality has been changed.

Before change:

(2) When used with the QoS control functionality

Terminal filtering and the QoS control functionality (receiving side) cannot be configured on the same port.

After change:

(2) When used with the QoS control functionality

Terminal filtering and the QoS control functionality (receiving side) cannot be configured on the same port.

For details of a concurrent operation with QoS, see (7) *Concurrent operation with other functionality of 3.1.4 Notes on using flow detection in Configuration Guide Vol. 2.*

## 14. Description of GSRP

### (1) 14.4.1 Overview [Change] [Addition]

(2) MAC address of the default gateway has been changed. [Version 11.11 and later]

Before change:

(2) MAC address of the default gateway

When you use GSRP to provide redundancy for the default gateway, a GSRP-specific virtual MAC address is used as the MAC address of the default gateway. A different virtual MAC address is assigned to each VLAN group ID.

The master switch periodically sends a GSRP control frame containing its virtual MAC address as the source MAC address to the lower-level LAN switches so that they can learn the virtual MAC address of the master switch.

After change:

(2) MAC address of the default gateway

When you use GSRP to provide redundancy for the default gateway, a GSRP-specific virtual MAC address is used as the MAC address of the default gateway. A different virtual MAC address is assigned to each VLAN group ID.

The master switch periodically sends a GSRP control frame (a frame for virtual MAC address learning) containing its virtual MAC address as the source MAC address to the lower-level LAN switches so that they can learn the virtual MAC address of the master switch.

(3) *Sending VLAN ports and sending interval of frames for virtual MAC address learning* has been added. [Version 11.11 and later]

Addition:

### (3) Sending VLAN ports and sending interval of frames for virtual MAC address learning

Frames for virtual MAC address learning are sent to each VLAN port belonging to the master VLAN group, at the specified interval. The number of frames (sending rate) that can be sent per second is determined so that the frames can be sent to the target VLAN port at the specified interval. The sending rate is calculated by the following equation, and changes automatically in a range that is less than or equal to 100 pps. When the sending rate is calculated to be more than or equal to 100 pps, take caution because this means a VLAN port that does not send frames for virtual MAC address learning exists.

- Equation for calculating the sending rate for frames for virtual MAC address learning:

Sending rate (pps) # = *number of VLAN ports that are to be sent / sending interval (seconds)*

# If the sending rate exceeds the maximum value (100 pps), no frames are sent.

Example: If there are 200 VLAN ports to be sent and if the sending interval is set to 5 seconds, the sending rate will be 40 pps.

## **(2) 14.6 Notes on using GSRP [Change]**

(16) *Learning virtual MAC addresses* has been changed. [Version 11.11 and later]

Before change:

### (16) Learning virtual MAC addresses

When you use Layer 3 redundancy switching, the MAC address of the default gateway for which GSRP is providing redundancy is a virtual MAC address. Conversely, the source MAC addresses in forwarded IP packets or frames that are voluntarily sent by the Switch are not virtual MAC addresses. Instead, a source MAC address is the MAC address of a switch or a VLAN.

GSRP periodically sends GSRP control frames to the devices that use a GSRP switch as the default gateway to allow them to learn the virtual MAC address of the default gateway. GSRP control frames are non-IP unicast frames with virtual MAC addresses as the source MAC addresses.

After change:

### (16) Learning virtual MAC addresses

When you use Layer 3 redundancy switching, the MAC address of the default gateway for which GSRP is providing redundancy is a virtual MAC address. Conversely, the source MAC addresses in forwarded IP packets or frames that are voluntarily sent by the Switch are not virtual MAC addresses. Instead, a source MAC address is the MAC address of a switch or a VLAN.

GSRP periodically sends frames for virtual MAC address learning to the devices that use a GSRP switch as the default gateway to allow them to learn the virtual MAC address of the default gateway. Frames for virtual MAC address learning are non-IP unicast frames with virtual MAC addresses as the source MAC addresses.

## 15. Settings and Operation for GSRP

### (1) 15.1.1 List of configuration commands [Change]

Table 15-1 List of configuration commands has been changed. [Version 11.11 and later]

Change:

Table 15-1 List of configuration commands

Command name	Description
advertise-holdtime	Sets the retention time for GSRP Advertise frames.
advertise-interval	Sets the sending interval for GSRP Advertise frames.
backup-lock	Enables backup locking.
flush-request-count	Sets the number of times that GSRP Flush request frames are sent.
gsrp	Enables GSRP.
gsrp-vlan	Configures a GSRP-managed VLAN.
gsrp direct-link	Configures a direct link.
gsrp exception-port	Configures a port not under GSRP control.
gsrp limit-control	Enables the GSRP VLAN group-only control functionality.
gsrp no-flush-port	Configures a port that does not send GSRP Flush request frames.
gsrp reset-flush-port	Configures a port on which port resetting is used.
layer3-redundancy	Enables Layer 3 redundancy switching.
no-neighbor-to-master	Sets the switchover method to be used when a switch is in the backup (neighbor unknown) state.
port-up-delay	Enables the prevention of repeated switchover when links are unstable.
reset-flush-time	Sets the length of the link-down time when port resetting is used.
selection-pattern	Sets the priority for selecting the master and backup switches.
vlan-group disable	Disables a VLAN group. The VLANs belonging to a disabled VLAN group stop sending and receiving traffic.
vlan-group priority	Configures the priority of a VLAN group.
vlan-group vlan	Assigns VLANs to a VLAN group.
virtual-mac-learning-interval	Sets the sending interval for frames for virtual MAC address learning.

