

show vlans

Syntax show vlans
<brief | detail | extensive>
<dot1q-tunneling>
<management-vlan>
<sort-by (tag | name)>
<vlan-range-name>

Release Information Command introduced in JUNOS Release 9.0 for EX Series switches.
Command modified in JUNOS Release 9.2 for EX Series switches to display support for MAC-based VLANs and **sort-by (tag | name)** and **vlan-range-name** options.
Command modified in JUNOS Release 9.4 for EX Series switches to display whether MAC learning is disabled and to include the **management-vlan** option.

Description Display information about VLANs configured on bridged Ethernet interfaces. For interfaces configured to support a VoIP VLAN and a data VLAN, the **show vlans** command displays both tagged and untagged membership for those VLANs.



NOTE: When a series of VLANs is created using the **vlan-range** statement, such VLAN names are prefixed and suffixed with a double underscore. For example, a series of VLANs using the VLAN range 1–3 and the base VLAN name **marketing** would be displayed as **__marketing_1__**, **__marketing_2__**, and **__marketing_3__**.



NOTE: To display an 802.1X supplicant successfully authenticated in multiple-suppliant mode with dynamic VLAN movement, use the **show vlans vlan-name extensive** operational mode command, where **vlan-name** is the dynamic VLAN.

Options none—Display information for all VLANs. VLAN information is displayed by VLAN name in ascending order.

brief | detail | extensive—(Optional) Display the specified level of output.

dot1q-tunneling—(Optional) Display VLANs with the Q-in-Q tunneling feature enabled.

management-vlan—(Optional) Display management VLANs.

sort-by (tag | name)—(Optional) Display VLANs in ascending order of VLAN IDs or VLAN names.

vlan-range-name—(Optional) Display VLANs in ascending order of VLAN-range names.

Required Privilege Level view

- Related Topics**
- show ethernet-switching interfaces
 - Example: Setting Up Basic Bridging and a VLAN for an EX Series Switch

- Example: Setting Up Bridging with Multiple VLANs for EX Series Switches
- Example: Configure Automatic VLAN Administration Using GVRP
- Example: Configuring a Private VLAN on an EX Series Switch
- Example: Setting Up Q-in-Q Tunneling on EX Series Switches
- Understanding Bridging and VLANs on EX Series Switches

List of Sample Output

- show vlans on page 3
- show vlans brief on page 4
- show vlans detail on page 4
- show vlans extensive (MAC-based) on page 4
- show vlans extensive (Port-based) on page 5
- show vlans sort-by tag on page 6
- show vlans sort-by employee (vlan-range-name) on page 7
- show vlans employee (vlan-range-name) on page 7

Output Fields Table 1 lists the output fields for the `show vlans` command. Output fields are listed in the approximate order in which they appear.

Table 1: show vlans Output Fields

Field Name	Field Description	Level of Output
Name	Name of a VLAN.	none, brief
Tag	The 802.1Q tag applied to this VLAN. If none is displayed, no tag is applied.	All levels
Interfaces	Interface associated with learned MAC addresses or all-members (flood entry). An asterisk (*) beside the interface indicates that the interface is UP .	All levels
Address	The IP address.	none, brief
Ports Active / Total	The number of interfaces associated with a VLAN. The Active column indicates interfaces that are UP , and the Total column indicates interfaces that are active and inactive.	brief
VLAN	Name of a VLAN.	detail, extensive
Admin state	Indicates whether the physical link is operational and can pass packets.	detail, extensive
Dot1q Tunneling Status	Indicates whether Q-in-Q Tunneling is enabled.	detail, extensive
MAC learning Status	Indicates whether MAC learning is disabled.	detail, extensive
Description	A description for the VLAN.	detail, extensive
Primary IP	Primary IP address associated with a VLAN.	detail
Number of interfaces	The number of interfaces associated with a VLAN. Both the total number of interfaces and the number of active interfaces associated with a VLAN are displayed.	detail, extensive
STP	The spanning tree associated with a VLAN.	detail, extensive

