4 Group and VLAN Commands

The following chapter contains information on configuring Group and VLANs. Topics include:

- Creating and deleting Groups and VLANs
- Configuring Group and VLAN parameters
- Viewing Group and VLAN information

Refer to the command task list below to find the page number for a specific task. If you would like to reference configuration tasks based on traditional UI commands, refer to Appendix A.

group

Command Usage

Create a new standard group.

Syntax Options

group <*number***>**

Definitions:
number = a numerical ID for the new group (value may range from 2 to 65535)

♦ **Syntax Note** ♦

Do not use commas when entering a group number (for example, **10,000** will return a syntax error message).

Command Examples:
group 3
group 10000

Corresponding UI Command

crgp

no group

Command Usage

Delete an existing group.

Syntax Options

no group <*number*>

Definitions:
number = a numerical ID for the group to be deleted (e.g., **3**)

Command Examples:
no group 3
no group 10000

Corresponding UI Command

rmgp

Remarks

Before you can remove a group, you must first remove all associated VLANs.

group router ip

Command Usage

Modify group and VLAN IP routing parameters.

Syntax Options

group <*number***> router ip <***ip-address***> [***ip-mask***] [***ip-broadcast***] [***rip-value***] [***frame-value***]**

Definitions:
number = the group number on which routing parameters are being modified (e.g., **414**)
ip-address = the IP address for a specific virtual router port (e.g., **168.23.9.100**)
ip-mask = the IP subnet mask for the virtual router port (e.g., **255.255.0.0**)
ip-broadcast = the IP broadcast address for the virtual router port (e.g., **168.23.255.255**)
rip-value = the RIP mode for the virtual router port. Command choices include:

- **silent**
- **ignore**
- **active**
- **inactive**

frame-value = the Default Framing type. Command choices include:

- **ethernet-ii**, **dix**, or **ethernet2** (for Ethernet-II)
- **ethernet-802.3** or **802.3** (for Ethernet 802.3)
- **fddi** (for FDDI)
- **tokenring** or **tr** (for Token Ring)
- **tokenring-sr** or **tr-sr** (for source route Token Ring)

Command and Switch Defaults:
rip-value = **silent**
frame-value = **ethernet-ii**

Command Examples:
group 414 router ip 1.1.1.1
group 77 router ip 168.23.9.100 inactive
group 888 router ip 168.23.9.100 fddi
group 2 router ip 168.23.9.100 255.255.0.0 ignore 802.3
group 2 router ip 168.23.9.100 255.255.0.0 168.23.255.255 active dix

Corresponding UI Command

modvl

group no router ip

Command Usage

Remove all IP routing parameters from a specified group (including CIP and WAN routing parameters).

Syntax Options

group <*number*> no router ip

Definitions:
number = the group number from which you want to remove all IP routing parameters (e.g., **414**)

Command Example:
group 77 no router ip

Corresponding UI Command

modvl

group wan router ip

Command Usage

Modify WAN group IP routing parameters.

Syntax Options

group <*number***> wan router ip <***ip-address***> [***ip-mask***] [***ip-broadcast***] [***rip-value***] [***frame-value***]**

Definitions:
number = the group number on which routing parameters are being modified (e.g., **414**)
ip-address = the IP address for a specific virtual router port (e.g., **168.23.9.100**)
ip-mask = the IP subnet mask for the virtual router port (e.g., **255.255.0.0**)
ip-broadcast = the IP broadcast address for the virtual router port (e.g., **168.23.255.255**)
rip-value = the RIP mode for the virtual router port. Command choices include:

- **silent**
- **ignore**
- **active**
- **inactive**

frame-value = the Default Framing type. Command choices include:

- **ethernet-ii**, **dix**, or **ethernet2** (for Ethernet-II)
- **ethernet-802.3** or **802.3** (for Ethernet 802.3)
- **fddi** (for FDDI)
- **tokenring** or **tr** (for Token Ring)
- **tokenring-sr** or **tr-sr** (for source route Token Ring)

Command and Switch Defaults:
rip-value = **silent**
frame-value = **ethernet-ii**

Command Examples:
group 414 wan router ip 1.1.1.1
group 77 wan router ip 168.23.9.100 inactive
group 888 wan router ip 168.23.9.100 fddi
group 2 wan router ip 168.23.9.100 255.255.0.0 ignore 802.3
group 2 wan router ip 168.23.9.100 255.255.255.0 168.23.255.255 active dix

Corresponding UI Command

modvl

group no wan router ip

Command Usage

Delete WAN group IP routing parameters.

Syntax Options

group <*number*> no wan router ip

Definitions:
number = the group number from which routing parameters are being removed (e.g., **414**)

Command Example:
group 414 no wan router ip

Corresponding UI Command

modvl

group cip router ip

Command Usage

Modify Classical IP (CIP) group IP routing parameters.

Syntax Options

group <*number***> cip router ip <***ip-address***> [***ip-mask***] [***ip-broadcast***] [***rip-value***] [***frame-value***]**

Definitions:
number = the group number on which routing parameters are being modified (e.g., **414**)
ip-address = the IP address for a specific virtual router port (e.g., **168.23.9.100**)
ip-mask = the IP subnet mask for the virtual router port (e.g., **255.255.0.0**)
ip-broadcast = the IP broadcast address for the virtual router port (e.g., **168.23.255.255**)
rip-value = the RIP mode for the virtual router port. Command choices include:

- **silent**
- **ignore**
- **active**
- **inactive**

frame-value = the Default Framing type. Command choices include:

- **ethernet-ii**, **dix**, or **ethernet2** (for Ethernet-II)
- **ethernet-802.3** or **802.3** (for Ethernet 802.3)
- **fddi** (for FDDI)
- **tokenring** or **tr** (for Token Ring)
- **tokenring-sr** or **tr-sr** (for source route Token Ring)

Command and Switch Defaults:
rip-value = **silent**
frame-value = **ethernet-ii**

Command Examples:
group 414 cip router ip 1.1.1.1
group 77 cip router ip 168.23.9.100 inactive
group 888 cip router ip 168.23.9.100 fddi
group 2 cip router ip 168.23.9.100 255.255.0.0 ignore 802.3
group 2 cip router ip 168.23.9.100 255.255.255.0 168.23.255.255 active dix

Corresponding UI Command

modvl

group no cip router ip

Command Usage

Delete CIP group IP routing parameters.

Syntax Options

group <*number*> no cip router ip

Definitions:
number = the group number from which routing parameters are being removed (e.g., **414**)

Command Example:
group 414 no cip router ip

Corresponding UI Command

modvl

group router ipx

Command Usage

Modify group and VLAN IPX routing parameters.

Syntax Options

group <*number***> router ipx <***network***> <***name***> [***rip-sap***] [***frame-value***] [***broadcast-type***]**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **13**)
network = an IPX network address. Up to eight (8) hex digits may be used (e.g., **01010101**)
name = a user-defined router description. Up to thirty (30) characters may be used (e.g., **"New Router"**)
rip-sap = the RIP and SAP status for the group. Command choices include:

- **rip** (RIP only)
- **active** (both RIP and SAP)
- **inactive** (none)

frame-value = the Default Framing type. Command choices include:

- **ethernet-ii**, **dix**, or **ethernet2** (for Ethernet-II)
- **ethernet-802.3** or **802.3** (for Ethernet 802.3)
- **fddi-snap** (for FDDI SNAP)
- **fddisr-snap** (for source route FDDI SNAP)
- **fddi-llc** (for FDDI LLC)
- **fddi-llc** or **fddi-sr-llc** (for source route FDDI LLC)
- **llc** (for LLC)
- **snap** (for SNAP)
- **raw** (for RAW)
- **tokenring** or **tr** (for Token Ring)
- **tokenring-sr** or **tr-sr** (for source route Token Ring)
- **tokenring-snap** or **tr-snap** (for Token Ring SNAP)
- **tokenring-sr-snap**, **tr-sr-snap**, or **trsr-snap** (for source route Token Ring SNAP)
- **tokenring-llc**, **token-ring-llc**, or **tr-llc** (for Token Ring LLC)
- **tokenring-sr-llc**, **tr-sr-llc**, or **trsr-llc** (for source route Token Ring LLC)

broadcast-type = specifies how broadcasts will be handled for source routing. Command choices include:

- **are**
- **ste** (for source routing only)

Command and Switch Defaults:
rip-sap = **active**
frame-value = **ethernet-ii**
broadcast-type = **are**

Command Examples:
group 3 router ipx 87598624 test
group 6 router ipx 02345678 "New Group 6" inactive fddi-snap
group 3 router ipx 87598624 "New Route" raw ste

Corresponding UI Command

modvl

group no router ipx

Command Usage

Remove all IPX routing parameters from a specified group (including WAN routing parameters).

Syntax Options

group <*number*> no router ipx

Definitions:
number = the group number from which you want to remove all IPX routing parameters (e.g., **23**)

Command Example:
group 23 no router ipx

Corresponding UI Command

modvl

group wan router ipx

Command Usage

Modify WAN group IPX routing parameters.

Syntax Options

group <*number***> wan router ipx <***network***> <***name***> [***rip-sap***] [***frame-value***] [***broadcast-type***]**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **13**)
network = an IPX network address. Up to eight (8) hex digits may be used (e.g., **01010101**)
name = a user-defined router description. Up to thirty (30) characters may be used (e.g., **"New Router"**)
rip-sap = the RIP and SAP status for the group. Command choices include:

- **rip** (RIP only)
- **active** (both RIP and SAP)
- **inactive** (none)

frame-value = the Default Framing type. Command choices include:

- **ethernet-ii**, **dix**, or **ethernet2** (for Ethernet-II)
- **ethernet-802.3** or **802.3** (for Ethernet 802.3)
- **fddi-snap** (for FDDI SNAP)
- **fddisr-snap** (for source route FDDI SNAP)
- **fddi-llc** (for FDDI LLC)
- **fddi-llc** or **fddi-sr-llc** (for source route FDDI LLC)
- **llc** (for LLC)
- **snap** (for SNAP)
- **raw** (for RAW)
- **tokenring** or **tr** (for Token Ring)
- **tokenring-sr** or **tr-sr** (for source route Token Ring)
- **tokenring-snap** or **tr-snap** (for Token Ring SNAP)
- **tokenring-sr-snap**, **tr-sr-snap**, or **trsr-snap** (for source route Token Ring SNAP)
- **tokenring-llc**, **token-ring-llc**, or **tr-llc** (for Token Ring LLC)
- **tokenring-sr-llc**, **tr-sr-llc**, or **trsr-llc** (for source route Token Ring LLC)

broadcast-type = specifies how broadcasts will be handled for source routing. Command choices include:

- **are**
- **ste** (for source routing only)

Command and Switch Defaults:
rip-sap = **active**
frame-value = **ethernet-ii**
broadcast-type = **are**

Command Examples:
group 3 wan router ipx 87598624 test
group 6 wan router ipx 02345678 "New Group 6" inactive fddi-snap
group 3 wan router ipx 87598624 "New Route" raw ste

Corresponding UI Command

modvl

group no wan router ipx

Command Usage

Delete WAN group IPX routing parameters.

Syntax Options

group <*number*> no wan router ipx

Definitions:
number = the group number from which routing parameters are being removed (e.g., **414**)

Command Example:
group 414 no wan router ipx

Corresponding UI Command

modvl

group mobility move to default

Command Usage

Enable or disable group mobility move-to-default status.

Syntax Options

group mobility move to default {on | off}

Definitions:
on = enables group mobility move-to-default status
off = disables group mobility move-to-default status

Switch Default:
on | off = **off**

Command Examples:
group mobility move to default on
group mobility move to default off

Corresponding UI Command

gmcfg

Remarks

This command is used to determine what happens to a port once the devices on that port age out of the filtering database.

When the group mobility move-to-default status is *disabled*, a port will remain a member of a mobile group as long as its attached devices have, at one point, satisfied the mobile group's membership criteria. Even if devices on a port stop transmitting, the port will still retain all of its mobile group memberships.

If the group mobility move-to-default status is changed to *enabled*, a port will lose its mobile group membership whenever its attached devices age out (i.e., they stop transmitting traffic that satisfies the mobile group's membership criteria). Once a port loses membership in all criteria-based mobile groups, it will return to its default group.

group mobility default group

Command Usage

Enable or disable default group status for group mobility.

Syntax Options

group mobility default group {on | off}

Definitions:
on = enables group mobility default group status
off = disables group mobility default group status

Switch Default:
on | off = **on**

Command Examples:
group mobility default group on
group mobility default group off

Corresponding UI Command

gmcfg

Remarks

The **group mobility default group** command determines what happens to devices that do not match any mobile group policies.

When the default group status is *enabled*, devices that do not match any mobile group policies will be part of the default group for that port.

If the default group status is changed to *disabled*, devices that do not match any mobile group policies will be dropped from their default group and will not be part of any mobile group.

group mobility

Command Usage

Enable or disable group mobility on the switch.

Syntax Options

group mobility {on | off}

Definitions:
on = enables group mobility
off = disables group mobility

Switch Default:
on | off = **on**

Command Examples:
group mobility on
group mobility off

Corresponding UI Command

gmcfg

Remarks

When group mobility is disabled, the switch's Default Group 1 is treated as a non-mobile group in which AutoTracker VLANs can be created.

When group mobility is enabled, the switch will no longer support AutoTracker VLANs within Default Group 1.

group *number* mobility

Command Usage

Enable or disable group mobility for a specified group.

Syntax Options

group <*number***> mobility {on | off | enable | disable}**

Definitions:
number = the group number for which group mobility is being enabled/disabled (e.g., **2**)
on = enables group mobility for the specified group
off = disables group mobility for the specified group
enable = same as **on**
disable = same as **off**

Switch Default:
When a new group is created, the default group mobility status for that group is **off**.

Command Examples:
group 2 mobility on
group 77 mobility off
group 2 mobility enable
group 77 mobility disable

Corresponding UI Command

gmstat

Remarks

This command is used to configure group mobility status for a single group only. To enable or disable *switch-wide* group mobility, refer to the **group mobility** command on page 4-20.

group stp

Command Usage

Enable or disable Spanning Tree for a particular group.