Added →

## (2) 15.1.4 Configuring Layer 3 redundancy switching [Change]

*Points to note* and *Command examples* have been changed. [Version 11.11 and later]

Change:

### Points to note

Added

Enable Layer 3 redundancy switching on both GSRP Switches. Layer 3 redundancy switching can be used only when the GSRP group ID is 1, 2, 3, or 4. When Layer 3 redundancy switching is used, the Switch under GSRP learns the virtual MAC address for GSRP by receiving the frame for virtual MAC address learning. The Switch under GSRP becomes flooded when aging occurs on the learned MAC address. Also, when a device is added to the network below, this device becomes flooded until the device receives a frame for virtual MAC address learning. Set the sending interval for frames for virtual MAC address learning by taking into account the amount of time flooding will occur.

When you use Layer 3 redundancy switching, assign the same IP addresses to VLANs on both GSRP switches. For details about how to assign IP addresses to VLANs, see *18.9 VLAN interfaces* in the *Configuration Guide Vol. 1 For Version 11.10*. In addition, when you use Layer 3 redundancy switching, you must configure a special path to continue communication with the upstream network even if a GSRP switch fails. For details, see *14.5.3 Switchover due to a failure in the upstream network when Layer 3 redundancy switching is used*.

### Command examples

1. `(config)# gsrp 1`

Switches to GSRP configuration mode.

2. `(config-gsrp)# layer3-redundancy`

Enables Layer 3 redundancy switching.

Added

3. `(config-gsrp)# virtual-mac-learning-interval 100`

Sets the sending interval for frames for virtual MAC address learning to 100 seconds.

**(3) 15.2.2 Checking the GSRP state [Change]**

*Figure 15-1 Results of executing the show gsrp detail command has been changed. [Version 11.11 and later]*

Change:

Figure 15-1 Results of executing the show gsrp detail command

```
> show gsrp detail
Date 20XX/11/07 22:24:36 UTC

GSRP ID: 1
  Local MAC Address       : 0012.e205.0000
  Neighbor MAC Address    : 0012.e205.0011
  Total VLAN Group Counts : 2
  GSRP VLAN ID           : 105
  Direct Port             : 0/10-11
  Limit Control           : Off
  GSRP Exception Port     : 0/1-5
  No Neighbor To Master   : manual
  Backup Lock             : disable
  Port Up Delay           : 0
  Last Flush Receive Time : -
  Forced Shift Time       : -
  Layer 3 Redundancy      : On
  Virtual MAC Learning    : Interval 120 (Output rate 30pps)
  VLAN Port Counts        : Configuration 15, Capacity 3600
  Virtual Link ID         : 100(VLAN ID : 20)

                                Local           Neighbor
  Advertise Hold Time      : 5             5
  Advertise Hold Timer     : 4             -
  Advertise Interval       : 1             1
  Selection Pattern        : ports-priority-mac ports-priority-mac

  VLAN Group ID   Local State   Neighbor State
  1                Backup       Master
  8                Master       Backup
>
```

Added

*Figure 15-2 Results of executing the show gsrp vlan-group command has been changed. [Version 11.11 and later]*

Change:

Figure 15-2 Results of executing the show gsrp vlan-group command

```
> show gsrp 1 vlan-group 1
Date 20XX/11/07 22:25:13 UTC

GSRP ID: 1
  Local MAC Address       : 0012.e205.0000
  Neighbor MAC Address    : 0012.e205.0011
  Total VLAN Group Counts : 1
  Layer 3 Redundancy      : On
  Virtual MAC Learning    : Interval 120 (Output rate 30pps)
  VLAN Port Counts        : Configuration 15, Capacity 3600
```

Added

```

VLAN Group ID : 1
VLAN ID       : 110,200-210
Member Port   : 0/6-8
Last Transition : 20XX/11/07 22:20:11 (Master to Backup)
Transition by reason : Priority was lower than neighbor's
Master to Backup Counts : 4
Backup to Master Counts : 4
Virtual MAC Address : 0000.8758.1307

                Local           Neighbor
State           : Backup       Master
Acknowledged State : Backup       -
Advertise Hold Timer : 3           -
Priority         : 100         101
Active Ports    : 3           3
Up Ports        : 3           -
>

```

*Figure 15-3 Results of executing the show gsrp command has been changed. [Version 11.11 and later]*

Change:

Figure 15-3 Results of executing the show gsrp command

```

> show gsrp
Date 20XX/11/07 22:28:38 UTC

GSRP ID: 10
Local MAC Address      : 0012.e205.0000
Neighbor MAC Address  : 0012.e205.0011
Total VLAN Group Counts : 2
Layer 3 Redundancy    : On
Virtual MAC Learning  : Interval 120 (Output rate 30pps)
VLAN Port Counts      : Configuration 15, Capacity 3600

VLAN Group ID   Local State   Neighbor State
1                Backup       Master
8                Master      Backup
>

```

Added

### 3. Changes in Configuration Guide Vol. 3 (For Version 11.10) (AX36S-S003X-H0)

#### 7. IPv4 Routing Protocol Overview

##### (1) 7.4.2 Load balancing specifications [Change]

*Table 7-6 Maximum number of multipath routes* has been changed. [Version 11.11 and later]

Before change:

#3

The maximum number of multipath routes applies to the combined total of IPv4 and IPv6 routes.

#4

For a single path, the maximum number of paths is determined by the capacity limit for the number of table entries. For multipath, the values in the table apply.

After change:

#3

The maximum number of multipath routes applies to the combined total of IPv4 and IPv6 routes. Note that multipath routes that match with the IP address and VRF for the next hop are counted as the same multipath route.

#4

The maximum number of paths is determined by the capacity limit for the number of table entries. However, the number of capacity for multipath is determined by the capacity limit indicated in the table.