Table 1: show vlans Output Fields *(continued)*

Field Name	Field Description	Level of Output
RTG	The redundant trunk group associated with a VLAN.	detail, extensive
Tagged interfaces	The tagged interfaces to which a VLAN is associated.	detail, extensive
Untagged interfaces	The untagged interfaces to which a VLAN is associated.	detail, extensive
Customer VLAN Ranges	Lists the customer VLAN (C-VLAN) ranges associated with this service VLAN (S-VLAN).	extensive
Private VLAN Mode	The private VLAN mode for this VLAN. Values are Primary , Isolated , and Community .	extensive
Primary VLAN	The primary VLAN tag for this secondary VLAN.	extensive
Internal Index	VLAN index internal to JUNOS Software.	extensive
Origin	The manner in which the VLAN was created. Values are static and learn .	extensive
Protocol	Port-based VLAN or MAC-based VLAN. MAC-based protocol is displayed when VLAN assignment is done either statically or dynamically through 802.1X.	extensive
IP addresses	IP address associated with a VLAN.	extensive
Number of MAC entries	For MAC-based VLANs created either statically or dynamically, the MAC addresses associated with an interface.	extensive
Secondary VLANs	The secondary VLANs associated with a primary VLAN.	extensive
Isolated VLANs	The isolated VLANs associated with a primary VLAN.	extensive
Community VLANs	The community VLANs associated with a primary VLAN.	extensive

```
show vlans user@switch> show vlans
```

```

Name      Tag      Interfaces
default   None
ge-0/0/34.0, ge-0/0/33.0, ge-0/0/32.0, ge-0/0/31.0,
ge-0/0/30.0, ge-0/0/29.0, ge-0/0/28.0, ge-0/0/27.0,
ge-0/0/26.0, ge-0/0/25.0, ge-0/0/19.0, ge-0/0/18.0,
ge-0/0/17.0, ge-0/0/16.0, ge-0/0/15.0, ge-0/0/14.0,
ge-0/0/13.0, ge-0/0/11.0, ge-0/0/9.0, ge-0/0/8.0,
ge-0/0/3.0, ge-0/0/2.0, ge-0/0/1.0
v0001     1
ge-0/0/24.0, ge-0/0/23.0, ge-0/0/22.0, ge-0/0/21.0
v0002     2
None
v0003     3
None
v0004     4
None
v0005     5
None
```

show vlans brief user@switch> **show vlans brief**

Name	Tag	Address	Ports Active/Total
default	None		0/23
v0001	1		0/4
v0002	2		0/0
v0003	3		0/0
v0004	4		0/0
v0005	5		0/0
v0006	6		0/0
v0007	7		0/0
v0008	8		0/0
v0009	9		0/0
v0010	10		0/2
v0011	11		0/0
v0012	12		0/0
v0013	13		0/0
v0014	14		0/0
v0015	15		0/0
v0016	16		0/0

show vlans detail user@switch> **show vlans detail**

VLAN: default, Tag: Untagged, Admin state: Enabled
Description: None
Primary IP: None, Number of interfaces: 23 (Active = 0)
STP: None, RTG: None
Untagged interfaces: ge-0/0/34.0, ge-0/0/33.0, ge-0/0/32.0, ge-0/0/31.0, ge-0/0/30.0, ge-0/0/29.0, ge-0/0/28.0, ge-0/0/27.0, ge-0/0/26.0, ge-0/0/25.0, ge-0/0/19.0, ge-0/0/18.0, ge-0/0/17.0, ge-0/0/16.0, ge-0/0/15.0, ge-0/0/14.0, ge-0/0/13.0, ge-0/0/11.0, ge-0/0/9.0, ge-0/0/8.0, ge-0/0/3.0, ge-0/0/2.0, ge-0/0/1.0,
Tagged interfaces: None

VLAN: v0001, Tag: 802.1Q Tag 1, Admin state: Enabled
Description: None
Primary IP: None, Number of interfaces: 4 (Active = 0)
Dot1q Tunneling Status: Enabled
STP: None, RTG: None
Untagged interfaces: None
Tagged interfaces: ge-0/0/24.0, ge-0/0/23.0, ge-0/0/22.0, ge-0/0/21.0,

VLAN: v0002, Tag: 802.1Q Tag 2, Admin state: Enabled
Description: None
Primary IP: None, Number of interfaces: 0 (Active = 0)
STP: None, RTG: None
Untagged interfaces: None
Tagged interfaces: None

VLAN: v0003, Tag: 802.1Q Tag 3, Admin state: Enabled
Description: None
Primary IP: None, Number of interfaces: 0 (Active = 0)
STP: None, RTG: None
Untagged interfaces: None
Tagged interfaces: None

VLAN: vlan4000, 802.1Q Tag: Untagged, Admin State: Enabled
MAC learning Status: Disabled
Number of interfaces: 0 (Active = 0)

show vlans extensive user@switch> **show vlans extensive**
(MAC-based)

```

VLAN: default, Created at: Thu May 15 13:43:09 2008
Internal index: 3, Admin State: Enabled, Origin: Static
Protocol: Port Mode
Number of interfaces: Tagged 0 (Active = 0), Untagged 2 (Active = 2)
    ge-0/0/0.0*, untagged, access
    ge-0/0/14.0*, untagged, access

VLAN: vlan_dyn, Created at: Thu May 15 13:43:09 2008
Internal index: 4, Admin State: Enabled, Origin: Static
Protocol: Port Mode
Number of interfaces: Tagged 0 (Active = 0), Untagged 0 (Active = 0)
Protocol: MAC Based
Number of MAC entries: 6
    ge-0/0/0.0*
        00:00:00:00:00:02 (untagged)
        00:00:00:00:00:03 (untagged)
        00:00:00:00:00:04 (untagged)
        00:00:00:00:00:05 (untagged)
        00:00:00:00:00:06 (untagged)
        00:00:00:00:00:07 (untagged)