Syntax Options

group <*number***> stp {on | off | enable |disable}**

Definitions:
number = the group number for which Spanning Tree is being enabled/disabled (e.g., **2**)
on = enables Spanning Tree for the specified group
off = disables Spanning Tree for the specified group
enable = same as **on**
disable = same as **off**

Switch Default:
on | off | enable |disable = **off**/**disable**

Command Examples:
group 2 stp on
group 77 stp off
group 2 stp enable
group 77 stp disable

Corresponding UI Command

stc

group authentication

Command Usage

Enable or disable user authentication for a specified group.

Syntax Options

group <*number***> authentication {on | off | enable | disable}**

Definitions:
number = the group number for which user authentication is being enabled/disabled (e.g., **2**)
on = enables user authentication for the specified group
off = disables user authentication for the specified group
enable = same as **on**
disable = same as **off**

Switch Default:
When a new group is created, the default group mobility status for that group is **off**.

Command Examples:
group 2 authentication on
group 77 authentication off

Corresponding UI Command

mag

Remarks

Because an authenticated group is a type of mobile group, you can enable group authentication on mobile groups *only*. For information on enabling group mobility on an specific group, refer to the **group** *group#* **mobility** command on page 4-21.

group authentication protocol

Command Usage

Configure group authentication protocols for a specified group.

Syntax Options

group <*number***> authentication protocol {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffff—e.g., **0000008137**)

Command Examples:
group 3 authentication protocol ip
group 77 authentication protocol ipx
group 2 authentication protocol decnet
group 202 authentication protocol appletalk
group 1117 authentication protocol ethernet 0806
group 8 authentication protocol dsap d1/d9
group 19 authentication protocol snap 0000008137

Corresponding UI Command

mag

group authentication no protocol

Command Usage

Remove group authentication protocols from a specified group.

Syntax Options

group <*number***> authentication no protocol {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffff—e.g., **0000008137**)

Command Examples:
group 3 authentication no protocol ip
group 77 authentication no protocol ipx
group 2 authentication no protocol decnet
group 202 authentication no protocol appletalk
group 1117 authentication no protocol ethernet 0806
group 8 authentication no protocol dsap d1/d9
group 19 authentication no protocol snap 0000008137

Corresponding UI Command

mag

group interface

Command Usage

Add virtual ports to an existing group.

Syntax Options

group <*number*> interface <*slot/port*>

Definitions:
number = the group number to which the port is being added (e.g., **2**)
slot/port = the slot and port to be added (e.g., **2/1**)

♦ Syntax Note ♦

You can add multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

Command Examples:
group 2 interface 2/1
group 77 interface 3/1-4
group 3 interface 3/1-4,4/2-3

Corresponding UI Command

addvp

group no interface

Command Usage

Remove virtual ports from an existing group.

Syntax Options

group <*number*> no interface <*slot/port*>

Definitions:
number = the group number from which the port is being removed (e.g., **2**)
slot/port = the slot and port to be removed (e.g., **2/1**)

♦ **Syntax Note** ♦

You can remove multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

Command Examples:
group 2 no interface 2/1
group 77 no interface 3/1-4
group 3 no interface 3/1-4,4/2-3

Corresponding UI Command

rmvp

group mac

Command Usage

Assign MAC address rules to an existing mobile group.

Syntax Options

group <*number***> mac <***mac-address***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
mac-address = the MAC address for a specific device (e.g., **00:90:27:17:F7:EB**)

♦ Syntax Note ♦

You can assign multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
group 3 mac 00:20:DA:B1:35:30
group 5 mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl, **crgp**

Remarks

A maximum of 1024 MAC addresses are supported per MAC address policy.

MAC address rules enable you to define membership on the basis of devices' MAC addresses. This is the simplest type of rule and provides the maximum degree of control and security. Members of the mobile group or AutoTracker VLAN will consist of devices with specific MAC addresses. These devices may all be connected to one switch or they may be connected to different switches in the group.

group no mac

Command Usage

Remove MAC address rules from a mobile group.

Syntax Options

group <*number***> no mac <***mac-address***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
mac-address = the mac address for a specific device (e.g., **00:90:27:17:F7:EB**)

♦ Syntax Note ♦

You can remove multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
group 3 no mac 00:20:DA:B1:35:30
group 3 no mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl

group user

Command Usage

Assign user-defined rules to a mobile group.

Syntax Options

group <*number***> user <***offset***> <***len***> <***value***> <***mask***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
offset = the number of bytes. Value must be between 0 and 63 (e.g., **61**)
len = the length of the data pattern. Value must be a positive number (e.g., **4**)
value = the length of the data pattern using a hex pattern (e.g., **23ef**)
mask = the bit value using a hex pattern (e.g., **ffff**)

Command Example:
group 7 user 61 2 23ef ffff

Corresponding UI Command

modatvl, **crgp**

Remarks

User-defined policies enable you to define membership on the basis of a specific pattern within a frame. All devices that originate frames containing this pattern are assigned to the mobile group or AutoTracker VLAN. The pattern is specified by defining an offset, a value, and a mask.

group no user

Command Usage

Remove user-defined rules from a mobile group.

Syntax Options

group <*number***> no user <***offset***> <***len***> <***value***> <***mask***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
offset = the number of bytes. Value must be between 0 and 63 (e.g., **61**)
len = the length of the data pattern. Value must be a positive number (e.g., **4**)
value = the length of the data pattern using a hex pattern (e.g., **23ef**)
mask = the bit value using a hex pattern (e.g., **ffff**)

Command Example:
group 7 no user 61 2 23ef ffff

Corresponding UI Command

modatvl

group port

Command Usage

Assign port rules to an existing mobile group.

Syntax Options

group <*number***> port <***slot/port***> [bridge | trunk** *description* **| lane** *elan-name* **]**

Definitions:
number = the numerical ID for the group (e.g., **11**)
slot/port = the slot and port number to which rules are being added (e.g., **2/1**)
bridge = specifies *bridging* service type
trunk = specifies *trunking* service type
lane = specifies *LANE* service type
description = the user-defined description for the trunking service. Up to thirty (32) characters may be used (e.g., **"Trunking Service 3"**)
elan-name = the user-defined name of the Emulated LAN (ELAN) for the service. Up to thirty (32) characters may be used (e.g., **"LAN Emulation Service 1"**)

♦ Syntax Notes ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

You must use quotation marks (**" "**) when entering a trunking description or ELAN name. Refer to the command examples below.

Command Default:
bridge

Command Examples:
group 3 port 3/1
group 110 port 2/1-2,3/6 trunk "Trunking Service 3"
group 78 port 3/3 bridge
group 3 port 3/1 lane "new lane"

Corresponding UI Command

modatvl, **crgp**

Remarks

Port policies enable you to define membership on the basis of ports. Members of the mobile group or AutoTracker VLAN will consist of devices connected to specific ports on one switch or on multiple switches in the Group.

group no port

Command Usage

Remove port rules from a mobile group.

Syntax Options

group <*number***> no port <***slot/port***> [bridge | trunk** *description* **| lane** *elan-name* **]**

Definitions:
number = the numerical ID for the group (e.g., **11**)
slot/port = the slot and port number to which rules are being added (e.g., **2/1**)
bridge = specifies *bridging* service type
trunk = specifies *trunking* service type
lane = specifies *LANE* service type
description = the user-defined description for the trunking service to be removed. Up to thirty (32) characters may be used (e.g., **"Trunking Service 3"**)
elan-name = the user-defined name of an Emulated LAN (ELAN) for the service to be removed. Up to thirty (32) characters may be used (e.g., **"LAN Emulation Service 1"**)

♦ Syntax Notes ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

You must use quotation marks (**" "**) when entering a trunking description or ELAN name. Refer to the command examples below.

Command Default:
bridge

Command Examples:
group 3 no port 3/1
group 110 no port 2/1-2,3/6 trunk "Trunking Service 3"
group 78 no port 3/3 bridge
group 3 no port 3/1 lane "new lane"

Corresponding UI Command

modatvl

Remarks

To view ATM services already assigned, use the **view atm service** command. The **view atm service** command is described in Chapter 12, "ATM Commands for Uplink Ports."

group dhcp port

Command Usage

Assign DHCP port rules to a mobile group.

Syntax Options

group <*number***> dhcp port <***slot/port***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
slot/port = the slot and port number to which DHCP port rules are being added (e.g., **2/1**)

♦ Syntax Note ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each slot/port entry (e.g., **2/2-5,3/3,4/3-5**).

Command Examples:
group 7 dhcp port 3/1-6
group 133 dhcp port 2/2-5,3/2

Corresponding UI Command

modatvl, **crgp**

Remarks

DHCP port policies are similar to standard port policies, but apply to switch ports to which DHCP client workstations are attached. For information on configuring standard port policies, refer to the **group port** command on page 4-32.

group no dhcp port

Command Usage

Remove DHCP port rules from a mobile group.

Syntax Options

group <*number***> no dhcp port <***slot/port***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
slot/port = the slot and port number from which DHCP port rules are being removed (e.g., **2/1**)

♦ Syntax Note ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each slot/port entry (e.g., **2/2-5,3/3,4/3-5**).

Command Examples:
group 7 no dhcp port 3/1-6
group 133 no dhcp port 2/2-5,3/2

Corresponding UI Command

modatvl

group dhcp mac

Command Usage

Assign DHCP MAC rules to a mobile group.

Syntax Options

group <*number***> dhcp mac <***mac-address***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
mac-address = the mac address for a specific device (e.g., **00:20:DA:B1:35:30**)

♦ **Syntax Note** ♦

You can assign multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
group 3 dhcp mac 00:20:DA:B1:35:30
group 5 dhcp mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl, **crgp**

Remarks

DHCP MAC policies are similar to standard MAC address policies, but apply to the MAC addresses of DHCP client workstations only. For information on configuring standard MAC policies, refer to the **group mac** command on page 4-28.

group no dhcp mac

Command Usage

Remove DHCP MAC rules from a mobile group.

Syntax Options

group <*number***> no dhcp mac <***mac-address***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
mac-address = the mac address for a specific device (e.g., **00:90:27:17:F7:EB**)

♦ Syntax Note ♦

You can specify multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
group 3 no dhcp mac 00:20:DA:B1:35:30
group 5 no dhcp mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl

group protocol

Command Usage

Assign protocol rules to an existing mobile group.

Syntax Options

group <*number***> protocol {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ip = Internet Protocol (IP) (see remarks below)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol (see remarks below)
appletalk = AppleTalk (see remarks below)
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffff—e.g., **0000008137**)

Command Examples:
group 3 protocol ip
group 77 protocol ipx
group 2 protocol decnet
group 202 protocol appletalk
group 1117 protocol ethernet 0806
group 8 protocol dsap d1/d9
group 19 protocol snap 0000008137

Corresponding UI Command

modatvl, **crgp**

Remarks

By selecting a specific protocol, you are indicating that all traffic originating from network devices using that protocol will be assigned to the mobile group or AutoTracker VLAN specified in the command line.

Address Resolution Protocol (ARP) is included as IP.

Datagram Delivery Protocol (DDP) and AARP (AppleTalk ARP) are included as AppleTalk.

DECNET is DECNET Phase IV traffic only.

group no protocol

Command Usage

Remove protocol rules from an existing mobile group.

Syntax Options

group <*number***> no protocol {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = Destination Service Access Protocol (DSAP) or Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffff—e.g., **0000008137**)

Command Examples:
group 3 no protocol ip
group 77 no protocol ipx
group 2 no protocol decnet
group 202 no protocol appletalk
group 1117 no protocol ethernet 0806
group 8 no protocol dsap d1/d9
group 19 no protocol snap 0000008137

Corresponding UI Command

modatvl

group binding ip

Command Usage

Assign IP-related binding rules to a mobile group.

Syntax Options

group <*number***> binding ip [***slot/port***] <***ip-address***> <***mac-address***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **222**)
slot/port = a slot and port to which the IP address will be assigned (e.g., **3/24**)
ip-address = the IP address that you want assigned to the specified MAC address or port, if applicable (e.g., **1.1.1.1**)
mac-address = the MAC address to which the IP address will be assigned (e.g., **00:20:DA:B1:35:30**)

Command Examples:
group 222 binding ip 3/24 1.1.1.1 00:20:DA:B1:35:30
group 43 binding ip 172.23.9.10 00:22:DB:A1:03:22

Corresponding UI Command

modatvl, **crgp**

Remarks

This command can be used to assign the following bindings:

- Bind IP Address to a Port and a MAC address.
- Bind IP Address to a MAC address.

group no binding ip

Command Usage

Remove IP-related binding rules from a mobile group.

Syntax Options

group <*number***> no binding ip [***slot/port***] <***ip-address***> <***mac-address***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **222**)
slot/port = a slot and port from which the IP address will be removed (e.g., **3/24**)
ip-address = the IP address that you want remove from the specified MAC address or port (e.g., **1.1.1.1**)
mac-address = the MAC address from which the IP address will be removed (e.g., **00:20:DA:B1:35:30**)

Command Examples:
group 222 no binding ip 3/24 1.1.1.1 00:20:DA:B1:35:30
group 43 no binding ip 172.23.9.10 00:22:DB:A1:03:22

Corresponding UI Command

modatvl

group binding mac

Command Usage

Assign MAC-related binding rules to a mobile group.

Syntax Options

group <*number***> binding mac <***slot/port***> <***mac-address***> [ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***]**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
slot/port = the slot and port to which the MAC address is being assigned (e.g., **3/24**)
mac-address = the MAC address that you want assigned to the specified port (e.g., **00:20:DA:B1:35:30**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
group 3 binding mac 3/24 00:20:DA:22:35:30 ip
group 77 binding mac 2/2 DA:20:DA:B1:24:30 ipx
group 2 binding mac 5/8 00:20:DA:B2:35:11 decnet
group 202 binding mac 6/21 00:20:DA:A1:35:32
group 1117 binding mac 3/1 00:20:DA:B1:35:06 ethernet 0806
group 1117 binding mac 3/1 00:20:DA:DD:35:DA ethertype ef34
group 8 binding mac 4/14 00:20:DA:B1:35:FA dsap d1/d9
group 19 binding mac 3/3 00:20:DA:A2:35:00 snap 0000008137

Corresponding UI Command

modatvl, **crgp**

Remarks

This command can be used to assign the following bindings:

- Bind MAC Address to a Protocol and a Port.
- Bind MAC Address to a Port.

group no binding mac

Command Usage

Remove MAC-related binding rules from a mobile group.

