

1 VLAN Commands

Command	Function
add interface	Add one access port or a group of access ports to the current virtual local area network (VLAN).
interface vlan	Create a switch virtual interface (SVI) for a VLAN and enter the SVI configuration mode.
name	Configure a name for a VLAN.
show vlan	Display member port information of a VLAN.
switchport access vlan	Add an access port to a specified VLAN.
switchport hybrid allowed vlan	Configure tagged and untagged allowed VLANs for a hybrid port.
switchport hybrid native vlan	Configure a native VLAN for a hybrid port.
switchport mode	Configure the L2 interface mode.
switchport trunk allowed vlan	Configure allowed VLANs for a trunk port or an uplink port.
switchport trunk native vlan	Configure a native VLAN for a trunk or uplink port.
vlan	Create a VLAN or enter the VLAN configuration mode.

1.1 add interface

Function

Run the **add interface** command to add one access port or a group of access ports to the current virtual local area network (VLAN).

Run the **no** form of this command to restore the current VLAN (other than VLAN 1) of one access port or a group of access ports to VLAN 1.

Run the **default** form of this command to delete one access port or a group of access ports from the current VLAN.

All L2 Ethernet interfaces belong to VLAN 1 by default, and no port exists in new VLANs.

Syntax

add interface { *interface-type interface-number* | **range** *interface-type interface-range* }

no add interface { *interface-type interface-number* | **range** *interface-type interface-range* }

default add interface { *interface-type interface-number* | **range** *interface-type interface-range* }

Parameter Description

interface *interface-type interface-number*: Specifies an interface in format of *interface-type [slot /] int*. The values are L2 Ethernet interfaces or L2 aggregation ports (APs).

range *interface-type interface-range*: Specifies a group of interfaces in format of *interface-type [slot /] intmin – intmax,int*. The values are L2 Ethernet interfaces or L2 APs.

Command Modes

VLAN configuration mode

Default Level

14

Usage Guidelines

This command takes effect to access ports only. If the interface is, for example, a trunk port, run the **switchport trunk allowed vlan** { **add** *vlan-list* | **remove** *vlan-list* } command to modify the allowed VLANs list of the interface.

If the interface is not an L2 access port, run the **switchport** command to configure the interface as an L2 interface, and run the **switchport mode access** command to configure the interface as an access port.

The configuration effect of this command is equivalent to that of the **switchport access vlan** *vlan-id* command that configures a VLAN for an interface in interface configuration mode. If both commands are configured, the later one prevails.

You must run the **interface aggregateport** *ap-number* command to create an AP before adding the AP to a VLAN. When you use this command to add an L2 AP to the current VLAN, the configuration takes effect to the L2 AP only.

Examples

The following example adds an access port GigabitEthernet 0/10 to VLAN 20 and displays the status and information about GigabitEthernet 0/10.

```

Hostname> enable
Hostname# configure terminal
Hostname(config)# vlan 20
Hostname(config-vlan)# add interface gigabitethernet 0/10
Hostname(config-vlan)# show interface gigabitethernet 0/10 switchport
Interface                Switchport  Mode      Access  Native  Protected  VLAN
lists
-----
-----
-----
-----
-----
-----
GigabitEthernet 0/10    enabled    ACCESS    20      1       Disabled  ALL

```

The following example adds a group of access ports to VLAN 20 and displays the member port information of the VLAN.

```

Hostname> enable
Hostname# configure terminal
Hostname(config)# vlan 20
Hostname(config-vlan)# add interface range gigabitethernet 0/1-10,0/12-14,0/15
Hostname# show vlan
VLAN Name      Status      Ports
-----
-----
1    VLAN0001    STATIC     Gi0/11,Gi0/16,Gi0/17,Gi0/18
                                           Gi0/19,Gi0/20,Gi0/21,Gi0/22
                                           Gi0/23,Gi0/24
20   VLAN0020    STATIC     Gi0/1,Gi0/2,Gi0/3,Gi0/4
                                           Gi0/5,Gi0/6,Gi0/7,Gi0/8
                                           Gi0/9,Gi0/10,Gi0/12,Gi0/13,
                                           Gi0/14,Gi0/15