##### (2) 7.4.3 Notes on using load balancing [Addition]

A note has been added. [Version 11.11 and later]

Addition:

9. The same multipath route might be divided into multiple multipath routes when the route is changed. Also, when the multipath route is switched due to, for example, a failure, and if a new multipath route is registered, resources for the total number of new and old multipath routes will be used temporarily because the new multipath keeps the status of the old multipath route when being registered. Make sure to operate the Switch with the number of multipath routes at a level which ensures that the number of multipath routes does not exceed the capacity limit when switching the route.



### **(3) 7.6.1 Checking the maximum number of multipaths handled by the Switch [Change]**

The section title has been changed. [Version 11.11 and later]

Before change:

#### 7.6.1 Checking the maximum number of multipaths handled by the Switch

After change:

#### 7.6.1 Checking the status of multipaths handled by the Switch

*Figure 7-14 Checking the maximum number of multipaths handled by the Switch* has been changed. [Version 11.11 and later]

Before change:

Figure 7-14 Checking the maximum number of multipaths handled by the Switch

```
>show system
:
:
Device resources
Current selected swrt_table_resource: l3switch-2
Current selected swrt_multicast_table: On
Current selected unicast multipath number: 8
:
:
```

>

After change:

Figure 7-14 Checking the status of multipaths handled by the Switch

```
>show system
:
:
Device resources
Current selected swrt_table_resource: l3switch-2
Current selected swrt_multicast_table: On
Current selected unicast multipath number: 8
:
Multipath table entry: current number=1 , max number=256
MAC-Address table entry(Unit1) : current number=2 , max number=16384
MAC-Address table entry(Unit2) : current number= - , max number= -
:
```

>

## 14. Description of IPv4 Multicasting

### (1) 14.4.2 IPv4 PIM-SM [Addition]

(9) Additional functionality for PIM-SM has been added. [Version 11.11 and later]

Addition:

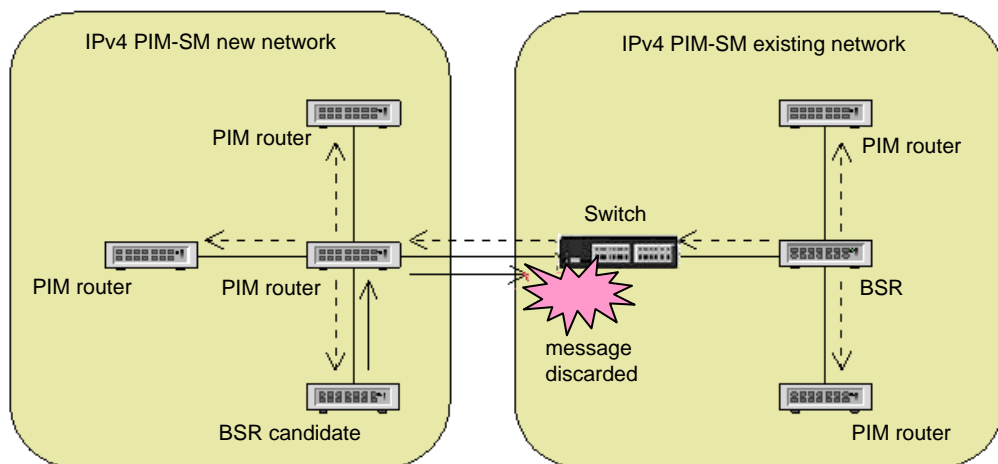
(9) Additional functionality for PIM-SM

(a) Suppression functionality for receiving bootstrap messages

When a new network is configured in the multicast network that is in operation and when the BSR candidate is incorrectly set, the BSR candidate becomes the main BSR and might stop the multicast communication in the entire connected multicast network.

This functionality discards the PIM-Bootstrap message that was sent from the newly configured network with an invalid setting, by setting the `ip pim accept-bootstrap` configuration command on the interface that is connected to the new network. This enables protection of the multicast network that is currently in operation. The following figure shows the operation of this functionality:

Figure 14-17 Operation of suppression functionality for receiving bootstrap messages



Legend:   
 - - - -> : PIM-Bootstrap message sent from the BSR on the existing network.   
 ———> : PIM-Bootstrap message sent from the BSR candidate on the new network.

The Switch on the network boundary discards the PIM-Bootstrap message sent from the BSR candidate on the newly configured network. This allows you to prevent forwarding the PIM-Bootstrap message from the new network to the existing network. On the other hand, the PIM-Bootstrap message sent from the existing network will be forwarded to the new network.

## 15. Settings and Operation for IPv4 Multicasting

### (1) 15.1.1 List of configuration commands [Change]

Table 15-1 List of configuration commands has been changed. [Version 11.11 and later]

Change:

Table 15-1 List of configuration commands

Command name	Description
ip igmp group-limit	Specifies the maximum number of groups that can run on an interface.
ip igmp router	Runs IGMP on the interface.
ip igmp source-limit	Specifies the maximum number of sources during group participation.
ip igmp ssm-map enable	Enables IPv4 PIM-SSM mapping operation to be used with IGMPv2 or IGMPv3 (EXCLUDE mode).
ip igmp ssm-map static	Sets the group address and source address for which PIM-SSM runs.
ip igmp static-group	Enables static additions to IGMP groups.
ip igmp version	Changes the IGMP version.
ip multicast-routing	Enables the IPv4 multicast functionality to be used.
ip pim accept-bootstrap	Sets the received bootstrap message sent from the applicable interface to be discarded.
ip pim bsr-candidate	Sets the BSR.
ip pim deletion-delay-time	Changes the deletion delay time.
ip pim keep-alive-time	Changes the keep-alive time.
ip pim max-interface	Changes the maximum number of interfaces that can run IPv4 PIM.
ip pim message-interval	Changes the sending interval for join or prune messages.
ip pim mroute-limit	Specifies the maximum number of multicast routing information entries.
ip pim multiple-negative-cache	Specifies that the same (S, G) multiple negative cache entries can be created for each VLAN.
ip pim negative-cache-time	Changes the negative cache time.
ip pim query-interval	Changes the sending interval for Hello messages.
ip pim register-checksum	Changes the checksum range for PIM-Register messages.
ip pim register-probe-time	Specifies the register probe time.
ip pim rp-address	Sets the static rendezvous point.
ip pim rp-candidate	Sets a rendezvous point candidate.
ip pim rp-mapping-algorithm	Specifies the rendezvous point selection algorithm.
ip pim sparse-mode	Sets the IPv4 PIM-SM.
ip pim ssm	Sets the IPv4 PIM-SSM address.