Syntax Options

group <*number***> no binding mac <***slot/port***> <***mac-address***> [ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***]**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
slot/port = the slot and port from which the MAC address is being removed (e.g., **3/24**)
mac-address = the MAC address that you want removed from the specified port (e.g., **00:20:DA:B1:35:30**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
group 3 no binding mac 3/24 00:20:DA:22:35:30 ip
group 77 no binding mac 2/2 DA:20:DA:B1:24:30 ipx
group 2 no binding mac 5/8 00:20:DA:B2:35:11 decnet
group 202 no binding mac 6/21 00:20:DA:A1:35:32
group 1117 no binding mac 3/1 00:20:DA:B1:35:06 ethernet 0806
group 1117 no binding mac 3/1 00:20:DA:DD:35:DA ethertype ef34
group 8 no binding mac 4/14 00:20:DA:B1:35:FA dsap d1/d9
group 19 no binding mac 3/3 00:20:DA:A2:35:00 snap 0000008137

Corresponding UI Command

modatvl

group binding port

Command Usage

Assign port-related binding rules to a mobile group.

Syntax Options

group <*number***> binding port <***slot/port***> {***ip-address* **| ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
slot/port = the slot and port to which rules are being added (e.g., **3/24**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
group 3 binding port 3/24 ip
group 77 binding port 2/2 ipx
group 2 binding port 5/8 172.5.0.0
group 202 binding port 6/21 appletalk
group 1117 binding port 3/1 ethernet 0806
group 1117 binding port 3/1 ethertype ef34
group 8 binding port 4/14 dsap d1/d9
group 19 binding port 3/3 snap 0000008137

Corresponding UI Command

modatvl, **crgp**

Remarks

This command can be used to assign the following bindings:

- Bind Port to a Protocol.
- Bind IP Address to a Port.

group no binding port

Command Usage

Remove port-related binding rules from a mobile group.

Syntax Options

group <*number***> no binding port <***slot/port***> {***ip-address* **| ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
slot/port = the slot and port from which rules are being removed (e.g., **3/24**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
group 3 no binding port 3/24 ip
group 77 no binding port 2/2 ipx
group 2 no binding port 5/8 172.5.0.0
group 202 no binding port 6/21 appletalk
group 1117 no binding port 3/1 ethernet 0806
group 1117 no binding port 3/1 ethertype ef34
group 8 no binding port 4/14 dsap d1/d9
group 19 no binding port 3/3 snap 0000008137

Corresponding UI Command

modatvl

group ip

Command Usage

Assign IP network address rules to a mobile group.

Syntax Options

group <*number***> ip <***ip-address***> [***ip-mask***]**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ip-address = IP address to be assigned (e.g., **172.23.9.101**)
ip-mask = optional IP subnet mask to be assigned (e.g., **255.255.0.0**)

Command Examples:
group 11 ip 172.23.9.101
group 3 ip 1.1.1.1 255.255.0.0

Corresponding UI Command

modatvl, **crgp**

group no ip

Command Usage

Remove IP network address rules from a mobile group.

Syntax Options

group <*number***> no ip <***ip-address***> [***ip-mask***]**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ip-address = the IP address to be removed (e.g., **172.23.9.101**)
ip-mask = optional IP subnet mask to be removed (e.g., **255.255.0.0**)

Command Example:
group 3 no ip 172.23.9.101 255.255.0.0

Corresponding UI Command

modatvl

group ipx

Command Usage

Assign IPX network address rules to a mobile group.

Syntax Options

group <*number***> ipx <***ipx-address***> {eii | llc | snap | 802.3}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ipx-address = the IPX address being assigned (e.g., **300**)
eii = Ethernet-II encapsulation
llc = 802.2 LLC encapsulation
snap = SNAP encapsulation
802.3 = IPX Proprietary encapsulation

Command Examples:
group 3 ipx 300 eii
group 17 ipx 050 llc
group 223 ipx 200 snap
group 45 ipx 034 802.3

Corresponding UI Command

modatvl, **crgp**

group no ipx

Command Usage

Remove IPX network address rules from a mobile group.

Syntax Options

group <*number***> no ipx <***ipx-address***> {eii | llc | snap | 802.3}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **11**)
ipx-address = the IPX address being removed (e.g., **300**)
eii = specifies Ethernet-II encapsulation
llc = specifies 802.2 LLC encapsulation
snap = specifies SNAP encapsulation
802.3 = specifies IPX Proprietary encapsulation

Command Examples:
group 3 no ipx 300 eii
group 17 no ipx 050 llc
group 223 no ipx 200 snap
group 45 no ipx 034 802.3

Corresponding UI Command

modatvl, **crgp**

group 802.1q

Command Usage

Assign or modify a port for an 802.1Q group.

Syntax Options

group <*number***> 802.1q <***slot/port***> <ieee | xylan | multi | single> [***tag***] [***priority***] [***description***]**

Definitions:
number = the numerical ID for the 802.1q group (e.g., **3**)
slot/port = the slot and port that is to be added to the specified group (e.g., **5/18**)
ieee = specifies IEEE mode (Gigabit Ethernet ports only)
xylan = specifies Xylan proprietary mode (Gigabit Ethernet ports only)
multi = specifies multi IEEE mode (Ethernet 10/100 ports only)
single = specifies single IEEE mode (Ethernet 10/100 ports only)
tag = the numerical tag for the 802.1q group (value may range from 1 to 4094)
priority = the priority value for the 802.1q group (value may range from 0 to 7)
description = a user-defined description for the 802.1q group (up to 30 characters)

Command and Switch Defaults:
tag = Default value is the group ID (e.g., **3**)
priority = 0

Command Examples:
group 3 802.1q 5/18 ieee
group 44 802.1q 3/3 xylan 5
group 19 802.1q 4/2 multi 7 "Test Port"
group 123 802.1q 5/8 single

Corresponding UI Command

cas

group no 802.1q

Command Usage

Remove a port from an 802.1Q group.

Syntax Options

group <*number***> no 802.1q <***slot/port***>**

Definitions:
number = the numerical ID for the 802.1q group (e.g., **3**)
slot/port = the slot and port that is to be removed from the specified group (e.g., **5/18**)

Command Example:
group 3 no 802.1q 5/18

Corresponding UI Command

das

group vport description

Command Usage

Assign a user-defined description to an existing virtual port.

Syntax Options

group <*number***> vport <***slot/port***> description <***string***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the slot and port (e.g., **5/18**)
string = the user-defined description for the virtual port. Up to thirty (30) characters may be used (e.g., **"test port"**)

Command Example:
group 3 vport 5/18 description "test port"

Corresponding UI Command

modvp

group vport bridge mode

Command Usage

Configure bridge mode for an existing virtual port.

Syntax Options

group <*number*> vport <*slot/port*> bridge mode {auto | optimized | bridged}

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the slot and port (e.g., **5/18**)
auto = specifies Auto-Switch mode
optimized = specifies Optimized Device Switching
bridged = specifies Spanning Tree Bridge

Command Examples:
group 3 vport 5/18 bridge mode auto
group 3 vport 3/1 bridge mode optimized
group 3 vport 5/28 bridge mode bridged

Corresponding UI Command

modvp

group vport switch timer

Command Usage

Specify a switch timer value for an existing virtual port.

Syntax Options

group <*number*> vport <*slot/port*> switch timer <*value*>

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the slot and port (e.g., **5/18**)
value = the time, in seconds, for an Auto-Switch port to revert back to Optimized Switching mode (value may range from 0 to 99999999)

Command Example:
group 3 vport 5/18 switch timer 60

Corresponding UI Command

modvp

Remarks

Specify a switch timer value only if the virtual port is set to Auto-Switch mode.

group vport flood limit

Command Usage

Specify a flood limit for an existing virtual port.

Syntax Options

group <*number***> vport <***slot/port***> flood limit <***value***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the slot and port (e.g., **5/18**)
value = specifies the flood limit value

Command Example:
group 3 vport 5/18 flood limit 196000

Corresponding UI Command

modvp

group vport encapsulation

Command Usage

Specify the encapsulation type for an existing virtual port.

Syntax Options

group <*number***> vport <***slot/port***> encapsulation {802.3 | ethernet-ii | snap | llc}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the slot and port (e.g., **5/18**)
802.3 = specifies IEEE 802.3 encapsulation
ethernet-ii = specifies Ethernet-II encapsulation
snap = specifies SNAP encapsulation
llc = specifies LLC encapsulation

Command Examples:
group 3 vport 5/18 encapsulation 802.3
group 3 vport 3/1 encapsulation ethernet-ii
group 3 vport 5/28 encapsulation snap
group 3 vport 5/28 encapsulation llc

Corresponding UI Command

modvp

group vport ethernet pass

Command Usage

Enable or disable Ethernet 802.2 Pass Through for an existing virtual port.

Syntax Options

group <*number***> vport <***slot/port***> ethernet pass {on | off}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the slot and port (e.g., **5/18**)
on = *enables* Ethernet 802.2 Pass Through
off = *disables* Ethernet 802.2 Pass Through

Command Examples:
group 3 vport 5/18 ethernet pass on
group 61 vport 2/2 ethernet pass off

Corresponding UI Command

modvp

Remarks

The **group vport ethernet pass** command can be used for Ethernet ports *only*.

group vport status

Command Usage

Administratively enable or disable an existing virtual port.

Syntax Options

group <*number***> vport <***slot/port***> status {on | off}**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the slot and port (e.g., **5/18**)
on = *enables* the specified virtual port
off = *disables* the specified virtual port

Command Examples:
group 3 vport 5/18 status on
group 61 vport 2/2 status off

Corresponding UI Command

modvp

group vport mirror port

Command Usage

Configure port mirroring for an existing virtual port.

Syntax Options

group <*number***> vport <***slot/port***> mirror port <***slot/port***>**

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the corresponding slot and port (e.g., **5/18**)
slot/port = the numerical ID for the port to be mirrored (e.g., **5/24**)

Command Example:
group 3 vport 5/18 mirror port 5/24

Corresponding UI Command

modvp

Remarks

The **group vport mirror port** command can be used for Ethernet or Token Ring ports *only*.

group vport no mirror port

Command Usage

Disable port mirroring on an existing virtual port.

Syntax Options

group <*number*> vport <*slot/port*> no mirror port

Definitions:
number = the numerical ID for the group you want to configure (e.g., **3**)
slot/port = the numerical ID for the port on which port mirroring is to be disabled (e.g., **5/18**)

Command Example:
group 3 vport 5/18 no mirror port

Corresponding UI Command

modvp

group vport mac

♦ Attention ♦

This command is not supported in the CLI. If you would like to assign a MAC address to an existing virtual port, use the **modvp** command in the UI.

group elan

Command Usage

Create a LANE service for a mobile group.

Syntax Options

group <*number***> elan <***name***> <***primary-slot/primary-port***> [***secondary-slot/secondary-port***]**

Definitions:
number = the numerical ID for the group to be configured (e.g., **414**)
name = the user-defined name for the LANE service. Up to thirty (30) characters may be used (e.g., **"ats 1"**)
primary-slot/primary-port = the slot and port of the ATM access switch port that will be the primary port for this LANE service (e.g., **3/1**)
secondary-slot/secondary-port = the slot and port of the ATM access switch port that will be used as the secondary port for this LANE service

Command Examples:
group 9 elan "ats 1" 6/2
group 9 elan "new lane service" 3/1 3/5

Corresponding UI Command

cats

group no elan

Command Usage

Remove a LANE service from a mobile group.

Syntax Options

group <*number***> no elan <***name***> <***primary-slot/primary-port***>**

Definitions:
number = the numerical ID for the group to be configured (e.g., **414**)
name = the user-defined name for the LANE service. Up to thirty (30) characters may be used (e.g., **"ats 1"**)
primary-slot/primary-port = the slot and port of the ATM access switch port that is the primary port for the LANE service to be removed (e.g., **3/1**)

Command Example:
group 9 no elan "ats 1" 6/2

Corresponding UI Command

dats

view group

Command Usage

View information for existing groups. Information includes group number, network address, protocol type, and encapsulation type.

Syntax Options

view group [*number***]**

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)

♦ **Syntax Note** ♦
If you do not specify a group, information for *all* groups will be displayed.

Command Examples:
view group
view group 12

Corresponding UI Command

gp

Screen Output

A screen similar to the following will be displayed:

```
Group
ID                Group Description          Network Address      Proto/
(:VLAN ID)                                   (IP Subnet Mask)     Encaps
                                             or (IPX Node Addr)
=====  ==========================  ===============  ========
    1  Default GROUP (#1)          198.206.182.115  IP /
                                   (ff.ff.ff.00)    ETH2
    2  New GROUP (#2)              198.206.101.12   IP /
                                   (ff.ff.ff.00)    SNAP
    3  New GROUP (#3)              198.206.181.10   IP/
                                   (ff.ff.ff.00)    1490
    5  New GROUP                   198.206.143.11   CIP /
                                   (ff.ff.ff.00)    1483
```

Table Description

Group ID (:VLAN ID). The identification number assigned to this Group when it was created through the **crgp** command. The Group identifier is typically consistent network-wide (i.e., Group 3 in this switch should be the same Group as Group 3 configured in all other OmniSwitches in the network). If this Group contains any VLANs, then they will be listed below the Group number. If the default VLAN in the Group supports both IP and IPX routing, then information on both (network address, etc) will display. Group 4 in the screen sample above shows a case where both IP and IPX routing are supported.

Group Description. The textual description of this Group that was entered when the Group was created or modified. This description is limited to 30 characters.

Network Address (IP Subnet Mask) or (IPX Node Addr). For each virtual router port configured, two addresses are listed. The first address is the Network Address, which is the address of the virtual router port for the default VLAN (VLAN #1) in this Group. For an IP virtual router port, this address is the IP address, which is shown in dotted decimal format. For an IPX virtual router port, this address is the IPX network address, which is shown as eight hex characters.

A second address is displayed below the Network address. For IP, this address is the IP Subnet Mask, which is normally derived from the default VLAN IP address class. For IPX, this address is the IPX Node Address.