```

The following example adds AggregatePort 10 to VLAN 20 and displays the information about AggregatePort 10.

```

Hostname> enable
Hostname# configure terminal
Hostname(config)# interfaces aggregateport 10
Hostname(config-if-AggregatePort 1)# show interface aggregateport 10 switchport
Interface                Switchport  Mode      Access  Native  Protected  VLAN
lists
-----
-----
-----
-----
-----
-----
AggregatePort 10        enabled    ACCESS    1       1       Disabled  ALL
Hostname(config-if-AggregatePort 1)# exit
Hostname(config)# vlan 20
Hostname(config-vlan)# add interface aggregateport 10
Hostname(config-vlan)# show interface aggregateport 10 switchport

```

```

Interface          Switchport   Mode   Access   Native   Protected   VLAN
-----          -
lists
-----
AggregatePort 10   enabled     ACCESS   20       1         Disabled    ALL
Hostname(config-vlan)# show vlan
VLAN Name         Status      Ports
-----          -
1    VLAN0001       STATIC     Gi0/11,Gi0/16,Gi0/17,Gi0/18
                                           Gi0/19,Gi0/20,Gi0/21,Gi0/22
                                           Gi0/23,Gi0/24
20   VLAN0020       STATIC     Gi0/1,Gi0/2,Gi0/3,Gi0/4
                                           Gi0/5,Gi0/6,Gi0/7,Gi0/8
                                           Gi0/9,Gi0/10,Gi0/12,Gi0/13,
                                           Gi0/14,Gi0/15,Ag10

```

Notifications

N/A

Common Errors

- The interface to be added or deleted is not an L2 switch port.
- The interface to be added or deleted is not an access port. For example, the allowed VLANs of the trunk port cannot be modified using this command.
- The interface to be added or deleted is a member port of the AP, or the AP is not created in advance.
- When you add a group of ports to a VLAN, the **range** parameter is not set.

Platform Description

N/A

Related Commands

- **interface aggregateport** (interface/link AP)
- **Switchport** (interface/Ethernet interface)
- **show interfaces switchport** (interface/Ethernet interface)
- [show vlan](#)
- [switchport access vlan](#)
- [switchport mode](#)
- [vlan](#)

1.2 interface vlan

Function

Run the **interface vlan** command to create a switch virtual interface (SVI) for a VLAN and enter the SVI configuration mode.

Run the **no** form of this command to delete an SVI from the VLAN.

No SVI is configured for a VLAN by default.

Syntax

interface vlan *vlan-id*

no interface vlan *vlan-id*

Parameter Description

vlan-id: VLAN ID. The value range is from 1 to 4094. Only one VLAN can be configured.

Command Modes

Global configuration mode

VLAN configuration mode

Interface configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example enters the SVI interface configuration mode of VLAN 1.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface vlan 1
Hostname(config-if-VLAN 1)#
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

- [vlan](#)

1.3 name

Function

Run the **name** command to configure a name for a VLAN.

Run the **no** form of this command to restore the VLAN name to the default value.

Run the **default** form of this command to restore the VLAN name to the default value.

The default name of a VLAN is "VLAN+VLAN ID". For example, the default name of VLAN 2 is VLAN0002.

Syntax

name *vlan-name*

no name

default name

Parameter Description

vlan-name: New name of a VLAN, used to replace the default VLAN name "VLAN+VLAN ID".

Command Modes

VLAN configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example configures the name of VLAN 20 as **office 10**.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# vlan 20
Hostname(config-vlan)# name office 10
Hostname(config-vlan)# show vlan
VLAN Name          Status          Ports
-----
1    VLAN0001        STATIC         Gi0/11,Gi0/16,Gi0/17,Gi0/18
                                           Gi0/19,Gi0/20,Gi0/21,Gi0/22
                                           Gi0/23,Gi0/24
20   office 10       STATIC         Gi0/1,Gi0/2,Gi0/3,Gi0/4
                                           Gi0/5,Gi0/6,Gi0/7,Gi0/8
                                           Gi0/9,Gi0/10,Gi0/12,Gi0/13,
                                           Gi0/14,Gi0/15,Ag10
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

- [show vlan](#)
- [vlan](#)

1.4 show vlan**Function**

Run the **show vlan** command to display member port information of a VLAN.

Syntax

```
show vlan [ id vlan-id ]
```

Parameter Description

id *vlan-id*: Specifies a VLAN ID. The value range is from 1 to 4094. If this parameter is configured, only member port information of a single VLAN is displayed. If this parameter is not configured, member port information of all VLANs is displayed.