Added

## 22. IPv6 Routing Protocol Overview

### (1) 22.4.2 Load balancing specifications [Change]

Table 22-6 Maximum number of multipath routes has been changed. [Version 11.11 and later]

Before change:

Table 22-6 Maximum number of multipath routes

Maximum number of multipaths specified in switch configuration <sup>#1</sup>	Maximum number of multipaths handled by the switch <sup>#2</sup>	Maximum number of multipath routes the switch can handle <sup>#2#3</sup>
1 to 2	2	1024 <sup>#4</sup>
3 to 4	4	512
5 to 8	8	256
9 to 16, or multipath disabled <sup>#5</sup>	16	128

#3

The maximum number of multipath routes applies to the combined total of IPv4 and IPv6 routes.

#4

For a single path, the maximum number of paths is determined by the capacity limit for the number of table entries. For multipath, the values in the table apply.

After change:

Table 22-6 Maximum number of multipath routes

Maximum number of multipaths specified in switch configuration <sup>#1</sup>	Maximum number of multipaths handled by the switch <sup>#2</sup>	Maximum number of multipath routes the switch can handle <sup>#2#3#4</sup>
1 to 2	2	1024
3 to 4	4	512
5 to 8	8	256
9 to 16, or multipath disabled <sup>#5</sup>	16	128

#3

The maximum number of multipath routes applies to the combined total of IPv4 and IPv6 routes. Note that multipath routes that match with the IP address and VRF for the next hop are counted as the same multipath route.

#4

The maximum number of paths is determined by the capacity limit for the number of table entries. However, the number of capacity for multipath is determined by the capacity limit indicated in the table.

### (2) 22.4.3 Notes on using load balancing [Addition]

A note has been added. [Version 11.11 and later]

Addition:

- The same multipath route might be divided into multiple multipath routes when the route is changed. Also, when the multipath route is switched due to, for example, a failure, and if a new multipath route is registered, resources for the total number of new and old multipath routes will be used temporarily because the new multipath keeps the status of the old multipath route when being registered. Make sure to operate the Switch with the number of multipath routes at a level which ensures that the number of multipath routes does not exceed the capacity limit when switching the route.

### (3) 22.6.1 Checking the maximum number of multipaths handled by the Switch [Change]

The section title has been changed. [Version 11.11 and later]

Before change:

22.6.1 Checking the maximum number of multipaths handled by the Switch

After change:

22.6.1 Checking the status of multipaths handled by the Switch

*Figure 22-4 Checking the maximum number of multipaths handled by the Switch* has been changed. [Version 11.11 and later]

Before change:

Figure 22-4 Checking the maximum number of multipaths handled by the Switch

```
>show system
:
:
Device resources
Current selected swrt_table_resource: l3switch-2
Current selected swrt_multicast_table: On
Current selected unicast multipath number: 8
:
:
>
```

After change:

Figure 22-4 Checking the status of multipaths handled by the Switch

```
>show system
:
:
Device resources
Current selected swrt_table_resource: l3switch-2
Current selected swrt_multicast_table: On
Current selected unicast multipath number: 8
:
Multipath table entry: current number=1 , max number=256
MAC-Address table entry(Unit1) : current number=2 , max number=16384
MAC-Address table entry(Unit2) : current number= - , max number= -
:
>
```

## 4. Changes in Configuration Command Reference Vol. 1 (For Version 11.10) (AX36S-S004X-H0)

### 17. Flow Detection Modes and Flow Operations

#### (1) flow action-change cos [Change]

The description for *flow action-change cos* has been changed.

Change:

#### flow action-change cos

Changes the QoS priority determination operation for the switch.

**Added** → Setting this command enables you to omit frames that are sent to the Switch from being subject to priority determination.

Because this command is used to change the priority determination operation, make sure you set this command during the first stage of actual operation. We recommend that you do not make any changes during operation.

If you do not set this command or if you have deleted information, operation proceeds as described in *Default behavior*.

#### Syntax

To set information:

flow action-change cos

To delete information:

no flow action-change cos

#### Input mode

(config)

#### Default behavior

The priority determination operation is not changed.

**Added** → Frames that are to be subjected to priority determination are frames that are sent to the Switch and frames forwarded by the Switch.

#### Parameters

None

#### Impact on communication

None

#### When the change is applied

The change is applied immediately after setting values are changed.

#### Notes

1. To change the priority determination operation, you need to delete all QoS flow detection conditions and operation information entries applied to the interface.

#### Related commands

ip qos-flow-group  
ipv6 qos-flow-group  
mac qos-flow-group

## 27. GSRP

### (1) *virtual-mac-learning-interval* [Addition]

The description for *virtual-mac-learning-interval* has been added. [Version 11.11 and later]

Addition:

#### virtual-mac-learning-interval

Sets the sending interval for frames for virtual MAC address learning to be sent when using Layer 3 redundancy switching functionality.