Proto/Encaps. For each Group or VLAN listed, the top field is the Protocol supported by this virtual router port. Possible values in the field are: **IP** (IP router), **IPX** (IPX router), and **CIP** (Classical IP Group with CIP router). If you configured an IP and an IPX router port, then two router entries will be listed—one with a Protocol of IP and the other with a Protocol of IPX.

The bottom field is the encapsulation used for outgoing frames on the router port. This encapsulation was configured when the router port was configured. Possible values for this field depend on the Protocol and type of Group.

Frame Relay WAN Groups will always display **1490** to indicate RFC 1490 encapsulation is performed on frames. ATM Classical IP (CIP) Groups will display **1483** to indicate RFC 1483 encapsulation is performed on frames.

IP and IPX routers have additional possible encapsulation types. For IP virtual router ports, the possible encapsulation types are as follows:

- **ETH2** Ethernet II
- **SNAP** Ethernet 802.3 SNAP
- **FDDI** FDDI
- **8025** Token Ring 802.5
- **TSRS** Token Ring Source Routing

For IPX virtual router ports, the possible encapsulation types are as follows:

- **ETH2** Ethernet II
- **LLC** Ethernet 802.3 LLC
- **SNAP** Ethernet 802.3 SNAP
- **8023** Ethernet 802.3 (Novell raw)
- **FDDI** FDDI SNAP
- **FSRS** FDDI Source Routing SNAP
- **FLLC** FDDI LLC
- **FSRL** FDDI Source Routing LLC
- **8025** Token Ring SNAP
- **TSRS** Token Ring Source Routing SNAP
- **TLLC** Token Ring LLC
- **TSRL** Token Ring Source Routing LLC

view group rules

Command Usage

View the policy configurations for all mobile groups and AutoTracker VLANs on the switch.

Syntax Options

view group [*number*] rules

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)

♦ **Syntax Note** ♦

If you do not specify a group in the command line, policy configurations for all mobile groups and AutoTracker VLANs will be displayed in the table.

Command Examples:
view group rules
view group 12 rules

Corresponding UI Command

viatrl

Screen Output

A screen similar to the following will be displayed:

VLAN Group :	VLAN Id	Rule Num	Rule Type	Rule Status	Rule Definition
3:	5	1	PORT RULE	Disabled	2/7/Brg/1
3:	11	1	NET ADDR RULE	Enabled	IPX Addr = 11223344
					IPX Encapsulation = Ethernet
3:	12	1	NET ADDR RULE	Enabled	DECNET Area = 13579
3:	23	1	PORT RULE	Enabled	2/7/Brg/1
3:	24	1	MAC RULE	Enabled	082008:003002
					082009:803728
3:	25	1	PROTOCOL RULE	Enabled	Protocol = IP
3:	26	1	NET ADDR RULE	Enabled	IP Addr = 131.1.2.3
					IP Mask = 255.255.0.0
3:	27	1	USER RULE	Enabled	Offset = 64
					Length = 2
					Value = FFFF
					Mask = FFFF

Table Description

VLAN Group. The Group to which this AutoTracker VLAN is assigned. The Group number is specified when first creating the VLAN.

VLAN ID. An identification number that you assigned when you created this virtual LAN. A value will not display in this column for mobile groups.

Rule Num. The number of the policy within the VLAN definition. Each rule defined for a VLAN is numbered sequentially in the order of creation. The rule number is needed when you want to modify or delete a rule definition.

Rule Type. The type of VLAN policy. The Rule Type can be a port policy (PORT RULE), MAC Address policy (MAC RULE), network address policy (NET ADDR RULE), Protocol policy (PROTOCOL RULE), a user-defined policy (USER RULE), port-binding policy (BIND RULE), DHCP Port policy (DHCP PORT RULE), or a DHCP MAC address policy (DHCP MAC RULE). You set up VLAN policies when you create or modify the VLAN.

Rule Status. Indicates whether the rule for this row is Enabled or Disabled. If the rule is enabled, then the VLAN is using the rule definition to determine VLAN membership. If Disabled, then the VLAN is not using this rule to determine membership. Note that this Rule Status is different from the Admin Status for the VLAN since it controls only this specific rule within this specific VLAN.

Rule Definition. Details of this rule. For a Port Rule, this column lists the virtual interface for the Port included in the VLAN as

<slot>/<port>/<service>/<instance>

For example, the port defined for the first row in the table applies to the first bridge instance on port 7 on the module in slot 2 of the switch. For a MAC address rule, this column lists the MAC address for the device in the VLAN. For a Network Address Rule, the column will list the address (IP or IPX) and the IP Mask (IP) or the Encapsulation type (IPX). For a Protocol policy, the column list the protocol used to determine membership. And in a User-Defined rule, the offset, length, value, and mask are listed.

view group virtual

Command Usage

View port attachments associated with a specified group or all groups in the switch.

Syntax Options

view group [*number*] virtual [ports]

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)
ports = optional command syntax

♦ **Syntax Note** ♦
If you do not specify a group in the command line, *all* groups and associated ports will be displayed in the table.

Command Examples:
view group virtual
view group virtual ports
view group 12 virtual
view group 113 virtual ports

Corresponding UI Command

via

Screen Output

A screen similar to the following will be displayed:

GROUP Interface Attachments For All Interfaces

GROUP: Slot/Intf	Description	Service/ Instance	Protocol	Admin Status
1.1	* GROUP #1.0 IP router vport	Rtr / 1	IP	Enabled
2.1	* for group 2	Rtr / 2	IP	Enabled
1:2/1	Virtual port (#2)	Brg / 1	Tns	Enabled
1:2/2	Virtual port (#3)	Brg / 1	Tns	Enabled
1:2/3	Virtual port (#4)	Brg / 1	Tns	Enabled

Table Description

GROUP: Slot/Intf. **GROUP** is the group number to which this port is assigned. When the Group displays as a Group number followed by a decimal and a 1 (**1.1** and **2.1** in the above sample), it represents the router port on the default VLAN within that Group. **Slot** is the position in the chassis of the switching module where this port is located. **Intf** (Interface) is the physical port on the switching module. When the Slot and Interface are shown as an asterisk (*)—as the top two entries in the above table display—it represents as virtual router port that does not have a corresponding physical interface.

Description. The textual description entered for either the virtual router port or the virtual switch port.

Service/Instance. **Service** is the service type configured for this port. **Instance** is an identifier of this service type within the switch. For example, multiple virtual router ports within the switch will be labelled consecutively (1, 2, 3, etc.), and will each have a different **Instance** number.

Values for the service type are as follows:

- **Rtr** Virtual router port
- **Brg** Virtual bridge port
- **Tnk** Virtual trunk port (used for ATM, FDDI, and WAN)
- **T10** 802.10 FDDI service port
- **FRT** Frame Relay trunk port
- **Lne** LAN Emulation service port
- **CIP** Classical IP service port
- **Vlc** VLAN Clusters (X-LANE) service port

Protocol. The bridging protocol for virtual ports and services or the routing protocol for virtual router ports. Possible values are:

- **Tns** Transparent bridge. Bridges maintain a dynamic table of known MAC addresses on connected segments. The table is used to make forwarding decisions. When a frame is received that contains a destination address that matches an address in the table, it is forwarded to designated bridge ports that are in forwarding state.
- **SR** Source Routing Bridge. Normally used in Token Ring environments. Routing information is determined by looking at the Routing Information Field (RIF) in a frame. The RIF contains the segment and bridge numbers that create the path to the destination.
- **SRT** Source Routing Transparent. Normally used in Token Ring environments. Allows Source Routing and Transparent bridges to coexist. The Source Routing Transparent Bridge will form a Spanning Tree with other Transparent Bridges and Source Routing Transparent Bridges and will forward frames that do not contain a Routing Information Field (RIF) to destinations reachable by the Spanning Tree. If the bridge detects routing information in the RIF, it will forward it the same way Source Routing bridges do.
- **IP** IP Routing Protocol. Routing Information Protocol (RIP) used to learn routes from neighboring routers.
- **IPX** IPX Routing Protocol. Uses RIP to learn routes from neighboring routers and the Service Advertising Protocol (SAP) to maintain a database of network services for requesting workstations.
- **CIP** Classical IP Routing (RFC 1577). Classical IP is necessary when an ATM network contains devices that support only CIP.
- **FR** Frame Relay IP Routing. WAN Routing Groups are configured slightly different from other Groups. Frame Relay IP Routing is IP Routing with some enhancements to account for the Frame Relay network.

Admin Status. Indicates whether the port is administratively **Enabled** or **Disabled**. When **Enabled**, the port can transmit and receive data as long as a cable is connected and no physical or operational problems exist. When **Disabled**, the port will not transmit or receive data even if a cable is connected and the physical connection is operational.

view group virtual statistics

Command Usage

View transmit and receive statistics for ports in the switch.

Syntax Options

view group [*number*] virtual [ports] statistics

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)
ports = optional command syntax

♦ **Syntax Note** ♦
If you do not specify a group in the command line, *all* groups and associated ports will be displayed in the table.

Command Examples:
view group virtual statistics
view group virtual ports statistics
view group 12 virtual statistics
view group 113 virtual ports statistics

Corresponding UI Command

vs

Screen Output

A screen similar to the following will be displayed:

Virtual Interface Statistical Information- For All Interfaces

Group	Slot/ Intf	Service/ Instance	Frames In / Out	Octets In / Out	UcastPkts In / Out	NUcastPkts In / Out
1	All	Rtr/ 1				
2	All	Rtr/ 2				
3	All	Rtr/ 3				
1	3/1	Tnk/ 1	0	0	0	0
			0	0	0	0
1	4/1	Brg/ 1	17774	1739560	1707	16067
			684	103048	681	3
1	4/2	Brg/ 1	0	0	0	0
			0	0	0	0

Table Description

Group, Slot/Intf. Slot/Intf. The slot (**Slot**) is the position in the chassis of the switching module where this port is located. The interface (**Intf**) is the physical port on the switching module. If this column reads **All**, then this port is a router port that supports all virtual ports in the Group.

Service/Instance. The Service Type (**Service**) and Instance (**Instance**) of this Service Type in the switch.

Service Type values are as follows:

- **Rtr** Virtual router port
- **Brg** Virtual bridge port
- **Tnk** Virtual trunk port (used for ATM, FDDI, and WAN)
- **T10** 802.10 FDDI service port
- **FRT** Frame Relay trunk port
- **Lne** LAN Emulation service port
- **Vlc** VLAN clusters (X-LANE) service port
- **CIP** Classical IP service port

The Instance (**Inst**) is an identifier of this type of service within the switch. For example, if more than one virtual router port is configured in the switch, then each "instance" of a router will be given a different number.

Frames In/Out. The number of frames received or sent from this port. The top number for each port row is the number of frames received, and the bottom number is the number of frames sent. (Statistics for virtual router ports are not provided in this table.)

Octets In/Out. The number of octets, or bytes, received or sent from this port. The top number for each port row is the number of octets received, and the bottom number is the number of octets sent. (Statistics for virtual router ports are not provided in this table.)

Ucast Pkts In/Out. The total number of unicast packets received or sent from this port. The top number for each port row is the number of unicast packets received, and the bottom number is the number of unicast packets sent. (Statistics for virtual router ports are not provided in this table.)

Non Ucast Pkts In/Out. The total number of non-unicast packets received or sent from this port. Non-unicast frames include multicast and broadcast frames. The top number for each port row is the number of non-unicast packets received, and the bottom number is the number of non-unicast packets sent. (Statistics for virtual router ports are not provided in this table.)

view group virtual errors

Command Usage

View error statistics for ports in the switch.

Syntax Options

view group [*number*] virtual [ports] errors

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)
ports = optional command syntax

♦ **Syntax Note** ♦
If you do not specify a group in the command line, *all* groups and associated ports will be displayed in the table.

Command Examples:
view group virtual errors
view group virtual ports errors
view group 12 virtual errors
view group 113 virtual ports errors

Corresponding UI Command

ve

Screen Output

A screen similar to the following will be displayed:

Virtual Interface Error Information- For All Interfaces

Group	Slot/ Intf	Service/ Instance	Buffer Discards In	Buffer Discards Out	Error Discards In	Error Discards Out
2	All	Rtr/ 1				
3	All	Rtr/ 2				
1	All	Rtr/ 1				
1	3/1	Tnk/ 1	0	0	0	0
1	4/1	Brg/ 1	0	0	0	0
1	4/2	Brg/ 1	0	0	0	0
1	4/3	Brg/ 1	0	0	0	0
1	4/4	Brg/ 1	0	0	0	0
1	4/5	Brg/ 1	0	0	0	0

Table Description

Group, Slot/Intf. Slot/Intf. The slot (**Slot**) is the position in the chassis of the switching module where this port is located. The interface (**Intf**) is the physical port on the switching module. If this column reads **All**, then this port is a router port that supports all virtual ports in the Group.

Service/Instance. The Service Type (**Service**) and Instance (**Instance**) of this Service Type in the switch. Service Type values are as follows:

- **Rtr** Virtual router port
- **Brg** Virtual bridge port
- **Tnk** Virtual trunk port (used for ATM, FDDI, and WAN)
- **T10** 802.10 FDDI service port
- **FRT** Frame Relay trunk port
- **Lne** LAN Emulation service port
- **Vlc** VLAN clusters (X-LANE) service port
- **CIP** Classical IP service port

The Instance (**Inst**) is an identifier of this type of service within the switch. For example, if more than one virtual router port is configured in the switch, then each "instance" of a router will be given a different number.

Buffer Discards In/Out. For transmit (**Out**) and receive (**In**), the number of frames discarded due to a lack of buffer space. Buffer discard information is not provided for virtual router ports.

Error Discards In/Out. For transmit (**Out**) and receive (**In**), the number of frames discarded due to errors. Error discard information is not provided for virtual router ports.

view group mac

Command Usage

View learned MAC addresses and the VLAN membership of those MAC addresses.

Syntax Options

view group [*number***] [***slot/port***] mac**

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)
slot/port = a specific slot and port number to be viewed (e.g., **2/1**)

♦ **Syntax Note** ♦
If you do not specify a group or slot and port number in the command line, learned MAC address information for *all* groups will be displayed in the table.