Command Modes

All modes except the user EXEC mode

Default Level

2

Usage Guidelines

N/A

Examples

The following example displays member port information of VLAN 1.

```

Hostname> enable
Hostname# configure terminal
Hostname(config-vlan)# show vlan id 20
VLAN Name                Status      Ports
-----
20  VLAN0020                STATIC     Gi0/1

```

The following example displays configurations and member port information of All VLANs.

```

Hostname(config-vlan)# show vlan
VLAN Name                Status      Ports
-----
1  VLAN0001                STATIC     Gi0/1, Gi0/2, Gi0/4, Gi0/5
                                           Gi0/6, Gi0/7, Gi0/8, Gi0/9
                                           Gi0/10, Gi0/11, Gi0/12, Gi0/13
                                           Gi0/14, Gi0/15, Gi0/16, Gi0/17
                                           Gi0/18, Gi0/19, Gi0/20, Gi0/21
                                           Gi0/22, Gi0/23, Gi0/24
2-3 VLAN0002-VLAN0003      STATIC     Gi0/1

```

```
20 VLAN0020          STATIC    Gi0/1
```

Table 1-1 Output Fields of the show vlan Command

Field	Description
VLAN	VLAN ID
Name	VLAN name
Status	Attribute of a VLAN <ul style="list-style-type: none"> ● STATIC: static VLAN ● Dynamic: dynamic VLAN ● PRIVATE: primary or secondary VLAN of a private VLAN ● SUPER: super VLAN ● SUB: sub VLAN of a super VLAN
Ports	Ports that are added to this VLAN

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.5 switchport access vlan

Function

Run the **switchport access vlan** command to add an access port to a specified VLAN.

Run the **no** form of this command to restore the current VLAN of the access port to VLAN 1.

Run the **default** form of this command to restore the current VLAN of the access port to the default VLAN.

The access port belongs to VLAN 1 by default.

Syntax

switchport access vlan *vlan-id*

no switchport access vlan

default switchport access vlan

Parameter Description

vlan *vlan-id*: Specifies the ID of a VLAN to which an access port is to be added. The value range is from 1 to 4094. Only one VLAN can be configured.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

If the specified VLAN already exists, the port is added to the VLAN. If the specified VLAN does not exist, the system automatically creates this VLAN and adds the interface to the VLAN.

If the interface to be added is a trunk port, the port cannot be added to the specified VLAN.

Examples

The following example adds the access port GigabitEthernet 0/1 to VLAN 2.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# switchport access vlan 2
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

- [switchport mode](#)

1.6 switchport hybrid allowed vlan

Function

Run the **switchport hybrid allowed vlan** command to configure tagged and untagged allowed VLANs for a hybrid port.

Run the **no** form of this command to restore the allowed VLANs of a hybrid port to default values.

Run the **default** form of this command to restore the allowed VLANs of a hybrid port to default values.

By default, the allowed VLANs of the hybrid port are tagged VLANs 2 to 4094 and untagged VLAN 1.

Syntax

```
switchport hybrid allowed vlan { [ add ] tagged | [ add ] untagged | only tagged | remove } vlan-list
```

```
no switchport hybrid allowed vlan
```

```
default switchport hybrid allowed vlan
```

Parameter Description

vlan-list: VLAN list. The value range is from 1 to 4094. The list can contain one or more VLANs. VLAN IDs are separated by commas (.). Continuous VLAN IDs are represented by connecting the first and the last VLAN IDs with a hyphen (-).

[**add**] **tagged** *vlan-list*: Adds the VLANs in *vlan-list* to the tagged allowed VLAN list of the hybrid port. Packets of the specified VLANs sent by the port are tagged. The native VLAN cannot be added to the tagged allowed VLAN list. The **add** parameter is optional. The command function is not affected by this parameter.

[**add**] **untagged** *vlan-list*: Adds the VLANs in *vlan-list* to the untagged allowed VLAN list of the hybrid port. Packets of the specified VLANs sent by the port are untagged. The native VLAN must be added to the untagged allowed VLAN list. The **add** parameter is optional. The command function is not affected by this parameter.

only tagged *vlan-list*: Adds the VLANs in *vlan-list* to the tagged allowed VLAN list of the hybrid port and removes other tagged VLANs from the allowed VLAN list. Other untagged VLANs are not affected.