#### Syntax

To set or change information:

```
virtual-mac-learning-interval <seconds>
```

To delete information:

```
no virtual-mac-learning-interval
```

#### Input mode

```
(config-gsrp)
```

#### Parameters

<seconds>

Specifies the sending interval (in seconds) for frames for virtual MAC address learning.

1. Default value when this parameter is omitted:

This parameter cannot be omitted.

2. Range of values:

4 to 120

#### Default behavior

The sending interval for frames for virtual MAC address learning is 120 seconds.

#### Impact on communication

None

#### When the change is applied

The change is applied immediately after setting values are changed.

#### Notes

If the sending interval is set to a short interval by using this command, there might be VLAN ports that cannot send frames depending on the number of VLAN ports where the frames for virtual MAC address learning is sent. In such cases, set the sending interval to a longer interval.

#### Related commands

```
layer3-redundancy
```

## 40. Error Messages Displayed When Editing the Configuration

### (1) 40.1.9 VLAN information [Change]

Table 40-9 VLAN error messages has been changed.

Before change:

Table 40-9 VLAN error messages

Message	Description
...	...
Relations between access-list and vlan mapping are inconsistent.	Tag translation cannot be set for the Ethernet interface because an access list that contains a VLAN ID as a detection condition is set on the outbound side. Tag translation cannot be set if an access list that contains a VLAN ID as a detection condition is applied to the outbound side. Delete the tag translation setting or specify an access list that does not contain a VLAN ID as a detection condition.
Relations between access-list and vlan mapping are inconsistent.	Tag translation cannot be set for the Ethernet interface because an access list is set on the outbound side. Tag translation cannot be set if an access list is applied to the outbound side. Delete the tag translation setting, or do not apply an access list to the outbound side.
...	...

After change:

Table 40-9 VLAN error messages

Message	Description
...	...
Relations between access-list and vlan mapping are inconsistent.	Tag translation cannot be set for the Ethernet interface because an access list that contains a VLAN ID as a detection condition is set on the outbound side of the Ethernet interface. Tag translation cannot be set if an access list that contains a VLAN ID as a detection condition is applied to the outbound side. Delete the tag translation setting or specify an access list that does not contain a VLAN ID as a detection condition.
	Tag translation cannot be set for the Ethernet interface because an access list is set on the outbound side of the VLAN interface. Tag translation cannot be set if an access list is applied to the outbound side. Delete the tag translation setting, or do not apply an access list to the outbound side.
...	...



**(2) 40.1.15 Access list information [Change]**

Table 40-15 Access list information has been changed.

Before change:

Table 40-15 Access list error messages

Message	Description
...	...
Relations between access-list and vlan mapping are inconsistent.	An access list that contains a VLAN ID as a detection condition cannot be set on the outbound side because tag translation is set for the Ethernet interface. Tag translation cannot be set if an access list that contains a VLAN ID as a detection condition is applied to the outbound side. Delete the tag translation setting or specify an access list that does not contain a VLAN ID as a detection condition.
Relations between access-list and vlan mapping are inconsistent.	An access list cannot be set on the outbound side because tag translation is set for the Ethernet interface. Tag translation cannot be set if an access list is applied to the outbound side. Delete the tag translation setting, or do not apply an access list to the outbound side.
...	...

After change:

Table 40-15 Access list error messages

Message	Description
...	...
Relations between access-list and vlan mapping are inconsistent.	An access list that contains a VLAN ID as a detection condition cannot be set on the outbound side of the Ethernet interface because tag translation is set for the Ethernet interface. Tag translation cannot be set if an access list that contains a VLAN ID as a detection condition is applied to the outbound side. Delete the tag translation setting or specify an access list that does not contain a VLAN ID as a detection condition.
	An access list cannot be set on the outbound side of the VLAN interface because tag translation is set for the Ethernet interface. Tag translation cannot be set if an access list is applied to the outbound side. Delete the tag translation setting, or do not apply an access list to the outbound side.
...	...

## 5. Changes in Configuration Command Reference Vol. 2 (For Version 11.10) (AX36S-S005X-H0)

### 15. IPv4 Multicast Routing Protocol Information

#### (1) *ip pim accept-bootstrap* [Addition]

The description for *ip pim accept-bootstrap* has been added. [Version 11.11 and later]

Addition:

#### *ip pim accept-bootstrap*

Discards the received bootstrap message sent from the applicable interface, and suppresses the forwarding of the message to the local network.

#### Syntax

To set or change information:  
no *ip pim accept-bootstrap*  
To delete information:  
*ip pim accept-bootstrap*

#### Input mode

(*config-if*)

#### Parameters

None

#### Default behavior

Forwards the received bootstrap message sent from the interface to the local network.

#### Impact on communication

None

#### When the change is applied

The change is applied immediately after setting values are changed.