Command Examples:
view group mac
view group 117 mac
view group 9 3/1 mac
view group 2/2 mac

Corresponding UI Command

fwtvl

Screen Output

A screen similar to the following will be displayed:

```
Total number of MAC addresses learned for Group 1: 2
      MAC Address     Slot/Intf/Service/Instance          AT VLAN Membership
 ------------------- ------------------------------------ ------------------
   0020DA:05F623       4/     /1      /Brg    1              1
```

Table Description

MAC Address. The MAC address for which virtual interface and VLAN membership information will be displayed.

Slot/Intf/Service/Instance. Specifies the virtual port for which AutoTracker VLAN information will be displayed. The **Slot** is the physical slot location to which the MAC address maps. The **Intf** is the physical port to which the MAC address maps. The **Service** is the service type for this MAC address. The service type may be a Router (**Rtr**), Bridge (**Brg**), Classical IP (**CIP**), FDDI Trunk (**Trk**), or an 802.10 Trunk (**T10**). **Instance** is the specific instance of this service type. These different instances are identified numerically. The first instance of a service type belonging to a physical port is identified as 1, the second instance is identified as 2, etc.

AT VLAN Membership. The AutoTracker VLANs to which this MAC Address belongs. An MAC address may belong to more than one VLAN. For example, let's say a MAC device runs on an IPX network. It could be included in a MAC Address policy for one AutoTracker VLAN and the IPX Protocol Policy of another VLAN.

view group ports

Command Usage

View the VLAN membership of all virtual ports in the switch.

Syntax Options

view group [*number*] ports

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)

♦ **Syntax Note** ♦
If you do not specify a group in the command line, VLAN membership information for *all* groups will be displayed in the table.

Command Examples:
view group ports
view group 117 ports

Corresponding UI Command

vivl

Screen Output

A screen similar to the following will be displayed:

Virtual Interface VLAN Membership

Slot/Intf/Service/Instance	Group	Member of VLAN#
1 /1 /Rtr /1	1	1
1 /1 /Rtr /2	3	1
1 /1 /Rtr /3	3	23
1 /1 /Rtr /4	3	24
1 /1 /Rtr /5	3	25
1 /1 /Rtr /6	3	5
2 /1 /Brg /1	1	1
2 /2 /Brg /1	1	1
2 /3 /Brg /1	1	1

Table Description

Slot/Intf/Service/Instance. Specifies the virtual interface for which AutoTracker VLAN information will be displayed. The **Slot** is the physical slot location to which the virtual interface maps. The **Intf** is the physical port to which the virtual interface maps. The **Service** is the service type for this interface. The service type may be a Router (**Rtr**), Bridge (**Brg**), Classical IP (**CIP**), FDDI Trunk (**Trk**), or an 802.10 Trunk (**T10**). **Instance** is the specific instance of this service type. These different instances are identified numerically. The first instance of a service type belonging to a physical port is identified as 1, the second instance is identified as 2, etc.

Group. The Group to which this virtual interface is assigned. The Group is specified when first creating an AutoTracker VLAN.

Member of VLAN #. The AutoTracker VLANs to which this virtual interface belongs. An interface may belong to more than one VLAN. For example, a port may contain devices using the IP Protocol and could match the Port policy of one AutoTracker VLAN and the Protocol policy of another AutoTracker VLAN. Also, physical ports always remain members of the default VLAN #1.

view group port

Command Usage

View the VLAN membership for a *single* virtual port in the switch.

Syntax Options

view group [*number***] port <***slot/port***>**

Definitions:
number = the numerical ID for a specific group (e.g., **11**)
slot/port = the slot and port number to be viewed (e.g., **2/1**)

Command Examples:
view group port 2/1
view group 222 port 3/16

Corresponding UI Command

vivl

Screen Output

A screen similar to the following will be displayed:

```
                    Virtual Interface VLAN Membership
Slot/Intf/Service/Instance          Group          Member of VLAN#
-------------------------------------------------------------------------------------------------------------------
  2    /1     /Brg     /1              1              1
```

Table Description

Slot/Intf/Service/Instance. Specifies the virtual interface for which AutoTracker VLAN information will be displayed. The **Slot** is the physical slot location to which the virtual interface maps. The **Intf** is the physical port to which the virtual interface maps. The **Service** is the service type for this interface. The service type may be a Router (**Rtr**), Bridge (**Brg**), Classical IP (**CIP**), FDDI Trunk (**Trk**), or an 802.10 Trunk (**T10**). **Instance** is the specific instance of this service type. These different instances are identified numerically. The first instance of a service type belonging to a physical port is identified as 1, the second instance is identified as 2, etc.

Group. The Group to which this virtual interface is assigned. The Group is specified when first creating an AutoTracker VLAN.

Member of VLAN #. The AutoTracker VLANs to which this virtual interface belongs. An interface may belong to more than one VLAN. For example, a port may contain devices using IP and could match the Port policy of one AutoTracker VLAN and the Protocol policy of another AutoTracker VLAN. Also, physical ports always remain members of the default VLAN #1.

view group authenticated

Command Usage

View currently-configured authenticated groups.

Syntax Options

view group [*number*] authenticated

Definitions:
number = the numerical ID for a specific group to be viewed (e.g., **11**)

♦ **Syntax Note** ♦
If you do not specify a group in the command line, *all* current authenticated groups will be displayed in the table.

Command Examples:
view group authenticated
view group 23 authenticated

Corresponding UI Command

vag

Screen Output

A screen similar to the following will be displayed:

```
Group ID    Protocol
==================
   6          Protocol = IP
```

Table Description

Group ID. The authenticated group number.

Protocol. This column describes the protocol supported by this group.

view group auto

Command Usage

View auto-activated LANE services for any or all mobile groups.

Syntax Options

view group [*number*] auto

Definitions:
number = the numerical ID for the specific group to be viewed (e.g., **11**)

♦ **Syntax Note** ♦
If you do not specify a group in the command line, LANE services for *all* current mobile groups will be displayed in the table.

Command Examples:
view group auto
view group 6 auto

Corresponding UI Command

vats

Screen Output

A screen similar to the following will be displayed:

Group ID	P. Port S. Port A. Port	Srvc Num	Srvc Index	Admin	Oper	Srvc Type	Service Name
3	3/ 1	2	1	Enabled	Inactive	LANE	elan1
8	4/2 4/1 4/2	3	1	Enabled	Active	LANE	elan2

Table Description

Group ID. The mobile group number to which this service is assigned.

P. Port, S. Port, A. Port. This column lists the current primary physical port (**P. Port**), secondary port (**S. Port**), and the current active port (**A. Port**) for this LANE service.

Srvc Num. The internal service number assigned to this service.

Srvc Index. The internal value used by dynamic LANE software to identify this service. The service index differs from the service number in that it is used exclusively by dynamic LANE software.

Admin. The current administrative status of the service. If **Enabled**, the service may become operationally active if traffic uses this service and the connection is good. If **Disabled**, the service cannot become active until you enable it.

Oper. the current operational status of the service. If **Active**, the service is currently in use. If you have set up primary and secondary services, only one will be Active. A port cannot become operationally active until is has been administratively enabled.

Srvc Type. The type of ATM service. Currently only LANE services are supported as auto-activated services.

Service Name. The ELAN to which this service belongs.

view group mobility

Command Usage

View all the groups in the switch currently configured as mobile groups, as well as the ports currently assigned to those groups.

Syntax Options

view group mobility (No additional syntax options are used.)

Corresponding UI Command

vpl

Remarks

Because ports are assigned to mobile groups dynamically, this display is helpful in determining which ports the switch already sees in each group. Ports will only display in this screen for secondary groups (i.e., not default or primary groups).

Screen Output

A screen similar to the following will be displayed:

```
================================================
Group ID          Physical Port          Virtual Port
================================================
Group ID: 2       4/2 4/3 4/4 4/5        12 13 14 15
Group ID: 3       3/1 5/2                8 20
Group ID: 6       NULL Port List
Group ID: 8       4/1 5/1                11 19
```

Table Description

Group ID. The group number assigned to this mobile group.

Physical Port. The physical switch ports that have been dynamically assigned to this group because they matched an AutoTracker policy. (Primary groups do not display in this screen.) If this column reads **NULL Port List**, no physical ports are currently assigned to the group.

Virtual Port. The virtual ports that are part of this mobile group. For Ethernet and Token Ring switch ports, there is a one-to-one relationship between physical and virtual ports. For ATM ports, multiple virtual ports may be associated with one physical port.

view 802.1q

Command Usage

View all switch ports assigned to 802.1Q groups.

Syntax Options

view 802.1q [*slot/port***]**

Definitions:
slot/port = a specific slot and port number to be viewed (e.g., **3/11**)

♦ **Syntax Note** ♦
If you do not specify a *slot/port* number in the command line, 802.1q information for *all* ports will be displayed in the table.

Command Examples:
view 802.1q
view 802.1q 3/11

Corresponding UI Command

viqgp

Screen Output

A screen similar to the following will be displayed:

Virtual Port	Physical Port	802.1Q Group
3	4/1	1
4	4/2	2
5	4/3	1
6	4/4	1
7	4/5	1
8	4/6	2
9	4/7	3
10	4/8	1
11	5/1	1
12	5/2	3
13	5/3	1
14	5/4	1
15	5/5	1
16	5/6	1

Table Description

Virtual Port. The internal virtual port number assigned to this port instance. For Ethernet ports there is a one-to-one correspondence between physical and virtual ports.

Physical Port. The slot and port number for this port instance.

802.1Q Group. The 802.1Q group to which this port was assigned.

view 802.1q statistics

Command Usage

View statistics for all switch ports assigned to 802.1Q groups.

Syntax Options

view 802.1q statistics <*slot/port***> [***group-number***]**

Definitions:
slot/port = a specific slot and port number to be viewed (e.g., **3/8**)
group-number = the numerical ID for a specific group (e.g., **11**)

♦ Syntax Note ♦
If you do not specify a group in the command line, 802.1q statistics for *all* groups will be displayed in the table.

Command Examples:
view 802.1q statistics 2/2
view 802.1q statistics 3/9 111

Corresponding UI Command

viqstats

Screen Output

A screen similar to the following will be displayed:

Physical Port	Group Id (802.1q)	Transmit Pkts	Received Pkts	Transmit Octets	Received Octets
4/1	1	29	0	41	0

Table Description

Physical Port. The slot and port number for this port.

Group (802.1Q). The 802.1Q group to which this port was assigned.

Transmit/Received Pkts. The number of packets transmitted and received on this port.

Transmit/Received Octets. The number of bytes transmitted and received on this port.

view 802.1q tag

Command Usage

View all Gigabit Ethernet ports assigned to X802.1Q and standard 802.1Q groups.

Syntax Options

view 802.1q tag [*slot/port***]**

Definitions:
slot/port = a specific slot and port number to be viewed (e.g., **3/8**)

♦ **Syntax Note** ♦
If you do not specify a *slot/port* number in the command line, information for *all* ports will be displayed in the table.

Command Examples:
view 802.1q tag
view 802.1q tag 3/9

Corresponding UI Command

vitggp

Screen Output

A screen similar to the following will be displayed:

Intf	Group	MAC Address	Encp	Admin	Oper	Spn Tr	Mode	Tagging Mode
7/ 1	11	0020da:c72032	DFLT	Enabld	Inactv	Disabl	Bridged	IEEE 802.1Q
7/ 1	12	0020da:c72033	DFLT	Enabld	Inactv	Disabl	Bridged	IEEE 802.1Q
7/ 1	13	0020da:c72034	DFLT	Enabld	Inactv	Disabl	Bridged	IEEE 802.1Q

Table Description

Intf. The slot and port number of the 802.1Q or X802.1Q group.

Group. The 802.1Q or X802.1Q group number.

MAC Address. The 802.1Q or X802.1Q group's MAC address.

Encp. The encapsulation method used for outgoing packets on this 802.1q or X802.1q group. Possible encapsulation values are:

- **DFLT** Default format for this switch port (differs for each interface type)
- **SWCH** Frame translations have been customized through the Switch menu
- **ETH2** Ethernet II
- **ESNP** Ethernet 802.3 SNAP (virtual router ports)
- **ELLC** Ethernet 802.3 LLC (IPX router ports only)
- **8023** Ethernet 802.3, Novel Raw (IPX router ports only)
- **8025** Token Ring 802.5 SNAP (virtual router ports)
- **TSRS** Token Ring Source Routing SNAP (virtual router ports)
- **TLLC** Token Ring LLC (IPX router ports only)
- **TSRL** Token Ring Source Routing LLC (IPX router ports only)
- **FDDI** FDDI SNAP (virtual router ports)
- **FSRS** FDDI Source Routing SNAP (IPX router ports only)
- **FLLC** FDDI LLC (IPX router ports only)
- **FSRL** FDDI Source Routing LLC (IPX router ports only)
- **1490** Frame Relay Routing (RFC 1490)
- **1483** Classical IP Routing (RFC 1483)
- **SNAP** SNAP (switch ports only)
- **LLC** LLC (switch ports only)

Admin. Indicates whether the port is administratively enabled (**Enabld**) or disabled (**Disabld**). When **Enabld**, the port can transmit and receive data as long as a cable is connected and no physical or operational problems exist. When **Disabld**, the port will not transmit or receive data even if a cable is connected and the physical connection is operational. A port can have an administrative status of enabled, but still be operationally inactive. See the description of the **Oper** field below.

Oper. Indicates the current operational status of the port. The port will be Active (**Active**) or Inactive (**Inactv**). If the port is active, then the port can pass data and has a good physical connection. If it is inactive, then it may not have a good physical connection and it is not capable of passing data at this time.

Spn Tr. The port's current state as defined by the Spanning Tree Protocol. The possible Spanning Tree States are: disabled, blocking, listening, learning, and forwarding. This state controls the action a port takes when it receives and transmits a frame. For ports which are administratively disabled or operationally inactive, this state will be disabled (**Disabl**), meaning the Spanning Tree algorithm is not active on this port. If the state is **Blocking**, then only BPDUs will be transmitted and received. If the state is **Forwarding**, then both data and BPDU frames will be transmitted and received. This Spanning Tree Protocol state is not applicable to virtual router ports and will read **N/A** for those ports.