remove *vlan-list*: Removes the VLANs in *vlan-list* from the allowed VLAN list of the hybrid port. The native VLAN can be removed as well.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example configures the L2 interface GigabitEthernet 0/1 as a hybrid port and removes the default allowed VLANs 1 to 4094.

```

Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# switchport mode hybrid
Hostname(config-if-GigabitEthernet 0/1)# show interface gigabitethernet 0/1
switchport
Interface          Switchport  Mode      Access  Native  Protected  VLAN
lists
-----
GigabitEthernet 0/1  enabled    HYBRID    1       1       Disabled   ALL
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid allowed vlan remove 1-4094
Hostname(config-if-GigabitEthernet 0/1)# show interface gigabitethernet 0/1
switchport
Interface          Switchport  Mode      Access  Native  Protected
VLAN lists

```

```
-----
```

GigabitEthernet 0/1	enabled	HYBRID	1	1	Disabled
---------------------	---------	--------	---	---	----------

```
-----
```

The following example adds VLAN 20 and VLAN 30 to the allowed VLAN list of the hybrid port and forwards packets of VLAN 20 and VLAN 30 in untagged mode.

```
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid allowed vlan untagged
20
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid allowed vlan add
untagged 30
```

The following example adds VLAN 40 and VLAN 50 to the allowed VLAN list of the hybrid port and forwards packets of VLAN 40 and VLAN 50 in tagged mode.

```
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid allowed vlan tagged 40
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid allowed vlan tagged 50
```

The following example configures the native VLAN of the hybrid port GigabitEthernet 0/1 as VLAN 2.

```
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid native vlan 2
Hostname(config-if-GigabitEthernet 0/1)# show interface gigabitethernet 0/1
switchport
Interface      Switchport      Mode      Access  Native  Protected  VLAN
lists
-----
-----
GigabitEthernet 0/1  enabled  HYBRID    1       2       Disabled
20,30,40,50
```

The following example retains VLAN 20 as the allowed VLAN for the hybrid port, deletes other VLANs (VLAN 30, VLAN 40, and VLAN 50), and forwards packets of VLAN 20 in tagged mode.

```
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid allowed vlan only
tagged 20
```

The following example deletes the allowed VLAN 20 from the hybrid port.

```
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid allowed vlan remove 20
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

- **show interface** (interface/Ethernet interface)
- [switchport mode](#)

1.7 switchport hybrid native vlan

Function

Run the **switchport hybrid native vlan** command to configure a native VLAN for a hybrid port.

Run the **no** form of this command to restore the native VLAN to VLAN 1.

Run the **default** form of this command to restore the native VLAN to VLAN 1.

The native VLAN of the hybrid port is VLAN 1 by default.

Syntax

switchport hybrid native vlan *vlan-id*

no switchport hybrid native vlan

default switchport hybrid native vlan

Parameter Description

vlan-id: Native VLAN of the hybrid port. The value range is from 1 to 4094. Only one VLAN can be configured.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

Packets of the native VLAN sent by the hybrid port are untagged. Packets of an allowed VLAN (other than the native VLAN) sent by the hybrid port can be tagged or untagged.

When the hybrid port receives an untagged packet, the hybrid port considers that the packet comes from the native VLAN of this port.

Examples

The following example configures the native VLAN of the hybrid port GigabitEthernet 0/1 as VLAN 2.