#### Notes

None

#### Related commands

*ip pim sparse-mode*

## 6. Changes in Operation Command Reference Vol. 1 (For Version 11.10) (AX36S-S006X-H0)

### 8. Checking Software Versions and Device Statuses

#### (1) show system [Change]

Figure 8-7 Example of displaying resource Information has been changed. [Version 11.11 and later]

Change:

Figure 8-7 Example of displaying resource Information

```
> show system
Date 20XX/12/10 06:35:27 UTC
System: AX3630S-24T2X, OS-L3A Ver. 11.11 ← Corrected
Node : Name=System Name
:
:
:
Device resources
Current selected swrt_table_resource: l3switch-2
Current selected swrt_multicast_table : On
Current selected unicast multipath number: 8
IP routing entry :
Unicast : current number=5 , max number=8192
Multicast : current number=5 , max number=256
ARP : current number=2 , max number=102
IPv6 routing entry :
Unicast : current number=2 , max number=2048
Multicast : current number=5 , max number=128
NDP : current number=2 , max number=1024
Multipath table entry : current number=1 , max number=256 ← Added
MAC-Address table entry(Unit1) : current number=2 , max
number=16384
MAC-Address table entry(Unit2) : current number= - , max number=
-
System Layer2 Table Mode : auto (mode=1)
Flow detection mode : layer3-1
Used resources for filter(Used/Max)
      MAC      IPv4      IPv6
Port 0/ 1- 8,25-26 : 0/128  30/128  n/a
Port 0/ 9-16      : 0/128  24/128  n/a
Port 0/17-24     : 0/128  24/128  n/a
VLAN             : 0/128   2/128   n/a
(omitted)
```

Table 8-6 Information displayed by the show system command (resource information) has been changed. [Version 11.11 and later]

Change:

Table 8-6 Information displayed by the show system command (resource information)

Item	Displayed information	Displayed detailed information
Multipath table entry	Number of multipath table entries set on the hardware	<code>current number</code> : Number of multipath table entries currently set on the hardware. <code>max number</code> : Maximum number of multipath table entries that can be set on the hardware. Note: A hyphen (-) is displayed if the status of the main board is <code>Fault</code> .
MAC-Address table entry(Unit1)	Number of MAC address table entries set on the hardware	<code>current number</code> : Number of MAC address table entries currently set on the hardware. <code>max number</code> : Maximum number of MAC address table entries that can be set on the hardware. Note: A hyphen (-) is displayed if the status of the main board is <code>Fault</code> .
MAC-Address table entry(Unit2)	Number of MAC address table entries set on the hardware	<code>current number</code> : Number of MAC address table entries currently set on the hardware. <code>max number</code> : Maximum number of MAC address table entries that can be set on the hardware. Note: A hyphen (-) is displayed if the status of the main board is <code>Fault</code> . A hyphen (-) is also displayed for any model of the switch to which 27 or more ports cannot be connected.
System Layer2 Table Mode	Search method for the Layer 2 hardware table	<code>auto(mode=x)</code> : Mode selected automatically. <code>mode=x</code> : Value set by the <code>system l2-table mode</code> configuration command For AX3640S series switches: If the mode is not set by using the <code>system l2-table mode</code> configuration command, 0 is displayed for <code>x</code> . (For details, see <i>Device Management</i> in the <i>Configuration Command Reference Vol. 1</i> .)
...	...	...

Added

## 29.GSRP

### (1) show gsrp [Change]

Figure 29-1 Example of displaying GSRP summary information has been changed. [Version 11.11 and later]

Change:

Figure 29-1 Example of displaying GSRP summary information

```
> show gsrp
Date 20XX/07/14 12:00:00 UTC

GSRP ID: 3
Local MAC Address      : 0012.e2a8.2527
Neighbor MAC Address   : 0012.e2a8.2505
Total VLAN Group Counts : 3
Layer 3 Redundancy     : On
Virtual MAC Learning   : Interval 120 (Output Rate 30pps)
VLAN Port Counts       : Configuration 15, Capacity 3600

VLAN Group ID      Local State      Neighbor State
1                   Backup           Master
2                   (disable)       -
8                   Master           -

>
```

Added

Table 29-1 Items displayed for GSRP summary information has been changed. [Version 11.11 and later]

Change:

Table 29-1 Items displayed for GSRP summary information

Item	Meaning	Displayed information
...	...	...
Layer 3 Redundancy	Layer 3 redundancy switching	<b>Off</b> : Not set. <b>On</b> : The Layer 3 redundancy switching functionality is enabled.
Virtual MAC Learning	Number of frames for virtual MAC address learning	--
Interval	Sending interval	4-120 (seconds)
(Output Rate)	Sending rate (packet/s)	Displays the current sending rate for frames for virtual MAC address learning. This item is not displayed when Layer 3 redundancy switching is not used in the configuration.
VLAN Port Counts	Number of sending ports for frames for virtual MAC address learning	This item is not displayed when Layer 3 redundancy switching is not used in the configuration.
Configuration	Number of target ports where frames for virtual MAC address learning are sent to	Displays the number of VLAN ports <sup>#</sup> where the frames for virtual MAC address learning are sent to. If this value is greater than the number of ports enabled for sending frames for virtual MAC address learning, it means that the differentials of frames for virtual MAC address learning were not sent.
Capacity	Number of ports enabled for sending frames for virtual MAC address learning	Displays the number of VLAN ports that can be sent in the sending interval for frames for virtual MAC address learning.
VLAN Group ID	VLAN group ID	1-64
...	...	...

Added

Added

<sup>#</sup> Total number of member ports among VLAN ports that belong to the master VLAN group. Each channel group is counted as one port.