Mode. The bridge mode currently in use on this port. This mode is not applicable to virtual router ports and will read **N/A** for those ports. Possible values are:

- **Bridged** Spanning Tree Bridge.
- **AutoSw** Auto Switch.
- **Optimzd** Optimized Device Switching.

Tagging Mode. The field displays if the group uses proprietary X802.1Q tagging (**Proprietary**) or standard IEEE 802.1Q tagging (**IEEE 802.1Q**).

vlan

Command Usage

Create a new VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***>**

Definitions:
group-number = the numerical ID for the group with which the VLAN will be associated (e.g., **3**)
vlan-number = the numerical ID for the new VLAN (e.g., **2**)

Command Example:
vlan 3 2

Corresponding UI Command

cratvl

Remarks

Before you can create a VLAN, you must either create a new group or select an existing group with which the VLAN can be associated.

no vlan

Command Usage

Delete an existing VLAN.

Syntax Options

no vlan <*group-number***> <***vlan-number***>**

Definitions:
group-number = the numerical ID for the associated group (e.g., **77**)
vlan-number = the numerical ID for the VLAN to be deleted (e.g., **4**)

Command Example:
no vlan 77 4

Corresponding UI Command

rmatvl

vlan router ip

Command Usage

Modify IP routing parameters for a specified VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> router ip <***ip-address***> [***ip-mask***] [***ip-broadcast***] [***rip-value***] [***frame-value***]**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the VLAN number on which routing parameters are being modified (e.g., **2**)
ip-address = the IP address for a specific virtual router port (e.g., **168.23.9.100**)
ip-mask = the IP subnet mask for the virtual router port (e.g., **255.255.0.0**)
ip-broadcast = the IP broadcast address for the virtual router port (e.g., **168.23.255.255**)
rip-value = the RIP mode for the virtual router port. Command choices include:

- **silent**
- **ignore**
- **active**
- **inactive**

frame-value = the Default Framing type. Command choices include:

- **ethernet-ii**, **dix**, or **ethernet2** (for Ethernet-II)
- **ethernet-802.3** or **802.3** (for Ethernet 802.3)
- **fddi** (for FDDI)
- **tokenring** or **tr** (for Token Ring)
- **tokenring-sr** or **tr-sr** (for source route Token Ring)

Command and Switch Defaults:
rip-value = **silent**
frame-value = **ethernet-ii**

Command Examples:
vlan 414 2 router ip 1.1.1.1
vlan 77 3 router ip 168.23.9.100 inactive
vlan 888 11 router ip 168.23.9.100 fddi
vlan 2 4 router ip 168.23.9.100 255.255.0.0 ignore 802.3
vlan 2 2 router ip 168.23.9.100 255.255.0.0 168.23.255.255 active dix

Corresponding UI Command

modvl

vlan no router ip

Command Usage

Remove all IP routing parameters from a specified VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no router ip**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which routing parameters are being removed (e.g., **2**)

Command Example:
vlan 414 2 no router ip

Corresponding UI Command

modvl

vlan router ipx

Command Usage

Modify IPX routing parameters for a specified VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> router ipx <***network***> <***name***> [***rip-sap***] [***frame-value***] [***broadcast-type***]**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the VLAN number on which routing parameters are being modified (e.g., **2**)
network = an IPX network address. Up to eight (8) hex digits may be used (e.g., **01010101**)
name = a user-defined router description. Up to thirty (30) characters may be used (e.g., **"New Router"**)
rip-sap = the RIP and SAP status for the group. Command choices include:

- **rip** (RIP only)
- **active** (both RIP and SAP)
- **inactive** (none)

frame-value = the Default Framing type. Command choices include:

- **ethernet-ii**, **dix**, or **ethernet2** (for Ethernet-II)
- **ethernet-802.3** or **802.3** (for Ethernet 802.3)
- **fddi-snap** (for FDDI SNAP)
- **fddisr-snap** (for source route FDDI SNAP)
- **fddi-llc** (for FDDI LLC)
- **fddi-llc** or **fddi-sr-llc** (for source route FDDI LLC)
- **llc** (for LLC)
- **snap** (for SNAP)
- **raw** (for RAW)
- **tokenring** or **tr** (for Token Ring)
- **tokenring-sr** or **tr-sr** (for source route Token Ring)
- **tokenring-snap** or **tr-snap** (for Token Ring SNAP)
- **tokenring-sr-snap**, **tr-sr-snap**, or **trsr-snap** (for source route Token Ring SNAP)
- **tokenring-llc**, **token-ring-llc**, or **tr-llc** (for Token Ring LLC)
- **tokenring-sr-llc**, **tr-sr-llc**, or **trsr-llc** (for source route Token Ring LLC)

broadcast-type = specifies how broadcasts will be handled for source routing. Command choices include:

- **are**
- **ste** (for source routing only)

Command and Switch Defaults:
rip-sap = **active**
frame-value = **ethernet-ii**
broadcast-type = **are**

Command Examples:
vlan 3 2 router ipx 87598624 test
vlan 6 8 router ipx 02345678 "New Group 6" inactive fddi-snap
vlan 3 3 router ipx 87598624 "New Route" raw ste

Corresponding UI Command

modvl

vlan no router ipx

Command Usage

Remove all IPX routing parameters from a specified VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no router ipx**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which routing parameters are being removed (e.g., **2**)

Command Example:
vlan 23 4 no router ipx

Corresponding UI Command

modvl

vlan description

Command Usage

Assign a user-defined description to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> description <***string***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which a description is being assigned (e.g., **2**)
string = the user-defined VLAN description. Up to thirty (30) characters may be used (e.g., **"test net vlan 6"**)

Command Example:
vlan 14 6 description "test net vlan 6"

Corresponding UI Command

modvl

vlan mac

Command Usage

Assign MAC address rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> mac <***mac-address***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which MAC rules are being assigned (e.g., **2**)
mac-address = the MAC address for a specific device (e.g., **00:90:27:17:F7:EB**)

♦ Syntax Note ♦

You can assign multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
vlan 3 2 mac 00:20:DA:B1:35:30
vlan 5 28 mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl

Remarks

A maximum of 1024 MAC addresses are supported per MAC address policy.

MAC address rules enable you to define membership on the basis of devices' MAC addresses. This is the simplest type of rule and provides the maximum degree of control and security. Members of the AutoTracker VLAN will consist of devices with specific MAC addresses. These devices may all be connected to one switch or they may be connected to different switches in the group.

vlan no mac

Command Usage

Remove MAC address rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no mac <***mac-address***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which MAC rules are being removed (e.g., **2**)
mac-address = the mac address for a specific device (e.g., **00:90:27:17:F7:EB**)

♦ Syntax Note ♦

You can remove multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
vlan 5 2 no mac 00:20:DA:B1:35:30
vlan 222 2 no mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl

vlan user

Command Usage

Assign user-defined rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> user <***offset***> <***len***> <***value***> <***mask***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which user rules are being assigned (e.g., **2**)
offset = the number of bytes. Value must be between 0 and 63 (e.g., **61**)
len = the length of the data pattern. Value must be a positive number (e.g., **4**)
value = the length of the data pattern using a hex pattern (e.g., **23ef**)
mask = the bit value using a hex pattern (e.g., **ffff**)

Command Example:
vlan 7 2 user 61 2 23ef ffff

Corresponding UI Command

modatvl

Remarks

User-defined policies enable you to define membership on the basis of a specific pattern within a frame. All devices that originate frames containing this pattern are assigned to the AutoTracker VLAN. The pattern is specified by defining an offset, a value, and a mask.

vlan no user

Command Usage

Remove user-defined rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no user <***offset***> <***len***> <***value***> <***mask***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which user rules are being removed (e.g., **2**)
offset = the number of bytes. Value must be between 0 and 63 (e.g., **61**)
len = the length of the data pattern. Value must be a positive number (e.g., **4**)
value = the length of the data pattern using a hex pattern (e.g., **23ef**)
mask = the bit value using a hex pattern (e.g., **ffff**)

Command Example:
vlan 414 2 no user 61 2 23ef ffff

Corresponding UI Command

modatvl

vlan port

Command Usage

Assign port rules to an AutoTracker VLAN.

Syntax Options

vlan <*group#***> <***vlan#* **> port <***slot/port***> [bridge | trunk** *description* **| lane** *elan-name* **]**

Definitions:
group# = the group with which the specified VLAN is associated (e.g., **3**)
vlan# = the VLAN number to which rules are being added (e.g., **11**)
slot/port = the slot and port number to which rules are being added (e.g., **2/1**)
bridge = specifies *bridging* service type
trunk = specifies *trunking* service type
lane = specifies *LANE* service type
description = the user-defined description for the trunking service. Up to thirty (32) characters may be used (e.g., **"Trunking Service 3"**)
elan-name = the user-defined name of an Emulated LAN (ELAN) for the service. Up to thirty (32) characters may be used (e.g., **"LAN Emulation Service 1"**)

♦ Syntax Notes ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

You must use quotation marks (**" "**) when entering a trunking description or ELAN name. Refer to the command examples below.

Command Default:
bridge

Command Examples:
vlan 3 2 port 3/1
vlan 110 11 port 2/1-2,3/6 trunk "Trunking Service 3"
vlan 78 4 port 3/3 bridge
vlan 3 2 port 3/1 lane "test 1"

Corresponding UI Command

modatvl

Remarks

Port policies enable you to define membership on the basis of ports. Members of the mobile group or AutoTracker VLAN will consist of devices connected to specific ports on one switch or on multiple switches in the Group.

vlan no port

Command Usage

Remove port rules from an AutoTracker VLAN.

Syntax Options

vlan <*group#***> <***vlan#* **> no port <***slot/port***> [bridge | trunk** *description* **| lane** *elan-name* **]**

Definitions:
group# = the group with which the specified VLAN is associated (e.g., **3**)
vlan# = the VLAN number from which rules are being removed (e.g., **11**)
slot/port = the slot and port number from which rules are being removed (e.g., **2/1**)
bridge = specifies *bridging* service type
trunk = specifies *trunking* service type
lane = specifies *LANE* service type
description = the user-defined description for the trunking service to be removed. Up to thirty (32) characters may be used (e.g., **"Trunking Service 3"**)
elan-name = the user-defined name of an Emulated LAN (ELAN) for the service to be removed. Up to thirty (32) characters may be used (e.g., **"LAN Emulation Service 1"**)

♦ Syntax Notes ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

You must use quotation marks (**" "**) when entering a trunking description or ELAN name. Refer to the command examples below.

Command Default:
bridge

Command Examples:
vlan 3 2 no port 3/1
vlan 110 11 no port 2/1-2,3/6 trunk "Trunking Service 3"
vlan 78 4 no port 3/3 bridge
vlan 3 2 no port 3/1 lane "new lane"

Corresponding UI Command

modatvl

vlan dhcp port

Command Usage

Assign DHCP port rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> dhcp port <***slot/port***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which DHCP port rules are being assigned (e.g., **2**)
slot/port = the slot and port number to which DHCP port rules are being added (e.g., **2/1**)

♦ Syntax Note ♦
You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each slot/port entry (e.g., **2/2-5,3/3,4/3-5**).

Command Examples:
vlan 7 7 dhcp port 3/1-6
vlan 133 2 dhcp port 2/2-5,3/2

Corresponding UI Command

modatvl

Remarks

DHCP port policies are similar to standard port policies, but apply to switch ports to which DHCP client workstations are attached. For information on configuring standard port policies, refer to the **vlan port** command on page 4-32.

vlan no dhcp port

Command Usage

Remove DHCP port rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no dhcp port <***slot/port***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which DHCP port rules are being removed (e.g., **2**)
slot/port = the slot and port number from which DHCP port rules are being removed (e.g., **2/1**)

♦ Syntax Note ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each slot/port entry (e.g., **2/2-5,3/3,4/3-5**).

Command Examples:
vlan 7 7 no dhcp port 3/1-6
vlan 133 2 no dhcp port 2/2-5,3/2

Corresponding UI Command

modatvl

vlan dhcp mac

Command Usage

Assign DHCP MAC rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> dhcp mac <***mac-address***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which DHCP MAC rules are being assigned (e.g., **2**)
mac-address = the MAC address for a specific device (e.g., **00:90:27:17:F7:EB**)

♦ Syntax Note ♦

You can assign multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
vlan 3 3 dhcp mac 00:20:DA:B1:35:30
vlan 5 2 dhcp mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl

Remarks

DHCP MAC policies are similar to standard MAC address policies, but apply to the MAC addresses of DHCP client workstations only. For information on configuring standard MAC policies, refer to the **vlan mac** command on page 4-28.

vlan no dhcp mac

Command Usage

Remove DHCP MAC rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no dhcp mac <***mac-address***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which DHCP MAC rules are being removed (e.g., **2**)
mac-address = the MAC address for a specific device (e.g., **00:90:27:17:F7:EB**)

♦ Syntax Note ♦

You can specify multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **00:90:27:17:F7:EB,00:20:DA:D4:32:80**).

Command Examples:
vlan 3 5 no dhcp mac 00:20:DA:B1:35:30
vlan 5 7 no dhcp mac 00:20:DA:B1:35:30,08:00:20:95:F3:89

Corresponding UI Command

modatvl

vlan protocol

Command Usage

Assign protocol rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> protocol {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which protocol rules are being assigned (e.g., **2**)
ip = Internet Protocol (IP) (see remarks below)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol (see remarks below)
appletalk = AppleTalk (see remarks below)
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
vlan 3 2 protocol ip
vlan 77 11 protocol ipx
vlan 2 3 protocol decnet
vlan 202 5 protocol appletalk
vlan 1117 8 protocol ethernet 0806
vlan 8 8 protocol dsap d1/d9
vlan 19 2 protocol snap 0000008137

Corresponding UI Command

modatvl

Remarks

By selecting a specific protocol, you are indicating that all traffic originating from network devices using that protocol will be assigned to the AutoTracker VLAN specified in the command line.

Address Resolution Protocol (ARP) is included as IP.

Datagram Delivery Protocol (DDP) and AARP (AppleTalk ARP) are included as AppleTalk.