```

Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# switchport mode hybrid
Hostname(config-if-GigabitEthernet 0/1)# switchport hybrid native vlan 2
Hostname(config-if-GigabitEthernet 0/2)# show interface gigabitethernet 0/2
switchport
Interface          Switchport Mode      Access Native Protected VLAN lists
-----
GigabitEthernet 0/1  enabled  HYBRID  1      2      Disabled  ALL

```

Notifications

N/A

Common Errors

No native VLAN is created before it is configured. In this case, VLAN configuration is not completed though the returned value is correct.

Platform Description

N/A

Related Commands

- [switchport mode](#)

1.8 switchport mode

Function

Run the **switchport mode** command to configure the L2 interface mode.

Run the **no** form of this command to restore the L2 interface mode to the default value.

Run the **default** form of this command to restore the L2 interface mode to the default value.

The L2 interface mode is **access** by default.

Syntax

switchport mode { access | trunk | hybrid | uplink }

no switchport mode

default switchport mode

Parameter Description

access: Configures the L2 interface mode as **access**.

trunk: Configures the L2 interface mode as **trunk**.

hybrid: Configures the L2 interface mode as **hybrid**.

Uplink: Configures the L2 interface mode as **uplink**.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

- Before you configure the L2 interface mode as **access**, **trunk**, **hybrid**, or **uplink**, ensure that the interface is an L2 interface. You can run the **switchport** command to configure an interface as an L2 interface, and run the **no switchport** command to configure an interface as an L3 interface. When you configure an interface as an L2/L3 interface, all attributes of the interface are restored to the default values in this interface mode.
- If the L2 interface mode is **access**, this interface can be assigned to one VLAN only. Therefore, the native VLAN is the allowed VLAN, and this VLAN is VLAN 1 by default. You can run the **switchport access vlan** command to assign this interface to a specified VLAN. Packets sent by the access port are untagged.

- If the L2 interface mode is **trunk**, this interface has one native VLAN, and this VLAN is VLAN 1 by default. You can run the **switchport trunk native vlan** command to configure the native VLAN for the interface. The allowed VLANs are VLANs 1 to 4094 by default, namely, all VLANs. You can run the **switchport trunk allowed vlan** command to configure allowed VLANs for the interface. The native VLAN can be excluded from the allowed VLANs. In this case, data of the native VLAN cannot be forwarded by the port. Packets of the native VLAN forwarded by the trunk port are untagged, and packets of other allowed VLANs are tagged.
- If the L2 interface mode is **uplink**, this interface has one native VLAN, and this VLAN is VLAN 1 by default. You can run the **switchport trunk native vlan** command to configure a native VLAN for the interface. The allowed VLANs are VLANs 1 to 4094 by default, namely, all VLANs. You can run the **switchport trunk allowed vlan** command to configure allowed VLANs for the interface. Unlike the trunk port, the uplink port forwards tagged packets.
- If the L2 interface mode is **hybrid**, this interface has one native VLAN, and this VLAN is VLAN 1 by default. You can run the **switchport hybrid native vlan** command to configure a native VLAN for the interface. The allowed VLANs are VLANs 1 to 4094 by default, namely, all VLANs. You can run the **switchport hybrid allowed vlan** command to configure allowed VLANs for the interface. Packets of the native VLAN sent by the hybrid port are untagged. Unlike the trunk port, the hybrid port can forward tagged and untagged packets of allowed VLANs other than the native VLAN.
- You can run the **show interface [interface id] switch** command to display interface configurations.

Examples

The following example configures GigabitEthernet 0/1 as an L2 interface and then configures the interface as an access port.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface GigabitEthernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# switchport
Hostname(config-if-GigabitEthernet 0/1)# switchport mode access
```

The following example configures the L2 interface GigabitEthernet 0/1 as a trunk port.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface GigabitEthernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# switchport mode trunk
```

The following example configures the L2 interface GigabitEthernet 0/1 as an uplink port.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# switchport mode uplink
```

The following example configures the L2 interface GigabitEthernet 0/1 as a hybrid port.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1)# switchport mode hybrid
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

- [switchport access vlan](#)
- [switchport hybrid allowed vlan](#)
- [switchport hybrid native vlan](#)
- [switchport trunk allowed vlan](#)
- [switchport trunk native vlan](#)

1.9 switchport trunk allowed vlan

Function

Run the **switchport trunk allowed vlan** command to configure allowed VLANs for a trunk port or an uplink port.

Run the **no** form of this command to restore the allowed VLANs of the trunk or uplink port to default values.

Run the **default** form of this command to restore the allowed VLANs of the trunk or uplink port to default values.

The allowed VLANs of the trunk port are VLANs 1 to 4094 and the allowed VLANs of the uplink port are VLANs 1 to 4094 by default.

Syntax

```
switchport trunk allowed vlan { all | { add | remove | except | only } vlan-list }
```

```
no switchport trunk allowed vlan
```

```
default switchport trunk allowed vlan
```

Parameter Description

all: Adds all VLANs to the allowed VLAN list of the trunk port.

vlan-list: VLAN list. The value range is from 1 to 4094. The list can contain one or more VLANs. VLAN IDs are separated by commas (,). Continuous VLAN IDs are represented by connecting the first and the last VLAN IDs with a hyphen (-).

add *vlan-list*: Adds the VLANs in *vlan-list* to the allowed VLAN list of the trunk port.

remove *vlan-list*: Removes the VLANs in *vlan-list* from the allowed VLAN list of the trunk port.

except *vlan-list*: Adds all the VLANs other than those in *vlan-list* to the allowed VLAN list of the trunk port.

only *vlan-list*: Adds the VLANs in *vlan-list* to the allowed VLAN list of the trunk port and removes other VLANs from the allowed VLAN list.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

You can configure an allowed VLAN list for the trunk or uplink port to direct traffic of the specified VLANs to pass through this trunk or uplink port.

You can run the **show interfaces** command to display interface configurations.