```

**show vlans extensive
(Port-based)**

```

user@switch> show vlans extensive
VLAN: default, created at Mon Feb 4 12:13:47 2008
Tag: None, Internal index: 0, Admin state: Enabled, Origin: static
Description: None
Dot1q Tunneling Status: Enabled
Customer VLAN ranges:
    1-4100
Private VLAN Mode: Primary
Protocol: Port based, Layer 3 interface: None
IP addresses: None
STP: None, RTG: None.
Number of interfaces: Tagged 0 (Active = 0), Untagged 23 (Active = 0)
    ge-0/0/34.0 (untagged, access)
    ge-0/0/33.0 (untagged, access)
    ge-0/0/32.0 (untagged, access)
    ge-0/0/31.0 (untagged, access)
    ge-0/0/30.0 (untagged, access)
    ge-0/0/29.0 (untagged, access)
    ge-0/0/28.0 (untagged, access)
    ge-0/0/27.0 (untagged, access)
    ge-0/0/26.0 (untagged, access)
    ge-0/0/25.0 (untagged, access)
    ge-0/0/19.0 (untagged, access)
    ge-0/0/18.0 (untagged, access)
    ge-0/0/17.0 (untagged, access)
    ge-0/0/16.0 (untagged, access)
    ge-0/0/15.0 (untagged, access)
    ge-0/0/14.0 (untagged, access)
    ge-0/0/13.0 (untagged, access)
    ge-0/0/11.0 (untagged, access)
    ge-0/0/9.0 (untagged, access)
    ge-0/0/8.0 (untagged, access)
    ge-0/0/3.0 (untagged, access)
    ge-0/0/2.0 (untagged, access)
    ge-0/0/1.0 (untagged, access)

Secondary VLANs: Isolated 1, Community 1
Isolated VLANs :
    __pvlan_pvlan_ge-0/0/3.0__
Community VLANs :

```

comm1

VLAN: v0001, created at Mon Feb 4 12:13:47 2008
Tag: 1, Internal index: 1, Admin state: Enabled, Origin: static
Description: None
Protocol: Port based, Layer 3 interface: None
IP addresses: None
STP: None, RTG: None.
Number of interfaces: Tagged 4 (Active = 0), Untagged 0 (Active = 0)
ge-0/0/24.0 (tagged, trunk)
ge-0/0/23.0 (tagged, trunk)
ge-0/0/22.0 (tagged, trunk)
ge-0/0/21.0 (tagged, trunk)

VLAN: v0002, created at Mon Feb 4 12:13:47 2008
Tag: 2, Internal index: 2, Admin state: Enabled, Origin: static
Description: None
Protocol: Port based, Layer 3 interface: None
IP addresses: None
STP: None, RTG: None.
Number of interfaces: Tagged 0 (Active = 0), Untagged 0 (Active = 0)
None

VLAN: v0003, created at Mon Feb 4 12:13:47 2008
Tag: 3, Internal index: 3, Admin state: Enabled, Origin: static
Description: None
Protocol: Port based, Layer 3 interface: None
IP addresses: None
STP: None, RTG: None.
Number of interfaces: Tagged 0 (Active = 0), Untagged 0 (Active = 0)
None

show vlans sort-by tag user@switch> **show vlans sort-by tag**

Name	Tag	Interfaces
default		None
__vlan-x_1__	1	None
__vlan-x_2__	2	None
__vlan-x_3__	3	None
__vlan-x_4__	4	None
__vlan-x_5__	5	None
__vlan-x_6__	6	None
__vlan-x_7__	7	None
__vlan-x_8__	8	None
__vlan-x_9__	9	None
__vlan-x_10__	10	None
__vlan-x_11__	11	None
__vlan-x_12__	12	None
__vlan-x_13__	13	None

__vlan-x_14__	14	None
__vlan-x_15__	15	None
__vlan-x_16__	16	None
__vlan-x_17__	17	None
__vlan-x_18__	18	None
__vlan-x_19__	19	None
__vlan-x_20__	20	None

show vlans sort-by employee (vlan-range-name) user@switch> **show vlans sort-by employee**

Name	Tag	Interfaces
__employee_120__	120	ge-0/0/22.0*
__employee_121__	121	ge-0/0/22.0*
__employee_122__	122	ge-0/0/22.0*
__employee_123__	123	ge-0/0/22.0*
__employee_124__	124	ge-0/0/22.0*
__employee_125__	125	ge-0/0/22.0*
__employee_126__	126	ge-0/0/22.0*
__employee_127__	127	ge-0/0/22.0*
__employee_128__	128	ge-0/0/22.0*
__employee_129__	129	ge-0/0/22.0*
__employee_130__	130	ge-0/0/22.0*

show vlans employee (vlan-range-name) user@switch> **show vlans employee**

Name	Tag	Interfaces
__employee_120__	120	ge-0/0/22.0*
__employee_121__	121	ge-0/0/22.0*
__employee_122__	122	ge-0/0/22.0*
__employee_123__	123	ge-0/0/22.0*
__employee_124__	124	ge-0/0/22.0*
__employee_125__	125	ge-0/0/22.0*
__employee_126__	126	ge-0/0/22.0*
__employee_127__	127	ge-0/0/22.0*

__employee_128__	128	ge-0/0/22.0*
__employee_129__	129	ge-0/0/22.0*
__employee_130__	130	ge-0/0/22.0*
		ge-0/0/22.0*

Published: 2009-10-09