DECNET is DECNET Phase IV traffic only.

vlan no protocol

Command Usage

Remove protocol rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no protocol {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which protocol rules are being removed (e.g., **2**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
vlan 3 2 no protocol ip
vlan 77 11 no protocol ipx
vlan 2 3 no protocol decnet
vlan 202 5 no protocol appletalk
vlan 1117 8 no protocol ethernet 0806
vlan 8 8 no protocol dsap d1/d9
vlan 19 2 no protocol snap 0000008137

Corresponding UI Command

modatvl

vlan binding ip

Command Usage

Assign IP-related port binding rules (IP address to a switch port and MAC address) to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> binding ip <***slot/port***> <***ip-address***> <***mac-address***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which port binding rules are being assigned (e.g., **2**)
slot/port = the slot and port to which the IP address is being assigned (e.g., **3/24**)
ip-address = the IP address that you want assigned to the specified port and MAC address (e.g., **1.1.1.1**)
mac-address = the MAC address to which the IP address is being assigned (e.g., **00:20:DA:B1:35:30**)

Command Example:
vlan 222 6 binding ip 3/24 1.1.1.1 08:00:20:95:F3:89

Corresponding UI Command

modatvl

vlan no binding ip

Command Usage

Remove IP port binding rules (IP address to a switch port and MAC address) from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no binding ip <***slot/port***> <***ip-address***> <***mac-address***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which port binding rules are being removed (e.g., **2**)
slot/port = the slot and port from which the IP address is being removed (e.g., **3/24**)
ip-address = the IP address that you want to remove from the specified port and MAC address (e.g., **1.1.1.1**)
mac-address = the MAC address from which the IP address is being removed (e.g., **00:20:DA:B1:35:30**)

Command Example:
vlan 222 6 no binding ip 3/24 1.1.1.1 08:00:20:95:F3:89

Corresponding UI Command

modatvl

vlan binding mac

Command Usage

Assign MAC-related port binding rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> binding mac <***slot/port***> <***mac-address***> {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which port binding rules are being assigned (e.g., **2**)
slot/port = the slot and port to which the MAC address is being assigned (e.g., **3/24**)
mac-address = the MAC address that you want assigned to the specified port (e.g., **08:00:20:DA:F3:11**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
vlan 3 2 binding mac 3/24 08:00:20:DA:F3:11 ip
vlan 77 4 binding mac 2/2 DA:00:20:33:F3:DA ipx
vlan 2 6 binding mac 5/8 01:22:20:95:F3:89 decnet
vlan 202 2 binding mac 6/21 03:00:20:95:F3:89 appletalk
vlan 1117 9 binding mac 3/1 08:00:21:21:F3:13 ethernet 0806
vlan 1117 9 binding mac 3/1 08:00:11:95:F3:22 ethertype ef34
vlan 8 2 binding mac 4/14 08:00:20:95:B2:BB dsap d1/d9
vlan 19 15 binding mac 3/3 08:11:20:95:A1:B1 snap 0000008137

Corresponding UI Command

modatvl

vlan no binding mac

Command Usage

Remove MAC-related port binding rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no binding mac <***slot/port***> <***mac-address***> {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which port binding rules are being removed (e.g., **2**)
slot/port = the slot and port from which the MAC address is being removed (e.g., **3/24**)
mac-address = the MAC address that you want to remove from the specified port (e.g., **08:00:20:DA:F3:11**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = specifies Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
vlan 3 2 no binding mac 3/24 08:00:20:DA:F3:11 ip
vlan 77 4 no binding mac 2/2 DA:00:20:33:F3:DA ipx
vlan 2 6 no binding mac 5/8 01:22:20:95:F3:89 decnet
vlan 202 2 no binding mac 6/21 03:00:20:95:F3:89 appletalk
vlan 1117 9 no binding mac 3/1 08:00:21:21:F3:13 ethernet 0806
vlan 1117 9 no binding mac 3/1 08:00:11:95:F3:22 ethertype ef34
vlan 8 2 no binding mac 4/14 08:00:20:95:B2:BB dsap d1/d9
vlan 19 15 no binding mac 3/3 08:11:20:95:A1:B1 snap 0000008137

Corresponding UI Command

modatvl

vlan binding port

Command Usage

Assign port binding rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> binding port <***slot/port***> {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which port binding rules are being assigned (e.g., **2**)
slot/port = the slot and port to which rules are being added (e.g., **3/24**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = protocol will be specified by Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = protocol will be specified by Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = protocol will be specified by Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
vlan 3 2 binding port 3/24 ip
vlan 77 5 binding port 2/2 ipx
vlan 2 12 binding port 5/8 decnet
vlan 202 6 binding port 6/21 appletalk
vlan 1117 8 binding port 3/1 ethernet 0806
vlan 1117 8 binding port 3/1 ethertype ef34
vlan 8 29 binding port 4/14 dsap d1/d9
vlan 19 2 binding port 3/3 snap 0000008137

Corresponding UI Command

modatvl

vlan no binding port

Command Usage

Remove port-binding rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no binding port <***slot/port***> {ip | ipx | decnet | appletalk | ethernet** *type* **| dsap** *{dsap-value | ssap-value}* **| snap** *snap-value***}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which port binding rules are being removed (e.g., **2**)
slot/port = the slot and port from which rules are being removed (e.g., **3/24**)
ip = Internet Protocol (IP)
ipx = Internetwork Packet Exchange protocol (IPX)
decnet = DECNET protocol
appletalk = AppleTalk
ethernet = specifies Ethernet type

♦ Syntax Note ♦
The syntax **ethertype** may be substituted for **ethernet** in the command line.

type = the user-defined ethernet type in hex (value may range from 0x600 to 0xffff—e.g., **0806**)
dsap = Destination Service Access Protocol (DSAP) and Source Service Access Protocol (SSAP)
dsap-value = the user-defined DSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
ssap-value = the user-defined SSAP value in hex (value may range from 0x00 to 0xff—e.g., **d1/d9**)
snap = Sub-Network Access Protocol (SNAP)
snap-value = the user-defined SNAP value in hex (value may range from 0x0000000000 to 0xfffffffffff—e.g., **0000008137**)

Command Examples:
vlan 3 2 no binding port 3/24 ip
vlan 77 5 no binding port 2/2 ipx
vlan 2 12 no binding port 5/8 decnet
vlan 202 6 no binding port 6/21 appletalk
vlan 1117 8 no binding port 3/1 ethernet 0806
vlan 1117 8 no binding port 3/1 ethertype ef34
vlan 8 29 no binding port 4/14 dsap d1/d9
vlan 19 2 no binding port 3/3 snap 0000008137

Corresponding UI Command

modatvl

vlan ip

Command Usage

Assign IP network address rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> ip <***ip-address***> <***ip-mask***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which IP network rules are being assigned (e.g., **2**)
ip-address = the IP address being assigned (e.g., **172.23.9.101**)
ip-mask = the IP subnet mask being assigned (e.g., **255.255.0.0**)

Command Example:
vlan 414 2 ip 172.23.9.101 255.255.0.0

Corresponding UI Command

modatvl

vlan no ip

Command Usage

Remove IP network address rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no ip <***ip-address***> <***ip-mask***>**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which IP network rules are being removed (e.g., **2**)
ip-address = the IP address being removed (e.g., **172.23.9.101**)
ip-mask = the IP subnet mask being removed (e.g., **255.255.0.0**)

Command Example:
vlan 414 2 no ip 172.23.9.101 255.255.0.0

Corresponding UI Command

modatvl

vlan ipx

Command Usage

Assign IPX network address rules to an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> ipx <***ipx-address***> {eii | llc | snap | 802.3}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number to which IPX network rules are being assigned (e.g., **2**)
ipx-address = the IPX address being assigned (e.g., **300**)
eii = specifies Ethernet-II encapsulation
llc = specifies 802.2 LLC encapsulation
snap = specifies SNAP encapsulation
802.3 = specifies IPX Proprietary encapsulation

Command Examples:
vlan 3 2 ipx 300 eii
vlan 17 3 ipx 050 llc
vlan 223 4 ipx 200 snap
vlan 45 5 ipx 034 802.3

Corresponding UI Command

modatvl

vlan no ipx

Command Usage

Remove IPX network address rules from an AutoTracker VLAN.

Syntax Options

vlan <*group-number***> <***vlan-number***> no ipx <***ipx-address***> {eii | llc | snap | 802.3}**

Definitions:
group-number = the group number with which the specified VLAN is associated (e.g., **414**)
vlan-number = the VLAN number from which IPX network rules are being removed (e.g., **2**)
ipx-address = the IPX address being removed (e.g., **300**)
eii = specifies Ethernet-II encapsulation
llc = specifies 802.2 LLC encapsulation
snap = specifies SNAP encapsulation
802.3 = specifies IPX Proprietary encapsulation

Command Examples:
vlan 3 5 no ipx 300 eii
vlan 17 4 no ipx 050 llc
vlan 223 3 no ipx 200 snap
vlan 45 2 no ipx 034 802.3

Corresponding UI Command

modatvl

multicast vlan

Command Usage

Create a new multicast VLAN.

Syntax Options

multicast vlan <*group-number*> <*vlan-number*>

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)

Command Example:
multicast vlan 414 2

Corresponding UI Command

crmcvl

no multicast vlan

Command Usage

Delete a multicast VLAN.

Syntax Options

no multicast vlan <*group-number***> <***vlan-number***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **14**)
vlan-number = the numerical ID for the multicast VLAN to be deleted (e.g., **6**)

Command Example:
no multicast vlan 14 6

Corresponding UI Command

rmmcvl

multicast vlan port

Command Usage

Configure multicast VLAN port rules.

Syntax Options

multicast vlan <*group-number***> <***vlan-number***> port <***slot/port***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)
slot/port = the port(s) that you want to receive multicast traffic for the specified multicast VLAN

♦ Syntax Note ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

Command Example:
multicast vlan 14 6 port 3/3,4/3-6

Corresponding UI Command

modmcvl

multicast vlan no port

Command Usage

Remove multicast VLAN port rules.

Syntax Options

multicast vlan <*group-number***> <***vlan-number***> no port <***slot/port***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)
slot/port = the port(s) on which you want to remove port rules

♦ Syntax Note ♦

You can specify multiple slots and ports within a single command entry. Use a hyphen to specify a range of ports (e.g., **2/1-5**). Use a comma to separate each *slot/port* entry (e.g., **2/2-5,3/3,4/3-5**).

Command Example:
multicast vlan 14 6 no port 3/3,4/3-6

Corresponding UI Command

modmcvl

multicast vlan mac

Command Usage

Configure multicast VLAN MAC address rules.

Syntax Options

multicast vlan <*group-number***> <***vlan-number***> mac <***mac-address***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)
mac-address = the MAC address(es) that you want to receive multicast traffic for the specified multicast VLAN

♦ Syntax Note ♦

You can specify multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **DA:01:FA:03:55:DA,08:11:20:95:A1:B1**).

Command Examples:
multicast vlan 14 6 mac DA:01:FA:03:55:DA
multicast vlan 14 6 mac DA:01:FA:03:55:DA,08:11:20:95:A1:B1

Corresponding UI Command

modmcvl

multicast vlan no mac

Command Usage

Remove multicast VLAN MAC address rules.

Syntax Options

multicast vlan <*group-number***> <***vlan-number***> no mac <***mac-address***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)
mac-address = the MAC address(es) to be removed

♦ Syntax Note ♦

You can specify multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **DA:01:FA:03:55:DA,08:11:20:95:A1:B1**).

Command Examples:
multicast vlan 14 6 no mac DA:01:FA:03:55:DA
multicast vlan 14 6 no mac DA:01:FA:03:55:DA,08:11:20:95:A1:B1

Corresponding UI Command

modmcvl

multicast vlan multicast

Command Usage

Configure multicast VLAN multicast address rules.

Syntax Options

multicast vlan <*group-number***> <***vlan-number***> multicast <***mac-address***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)
mac-address = the MAC address(es) that you want to receive multicast traffic for the specified multicast VLAN

♦ Syntax Note ♦

You can specify multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **08:90:27:17:F7:EB,01:20:DA:D4:32:80**).

Command Examples:
multicast vlan 14 6 multicast 08:90:27:17:F7:EB
multicast vlan 14 6 multicast 01:90:27:17:F7:EB,08:20:DA:D4:32:80

Corresponding UI Command

modmcvl

multicast vlan no multicast

Command Usage

Remove multicast VLAN multicast address rules.

Syntax Options

multicast vlan <*group-number***> <***vlan-number***> no multicast <***mac-address***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)
mac-address = the MAC address(es) to be removed

♦ **Syntax Note** ♦

You can specify multiple MAC addresses within a single command entry. Use a comma to separate each MAC address entry (e.g., **08:90:27:17:F7:EB,01:20:DA:D4:32:80**).

Command Examples:
multicast vlan 14 6 no multicast 08:90:27:17:F7:EB
multicast vlan 14 6 no multicast 01:90:27:17:F7:EB,08:20:DA:D4:32:80

Corresponding UI Command

modmcvl

multicast vlan description

Command Usage

Assign a multicast VLAN description.

Syntax Options

multicast vlan <*group-number***> <***vlan-number***> description <***text-string***>**

Definitions:
group-number = the group number with which the VLAN is associated (e.g., **414**)
vlan-number = the numerical ID for the multicast VLAN (e.g., **2**)
text-string = the user-defined multicast VLAN description (e.g., **3**)

Command Example:
multicast vlan 14 6 description 3

Corresponding UI Command

modmcvl

vlan default membership

Command Usage

Enable VLAN default membership.

Syntax Options

vlan default membership (No additional syntax options are used.)

Corresponding UI Command

defvl

no vlan default membership

Command Usage

Disable VLAN default membership.

Syntax Options

no vlan default membership (No additional syntax options are used.)

Corresponding UI Command

defvl

view vlan

Command Usage

Display the current status of all mobile groups and AutoTracker VLANs on the switch.

Syntax Options

view vlan [*group-number [vlan-number]* **]**

Definitions:
group-number = the numerical ID for the group with which the VLAN is associated (e.g., **11**)
vlan-number = the numerical ID for the VLAN to be viewed (e.g., **2**)

♦ Syntax Note ♦
If you do not specify a group or VLAN in the command line, *all* VLANs will be displayed in the table.