*Figure 29-2 Example of displaying GSRP information when a VLAN group ID is specified has been changed. [Version 11.11 and later]*

Change:

Figure 29-2 Example of displaying GSRP information when a VLAN group ID is specified

```
> show gsrp 3 vlan-group 1,2,8
Date 20XX/07/14 12:00:00 UTC
```

```
GSRP ID: 3
```

```
Local MAC Address      : 0012.e2a8.2527
Neighbor MAC Address   : 0012.e2a8.2505
Total VLAN Group Counts : 3
Layer 3 Redundancy     : On
Virtual MAC Learning   : Interval 120 (Output Rate 30pps)
VLAN Port Counts       : Configuration 15, Capacity 3600
```

Added

```
VLAN Group ID : 1
```

```
VLAN ID                : 110,200-2169
Member Port            : 0/6-8
Active Port            : 0/6-8
Last Transition        : 20XX/07/14 10:00:00 (Master to Backup)
Transition by reason   : Priority was lower than neighbor's
Master to Backup Counts : 4
Backup to Master Counts : 4
Virtual MAC Address    : 0000.8758.1387
```

(omitted)

Table 29-2 Items displayed for GSRP information when a VLAN group ID is specified has been changed. [Version 11.11 and later]

Change:

Table 29-2 Items displayed for GSRP information when a VLAN group ID is specified

Item	Meaning	Displayed information
...	...	...
Layer 3 Redundancy	Layer 3 redundancy switching	<b>Off</b> : Not set. <b>On</b> : The Layer 3 redundancy switching functionality is enabled.
Virtual MAC Learning	Number of frames for virtual MAC address learning	--
Interval	Sending interval	4-120 (seconds)
(Output Rate)	Sending rate (packet/s)	Displays the current sending rate for frames for virtual MAC address learning. This item is not displayed when Layer 3 redundancy switching is not used in the configuration.
VLAN Port Counts	Number of sending ports for frames for virtual MAC address learning	This item is not displayed when Layer 3 redundancy switching is not used in the configuration.
Configuration	Number of target ports where frames for virtual MAC address learning are sent to	Displays the number of VLAN ports <sup>#</sup> where the frames for virtual MAC address learning are sent to. If this value is greater than the number of ports enabled for sending frames for virtual MAC address learning, it means that the differentials of frames for virtual MAC address learning were not sent.
Capacity	Number of ports enabled for sending frames for virtual MAC address learning	Displays the number of VLAN ports that can be sent in the sending interval for frames for virtual MAC address learning.
VLAN Group ID	VLAN group ID	1-64
VLAN ID	VLAN ID	1-4094 When used in combination with Ring Protocol, VLANs that do not belong to the VLAN group are not included.
Member Port	Ports belonging to a VLAN which is configured for a VLAN group	- is displayed if no active ports belong to a VLAN group, or if the VLAN group is disabled. A channel group is expanded to a list of aggregate ports and then displayed. <span style="border: 1px solid black; padding: 2px;">Corrected</span>
Active Port	Active port	- is displayed if no active ports belong to a VLAN group, or if the VLAN group is disabled. A channel group is expanded to a list of aggregate ports and then displayed. <span style="border: 1px solid black; padding: 2px;">Corrected</span> Note, however, that a ring port is not counted as an active port.
Last Transition	Last state transition time	yyyy/mm/dd hh:mm:ss year/month/day hour:minute:second The state transition is shown within parentheses. - is displayed if no state transitions have been performed, or if the VLAN group is disabled.

Added



Item	Meaning	Displayed information
...	...	...
Priority	Priority information	0-255 (The greater the value, the higher the priority.)
Active Ports	Number of active ports	0 to the maximum number of ports per switch. Each channel group is counted as one port. ← <b>Corrected</b> - is displayed if the VLAN group is disabled. Note, however, that a ring port is not counted as an active port.
Up Ports	Number of enabled ports belonging to a VLAN that is configured to be in a VLAN group	0 to the maximum number of ports per switch. Each channel group is counted as one port. ← <b>Corrected</b> - is displayed if the VLAN group is disabled. (- is displayed for information about the partner switch.)

**Added** { # Total number of member ports among VLAN ports that belong to the master VLAN group. Each channel group is counted as one port.

Figure 29-3 Example of displaying detailed GSRP information has been changed. [Version 11.11 and later]

Change:

Figure 29-3 Example of displaying detailed GSRP information

```
> show gsrp detail
Date 20XX/11/07 12:00:00 UTC

GSRP ID: 3
Local MAC Address      : 0012.e2a8.2527
Neighbor MAC Address   : 0012.e2a8.2505
Total VLAN Group Counts : 3
GSRP VLAN ID          : 105
Direct Port           : 0/10-11
Limit Control          : Off
GSRP Exception Port    : 0/1-5
No Neighbor To Master  : manual
Backup Lock            : disable
Port Up Delay          : 0
Last Flush Receive Time : -
Forced Shift Time      : -
Layer 3 Redundancy     : On
Virtual MAC Learning   : Interval 120 (Output Rate 30pps)
VLAN Port Counts       : Configuration 15, Capacity 3600
Virtual Link ID        : 100(VLAN ID : 20)

Advertise Hold Time    Local      Neighbor
: 5                    5
Advertise Hold Timer   : 4                -
Advertise Interval     : 1                1
Selection Pattern      : ports-priority-mac ports-priority-mac

VLAN Group ID   Local State   Neighbor State
1               Backup        Master
2               (disable)    -
8               Master        -
>
```

**Added** {

Table 29-3 Items displayed for detailed GSRP information has been changed. [Version 11.11 and later]

Change:

Table 29-3 Items displayed for detailed GSRP information

Item	Meaning	Displayed information
...	...	...
Layer 3 Redundancy	Layer 3 redundancy switching	<b>Off</b> : Not set. <b>On</b> : The Layer 3 redundancy switching functionality is enabled.
Virtual MAC Learning	Number of frames for virtual MAC address learning	--
Interval	Sending interval	4-120 (seconds)
(Output Rate)	Sending rate (packet/s)	Displays the current sending rate for frames for virtual MAC address learning. This item is not displayed when Layer 3 redundancy switching is not used in the configuration.
VLAN Port Counts	Number of sending ports for frames for virtual MAC address learning	This item is not displayed when Layer 3 redundancy switching is not used in the configuration.
Configuration	Number of target ports where frames for virtual MAC address learning are sent to	Displays the number of VLAN ports# where the frames for virtual MAC address learning are sent to. If this value is greater than the number of ports enabled for sending frames for virtual MAC address learning, it means that the differentials of frames for virtual MAC address learning were not sent.
Capacity	Number of ports enabled for sending frames for virtual MAC address learning	Displays the number of VLAN ports that can be sent in the sending interval for frames for virtual MAC address learning.
Virtual Link ID	Virtual link ID	1-250 - is displayed if no virtual link IDs are set. Information enclosed in parentheses indicates the virtual link VLAN ID.
...	...	...