Examples

The following example removes VLAN 2 from the allowed VLAN list of the trunk port GigabitEthernet 0/10.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode trunk
Hostname(config-if-GigabitEthernet 0/10)# switchport trunk allowed vlan remove 2
```

The following example adds VLANs other than VLAN 10 to the allowed VLAN list of the trunk port GigabitEthernet 0/10.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode trunk
Hostname(config-if-GigabitEthernet 0/10)# switchport trunk allowed vlan except 10
```

The following example adds only VLAN 10 to the allowed VLAN list of the trunk port GigabitEthernet 0/10 and removes other VLANs from the allowed list of the port.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode trunk
Hostname(config-if-GigabitEthernet 0/10)# switchport trunk allowed vlan only 10
```

The following example removes VLAN 10 from the allowed VLAN list of the uplink port GigabitEthernet 0/10.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode uplink
Hostname(config-if-GigabitEthernet 0/10)# switchport trunk allowed vlan remove 10
```

The following example adds VLANs other than VLAN 10 to the allowed VLAN list of the uplink port GigabitEthernet 0/10.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode uplink
```



```
Hostname(config-if-GigabitEthernet 0/10)# switchport trunk allowed vlan except 10
```

The following example adds only VLAN 10 to the allowed VLAN list of the uplink port GigabitEthernet 0/10 and removes other VLANs from the allowed list of the port.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode uplink
Hostname(config-if-GigabitEthernet 0/10)# switchport trunk allowed vlan only 10
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

- **show interface** (interface/Ethernet interface)
- [switchport mode](#)

1.10 switchport trunk native vlan

Function

Run the **switchport trunk native vlan** command to configure a native VLAN for a trunk or uplink port.

Run the **no** form of this command to restore the native VLAN of a port to VLAN 1.

Run the **default** form of this command to restore the native VLAN of a port to VLAN 1.

The native VLAN of a trunk or uplink port is VLAN 1 by default.

Syntax

```
switchport trunk native vlan vlan-id
```

```
no switchport trunk native vlan
```

```
default switchport trunk native vlan
```

Parameter Description

vlan-id: ID of the configured native VLAN. The value range is from 1 to 4094. Only one VLAN can be configured.

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

After you configure a native VLAN for the trunk port, when the trunk port receives an untagged packet, the trunk port considers that the packet comes from the native VLAN of this port.

Packets of the native VLAN sent by the port are untagged.

Examples

The following example configures the native VLAN of the trunk port GigabitEthernet 0/10 as VLAN 10.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode trunk
Hostname(config-if-GigabitEthernet 0/10)# switch trunk native vlan 10
```

The following example configures the native VLAN of the uplink port GigabitEthernet 0/10 as VLAN 10.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/10
Hostname(config-if-GigabitEthernet 0/10)# switchport mode uplink
Hostname(config-if-GigabitEthernet 0/10)# switch trunk native vlan 10
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

- [switchport mode](#)

1.11 vlan

Function

Run the **vlan** command to create a VLAN or enter the VLAN configuration mode.

Run the **no** form of this command to delete an existing VLAN.

Run the **default** form of this command to restore a configured VLAN to a common static VLAN.

Only one common static VLAN (VLAN 1) exists by default.

Syntax

```
vlan { vlan-id | range vlan-range }
```

```
no vlan { vlan-id | range vlan-range }
```

```
default vlan { vlan-id | range vlan-range }
```

Parameter Description

vlan-id: VLAN ID. The value range is from 1 to 4094. Only one VLAN can be configured. The default VLAN (VLAN 1) cannot be deleted.

vlan-range: Range of VLAN IDs. The value range is from 1 to 4094. The *vlan-range* field can be set to a single VLAN or a VLAN range. VLAN IDs are separated by commas (.). Continuous VLAN IDs can be represented by connecting the first and the last VLAN IDs with a hyphen (-).

Command Modes

Global configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example creates a VLAN 10 and enters the VLAN 10: configuration mode.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# vlan 10
Hostname(config-vlan)#
```

The following example creates a group of VLANs.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# vlan range 2
Hostname(config-vlan-range)# exit
Hostname(config)# vlan range 20,3,5,7-9,15-11
Hostname(config-vlan-range)# exit
```

Notifications

When an SVI has been created for a VLAN, the following notification will be displayed:

```
Vlan 10 is not allowed to be deleted.
```

Common Errors

N/A

Platform Description

N/A

Related Commands

- [add](#)
- [interface vlan](#)
- [name](#)