Command Examples:
view vlan
view vlan 12
view vlan 12 6

Corresponding UI Command

atvl

Screen Output

A screen similar to the following will be displayed:

VLAN Group :	VLAN Id	VLAN Description	Admin Status	Operational Status
6		New Mobile Group 6	Enabled	Active
8		New Mobile Group 8	Enabled	Active

Table Description

VLAN Group. The Group to which this AutoTracker VLAN is assigned. The Group is specified when first creating an AutoTracker VLAN.

VLAN ID. An identification number that you assigned when you created this VLAN. A value will not display in this column for mobile groups.

VLAN Description. A textual description for the VLAN. This description is limited to 30 characters.

Admin Status. The Administrative Status for the VLAN may be enabled or disabled. You enable or disable the Administrative Status for a VLAN when you create or modify it. If the VLAN is enabled, the switch will use the policies you configured to filter traffic to the devices in this VLAN. If you disable the rule, then policies will not be used, but the parameters you set up for the VLAN will be saved.

Oper Status. The VLAN is shown as **Active** or **Inactive**. In order for an enabled VLAN to become "active" it must be able to assign a switch port to the VLAN. If the port rule is used for a VLAN, then the VLAN automatically becomes active. If any other rule is used (MAC address, protocol, etc.), then a frame matching the VLAN rule must first be received by a switch port before the VLAN is active. So, an Active VLAN requires the following:

- Admin Status must be enabled.
- A port must be assigned to the VLAN through either a port-based rule or by a device transmitting data that matches the VLAN policy.

view vlan rules

Command Usage

Display the policy configurations for all AutoTracker VLANs on the switch.

Syntax Options

view vlan rules [*group-number [vlan-number]***]**

Definitions:
group-number = the numerical ID for the group with which the VLAN is associated (e.g., **11**)
vlan-number = the numerical ID for a specific VLAN to be viewed (e.g., **2**)

♦ **Syntax Note** ♦

If you do not specify a group or VLAN in the command line, policy configurations for *all* VLANs will be displayed in the table.

Command Examples:
view vlan rules
view vlan rules 12
view vlan rules 12 6

Corresponding UI Command

viatrl

Screen Output

A screen similar to the following will be displayed:

VLAN Group :	VLAN Id	Rule Num	Rule Type	Rule Status	Rule Definition
3:	5	1	PORT RULE	Disabled	2/7/Brg/1
3:	11	1	NET ADDR RULE	Enabled	IPX Addr = 11223344
					IPX Encapsulation = Ethernet
3:	12	1	NET ADDR RULE	Enabled	DECNET Area = 13579
3:	23	1	PORT RULE	Enabled	2/7/Brg/1
3:	24	1	MAC RULE	Enabled	082008:003002
					082009:803728
3:	25	1	PROTOCOL RULE	Enabled	Protocol = IP
3:	26	1	NET ADDR RULE	Enabled	IP Addr = 131.1.2.3
					IP Mask = 255.255.0.0
3:	27	1	USER RULE	Enabled	Offset = 64
					Length = 2
					Value = FFFF
					Mask = FFFF

Table Description

VLAN Group. The Group to which this AutoTracker VLAN is assigned. The Group number is specified when first creating the VLAN.

VLAN ID. An identification number that you assigned when you created this virtual LAN. A value will not display in this column for mobile groups.

Rule Num. The number of the policy within the VLAN definition. Each rule defined for a VLAN is numbered sequentially in the order of creation. The rule number is needed when you want to modify or delete a rule definition.

Rule Type. The type of VLAN policy. The Rule Type can be a port policy (PORT RULE), MAC Address policy (MAC RULE), network address policy (NET ADDR RULE), Protocol policy (PROTOCOL RULE), a user-defined policy (USER RULE), port-binding policy (BIND RULE), DHCP Port policy (DHCP PORT RULE), or a DHCP MAC address policy (DHCP MAC RULE). You set up VLAN policies when you create or modify the VLAN.

Rule Status. Indicates whether the rule for this row is Enabled or Disabled. If the rule is enabled, then the VLAN is using the rule definition to determine VLAN membership. If Disabled, then the VLAN is not using this rule to determine membership. Note that this Rule Status is different from the Admin Status for the VLAN since it controls only this specific rule within this specific VLAN.

Rule Definition. Details of this rule. For a Port Rule, this column lists the virtual interface for the Port included in the VLAN as

slot/port/service/instance

For example, the port defined for the first row in the table applies to the first bridge instance on port 7 on the module in slot 2 of the switch. For a MAC address rule, this column lists the MAC address for the device in the VLAN. For a Network Address Rule, the column will list the address (IP or IPX) and the IP Mask (IP) or the Encapsulation type (IPX). For a Protocol policy, the column list the protocol used to determine membership. And in a User-Defined rule, the offset, length, value, and mask are listed.

view vlan port

Command Usage

Display the VLAN membership for each virtual interface in the switch.

Syntax Options

view vlan port [*slot/port* **]**

Definitions:
slot/port = the number of a specific port to be viewed (e.g., **3/1**)

♦ **Syntax Note** ♦
If you do not specify a port, VLAN membership for *all* ports will be displayed in the table.

Command Examples:
view vlan port
view vlan port 3/16

Corresponding UI Command

vivl

Screen Output

A screen similar to the following will be displayed:

Virtual Interface VLAN Membership

Slot/Intf/Service/Instance	Group	Member of VLAN#
1 /1 /Rtr /1	1	1
1 /1 /Rtr /2	3	1
1 /1 /Rtr /3	3	23
1 /1 /Rtr /4	3	24
1 /1 /Rtr /5	3	25
1 /1 /Rtr /6	3	5
2 /7 /Brg /1	1	1 22
2 /8 /Brg /1	1	1

Table Description

Slot/Intf/Service/Instance. Specifies the virtual interface for which AutoTracker VLAN information will be displayed. The **Slot** is the physical slot location to which the virtual interface maps. The **Intf** is the physical port to which the virtual interface maps. The **Service** is the service type for this interface. The service type may be a Router (**Rtr**), Bridge (**Brg**), Classical IP (**CIP**), FDDI Trunk (**Trk**), or an 802.10 Trunk (**T10**). **Instance** is the specific instance of this service type. These different instances are identified numerically. The first instance of a service type belonging to a physical port is identified as 1, the second instance is identified as 2, etc.

Slot/Intf/Service/Instance. Specifies the virtual interface for which AutoTracker VLAN information will be displayed. The **Slot** is the physical slot location to which the virtual interface maps. The **Intf** is the physical port to which the virtual interface maps. The **Service** is the service type for this interface. The service type may be a Router (**Rtr**), Bridge (**Brg**), Classical IP (**CIP**), FDDI Trunk (**Trk**), or an 802.10 Trunk (**T10**). **Instance** is the specific instance of this service type. These different instances are identified numerically. The first instance of a service type belonging to a physical port is identified as 1, the second instance is identified as 2, etc.

Group. The Group to which this virtual interface is assigned. The Group is specified when first creating an AutoTracker VLAN.

Member of VLAN #. The AutoTracker VLANs to which this virtual interface belongs. An interface may belong to more than one VLAN. For example, a port may contain devices using the IP Protocol and could match the Port policy of one AutoTracker VLAN and the Protocol policy of another AutoTracker VLAN. Also, physical ports always remain members of the default VLAN #1.

view multicast vlan

Command Usage

View the current status of multicast VLANs in the switch.

Syntax Options

view multicast vlan [*group-number [vlan-number]***]**

Definitions:
group-number = the numerical ID for a specific group to be viewed (e.g., **11**)
vlan-number = the numerical ID for an associated VLAN (e.g., **2**)

♦ Syntax Note ♦
If you do not specify a group or VLAN in the command line, status information for *all* multicast VLANs will be displayed in the table.

Command Examples:
view multicast vlan
view multicast vlan 223
view multicast vlan 87 2

Corresponding UI Command

mcvl

Screen Output

A screen similar to the following will be displayed:

VLAN Group :	VLAN Id	VLAN Description	Admin Status	Operational Status
3:	5	MVLAN 5	Enabled	Active
3:	11	MVLAN 11	Enabled	Inactive
3:	12	MVLAN 12	Enabled	Inactive
3:	22	MVLAN 22	Enabled	Active
3:	23	MVLAN 23	Enabled	Active
3:	24	MVLAN 24	Enabled	Inactive
3:	25	MVLAN 25	Enabled	Inactive
3:	26	MVLAN 26	Enabled	Inactive
3:	27	MVLAN 27	Enabled	Inactive
3:	31	MVLAN 31	Enabled	Inactive
3:	32	MVLAN 32	Enabled	Inactive

Table Description

VLAN Group. The Group to which this multicast VLAN is assigned. The Group is specified when first creating a multicast VLAN.

VLAN ID. An identification number that you assigned when you created this multicast VLAN.

VLAN Description. A textual description. This description is limited to 30 characters.

Admin Status. A multicast VLAN can be enabled or disabled. You enable or disable a multicast VLAN when you create or modify it. If the multicast VLAN is enabled, AutoTracker floods multicast traffic to the recipients you specified when setting up the multicast VLAN. If the multicast VLAN is disabled, the multicast traffic is not flooded as you specified; however, the parameters you set up for the multicast VLAN are saved.

Oper Status. The multicast VLAN is shown as active or inactive. In order for an enabled multicast VLAN to become "active" it must be able to assign a switch port to the multicast VLAN. If the port rule is used for a multicast VLAN, then the multicast VLAN automatically becomes active. If you defined multicast traffic recipients by MAC address only, then a frame destined for a defined MAC address must first be received by a switch port before the multicast VLAN is active. An active multicast VLAN requires the following:

- Admin Status must be enabled.
- A port must be assigned to the multicast VLAN through either a port-based rule or by a device transmitting data that matches the multicast VLAN policy.

view multicast vlan rules

Command Usage

View the current multicast VLAN policies and their status.

Syntax Options

view multicast vlan rules [*group-number [vlan-number]***]**

Definitions:
group-number = the numerical ID for a specific group to be viewed (e.g., **11**)
vlan-number = the numerical ID for an associated VLAN (e.g., **2**)

♦ **Syntax Note** ♦
If you do not specify a group or VLAN in the command line, policy information for *all* multicast VLANs will be displayed in the table.

Command Examples:
view multicast vlan rules
view multicast vlan rules 223
view multicast vlan rules 87 2

Corresponding UI Command

vimcrl

Screen Output

A screen similar to the following will be displayed:

VLAN Group :	VLAN Id	Rule Num	Rule Type	Rule Status	Rule Definition
3:	5	1	PORT RULE	Disabled	2/7/Brg/1
3:	5	2	MCAST	Disabled	072467:0034ab
3:	22	1	PORT RULE	Enabled	2/7/Brg/1
3:	22	2	MCAST	Enabled	080027:0135de1
3:	23	1	PORT RULE	Enabled	2/7/Brg/1
3:	23	2	MCAST	Enabled	050034:000017
3:	24	1	MAC RULE	Enabled	082008:003002 082009:803728
3:	24	2	MCAST	Enabled	053967:0126af5

Table Description

VLAN Group. The Group to which this multicast VLAN is assigned. The Group is specified when first creating a multicast VLAN.

VLAN ID. An identification number that you assigned when you created this multicast VLAN.

Rule Num. The number for this rule within the multicast VLAN definition. Each rule defined for a multicast VLAN is numbered sequentially in the order of creation. The rule number is needed when you want to modify or delete a rule definition.

Rule Type. The type of multicast VLAN rule. For multicast VLANs, the rule type can be PORT RULE, MAC RULE, or MULICAST RULE. Each multicast VLAN by definition will contain a multicast rule. The multicast rule defines the multicast address. In addition, the multicast VLAN contains either a Port-based rule, MAC address rule, or both a Port and MAC address rule. The Port and MAC address rules define the recipients of multicast traffic.

Rule Status. Indicates whether the rule for this row is Enabled or Disabled. If the rule is enabled, then the switch is using the rule definition to determine multicast traffic flooding. If Disabled, then the switch is not using this rule to regulate multicast traffic flow. Note that this Rule Status is different from the Admin Status for the multicast VLAN since it controls only this specific rule within this specific multicast VLAN.

Rule Definition. Details of this rule. For a Port Rule, this column lists the virtual interface for the Port that is a recipient of the multicast traffic as

slot/port/service/instance

For example, the port defined for the first row in the table applies to the first bridge instance on port 7 on the module in slot 2 of the switch. For a MAC address rule, this column lists the MAC address for the recipient of the multicast traffic. For a multicast Rule, this column lists the multicast address.

view multicast vlan ports

Command Usage

View the multicast VLAN membership of each virtual interface in the switch.

Syntax Options

view multicast vlan ports [*slot/port*]

Definitions:
slot/port = a specific slot and port number to be viewed (e.g., **3/8**)

♦ **Syntax Note** ♦
If you do not specify a slot and port number in the command line, membership information for *all* virtual ports will be displayed in the table.

Command Examples:
view multicast vlan ports
view multicast vlan ports 3/8

Corresponding UI Command

vimcvl

Screen Output

A screen similar to the following will be displayed:

Virtual Interface VLAN Membership

Slot/Intf/Service/Instance	Group	Member of VLAN#
1 /1 /Rtr /1	1	1
1 /1 /Rtr /2	3	23
2 /1 /Brg /1	1	23

Table Description

Slot/Intf/Service/Instance. Specifies the virtual interface for which multicast VLAN information will be displayed. The **Slot** is the physical slot location to which the virtual interface maps. The **Intf** is the physical port to which the virtual interface maps. The **Service** is the service type for this interface. The service type may be a Router (**Rtr**), Bridge (**Brg**), Classical IP (**CIP**), FDDI Trunk (**Trk**), or an 802.10 Trunk (**T10**). **Instance** is the specific instance of this service type. These different instances are identified numerically. The first instance of a service type belonging to a physical port is identified as 1, the second instance is identified as 2, etc.

Group. The Group to which this virtual interface is assigned. The Group is specified when first creating a multicast VLAN.

Member of VLAN #. The multicast VLANs to which this virtual interface belongs. An interface may belong to more than one multicast VLAN. For example, if you set up a multicast VLAN for CNN News and another for NBC News, you may want certain ports to receive both multicast traffic streams.