Added

Added

# Total number of member ports among VLAN ports that belong to the master VLAN group. Each channel group is counted as one port.

Table 29-4 Items displayed for GSRP information when a port is specified has been changed.  
[Version 11.11 and later]

Change:

Table 29-4 Items displayed for GSRP information when a port is specified

Item	Meaning	Displayed information
...	...	...
TxFram	Number of sent GSRP Advertise frames (statistics)	0-4294967295 The same value is displayed for all ports in the same channel group. ← Corrected
RxFram	Number of received GSRP Advertise frames (statistics)	0-4294967295 The same value is displayed for all ports in the same channel group. ← Corrected
Discard Frame	Number of GSRP Advertise frames discarded when they are received (statistics)	0-262140 (The maximum value is 65535 (the maximum number by reason why the frame is discarded) times 4 (the number of components).) The same value is displayed for all ports in the same channel group. ← Corrected

Table 29-5 Items displayed for GSRP information when a port is specified has been changed.  
[Version 11.11 and later]

Change:

Table 29-5 Items displayed for GSRP information when a port is specified

Item	Meaning	Displayed information
...	...	...
TxFram	Number of sent GSRP Advertise frames (statistics)	0-4294967295 The same value is displayed for all ports in the same channel group. ← Corrected
RxFram	Number of received GSRP Advertise frames (statistics)	0-4294967295 The same value is displayed for all ports in the same channel group. ← Corrected
Discard Frame	Number of GSRP Advertise frames discarded when they are received (statistics)	0-262140 (The maximum value is 65535 (the maximum number by reason why the frame is discarded) times 4 (the number of components).) The same value is displayed for all ports in the same channel group. ← Corrected
...	...	...

## 7. Changes in Operation Command Reference Vol. 2 (For Version 11.10) (AX36S-S007X-H0)

### 7. IPv4 Multicast Routing Protocols

#### (1) show ip pim interface [Change]

Figure 7-3 Displaying the status of a PIM-SM or PIM-SSM interface has been changed. [Version 11.11 and later]

Change:

Figure 7-3 Displaying the status of a PIM-SM or PIM-SSM interface

```

> show ip pim interface
Date 20XX/12/10 15:08:10 UTC
Address          Interface  Component  Vif    Nbr    Hello  DR      Notice
                  Count     Intvl     Address
192.10.10.1     VLAN0011  PIM-SM     1      4      30     This system
192.10.20.1     VLAN0012  PIM-SM     9      10     30     192.10.20.2
192.10.30.1     VLAN0014  PIM-SM     10     11     30     This system
>
> show ip pim interface detail
Date 20XX/12/10 15:09:10 UTC
Address          Interface  Component  Vif    Nbr    Hello  GenID   DR      Notice
                  Count     Intvl     Address
192.10.10.1     VLAN0011  PIM-SM     1      4      30     3503c645  This system
192.10.20.1     VLAN0012  PIM-SM     9      10     30     42278152  192.10.20.2
192.10.30.1     VLAN0014  PIM-SM     10     11     30     29ba460b  This system
>

```

Table 7-5 Items displayed by the show ip pim interface command has been changed. [Version 11.11 and later]

Change:

Table 7-5 Items displayed by the show ip pim interface command

Item	Meaning	Displayed information
...	...	...
DR Address	DR address	If the specified interface is down, - is displayed. If the Switch is the DR, This system is displayed.
Notice	Warning information	B: The PIM-Bootstrap message was discarded because the no ip pim accept-bootstrap configuration command was specified. From the time an event occurred until PIM-Bootstrap message retention time (Bootstrap-Timeout) passes, this item is displayed when the command is executed.

Added

## 9. IPv6, NDP, and ICMPv6

### (1) *traceroute ipv6* [Change]

The *numeric* parameter has been changed.

Before change:

*numeric*

Displays the gateway address by the IPv6 address alone, not by the host name and IPv6 address.

Operation when this parameter is omitted:

Displays the name converted from the host IPv6 address.

After change:

*numeric*

Displays the gateway address by the IPv6 address alone, not by the host name.

Operation when this parameter is omitted:

Displays the name converted from the host IPv6 address.

## 8. Changes in Message and Log Reference (For Version 11.10) (AX36S-S008X-H0)

### 3. Device Failure and Event Information

#### (1) 3.3.4 Event location = VLAN (GSRP) [Addition]

The following will be added to *Table 3-6 Device failure and event information when the event location is VLAN (GSRP)*. [Version 11.11 and later]

Addition:

Table 3-6 Device failure and event information when the event location is VLAN (GSRP)

#	Event level	Event location	Message ID	Added info Highest 4 digits	Message text
					Description
18	E4	VLAN	20130020	0700	GSRP : Virtual MAC address learning frame cannot be sent in the port where capacity was exceeded. The number of VLAN ports that can send the frames for virtual MAC address learning exceeded the capacity limit. Control frames cannot be sent from VLAN ports whose capacity limit is exceeded. [Explanation of message variables] None. [Action] Decrease the number of sending ports for frames for virtual MAC address learning. Alternatively, set the sending interval to a longer interval.

## **9. *Changes in MIB Reference (AX36S-S009X-H0)***

No corrections.