show dot1x

Syntax show dot1x
<brief | detail>
<interface [*interface-names*]>

Release Information Command introduced in JUNOS Release 9.0 for EX Series switches.

Description Display the current operational state of all ports with the list of connected users.

Options none—Display information for all authenticator ports.

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

interface *interface-names*—Display information for the specified port with a list of connected supplicants.

Required Privilege Level view

Related Topics

- clear dot1x
- Example: Setting Up 802.1X for Single Supplicant or Multiple Supplicant Configurations on an EX Series Switch
- Example: Configuring 802.1X Authentication Options When the RADIUS Server is Unavailable to an EX Series Switch
- Example: Connecting a RADIUS Server for 802.1X to an EX Series Switch
- Example: Configuring MAC RADIUS Authentication on an EX Series Switch
- Example: Setting Up VoIP with 802.1X and LLDP-MED on an EX Series Switch
- Configuring 802.1X RADIUS Accounting (CLI Procedure)
- Filtering 802.1X Supplicants Using RADIUS Server Attributes
- Verifying 802.1X Authentication

List of Sample Output
show dot1x interface brief on page 4
show dot1x interface detail on page 4

Output Fields Table 1 lists the output fields for the show dot1x command. Output fields are listed in the approximate order in which they appear.

Table 1: show dot1x Output Fields

Field Name	Field Description	Level of Output
Interface	Name of a port.	All levels
MAC address	The MAC address of the connected supplicant on the port.	All levels

Table 1: show dot1x Output Fields *(continued)*

Field Name	Field Description	Level of Output
Role	The 802.1X authentication role of the interface. When 802.1X is enabled on an interface, the role is Authenticator. As Authenticator, the interface blocks LAN access until a supplicant is authenticated through 802.1X or MAC RADIUS authentication.	brief, detail
State	The state of the port: ■ Authenticated—The supplicant has been authenticated through the RADIUS server or has been permitted access through server fail fallback. ■ Authenticating—The supplicant is authenticating through the RADIUS server. ■ Held—An action has been triggered through server fail fallback during a RADIUS server timeout. A supplicant is denied access, permitted access through a specified VLAN, or maintains the authenticated state granted to it before the RADIUS server timeout occurred.	brief
Administrative state	The administrative state of the port: ■ auto—Traffic is allowed through the port based on the authentication result. (Default) ■ force-authorize—All traffic flows through the port irrespective of the authentication result. This state is not allowed on an interface whose VLAN membership has been set to dynamic. ■ force-unauthorize—All traffic drops on the port irrespective of the authentication result. This state is not allowed on an interface whose VLAN membership has been set to dynamic.	detail
Supplicant	The mode for the supplicant: ■ single—Authenticates only the first supplicant. All other supplicants who connect later to the port are allowed full access without any further authentication. They effectively "piggyback" on the first supplicant's authentication. ■ single-secure—Allows only one supplicant to connect to the port. No other supplicant is allowed to connect until the first supplicant logs out. ■ multiple—Allows multiple supplicants to connect to the port. Each supplicant is authenticated individually.	detail
Quiet period	The number of seconds the port remains in the wait state following a failed authentication exchange with the supplicant before reattempting the authentication. The default value is 60 seconds. The range is 0 through 65,535 seconds.	detail
Transmit period	The number of seconds the port waits before retransmitting the initial EAPOL PDUs to the supplicant. The default value is 30 seconds. The range is 1 through 65,535 seconds.	detail
MAC radius	MAC RADIUS authentication: ■ enabled—The switch sends an EAPOL request to the connecting host to attempt 802.1X authentication and if the connecting host is unresponsive, the switch tries to authenticate using the MAC address. ■ disabled—The default. The switch will not attempt to authenticate the MAC address of the connecting host.	detail

Table 1: show dot1x Output Fields *(continued)*

Field Name	Field Description	Level of Output
MAC radius restrict	The authentication method is restricted to MAC RADIUS only. 802.1X authentication is not enabled.	detail
Reauthentication	The reauthentication state: ■ disable—Periodic reauthentication of the client is disabled. ■ interval—Sets the periodic reauthentication time interval. The default value is 3600 seconds. The range is 1 through 65,535 seconds.	detail
Supplicant timeout	The number of seconds the port waits for a response when relaying a request from the authentication server to the supplicant before resending the request. The default value is 30 seconds. The range is 1 through 60 seconds.	detail
Server timeout	The number of seconds the port waits for a reply when relaying a response from the supplicant to the authentication server before timing out. The default value is 30 seconds. The range is 1 through 60 seconds.	detail
Maximum EAPOL requests	The maximum number of retransmission times of an EAPOL request packet to the supplicant before the authentication session times out. The default value is 2. The range is 1 through 10.	detail
Number of clients bypassed because of authentication	The number of non-802.1X clients granted access to the LAN by means of static MAC bypass. The following fields are displayed: ■ Client—MAC address of the client. ■ vlan —The name of the VLAN to which the client is connected.	detail
Guest VLAN member	The VLAN to which a supplicant is connected when the supplicant is authenticated using a guest VLAN. If a guest VLAN is not configured on the interface, this field displays < not configured > .	detail
Number of connected supplicants	The number of supplicants connected to a port.	detail
Supplicant	The user name and MAC address of the connected supplicant.	detail

Table 1: show dot1x Output Fields *(continued)*

Field Name	Field Description	Level of Output
Authentication method	The 802.1X authentication method used for a supplicant: ■ Guest VLAN—A supplicant is connected to the LAN through the guest VLAN. ■ MAC Radius—A nonresponsive host is authenticated based on its MAC address. The MAC address is configured as permitted on the RADIUS server, the RADIUS server lets the switch know that the MAC address is a permitted address, and the switch opens LAN access to the nonresponsive host on the interface to which it is connected. ■ Radius—A supplicant is configured on the RADIUS server, the RADIUS server communicates this to the switch, and the switch opens LAN access on the interface to which the supplicant is connected. ■ Server-fail deny—If the RADIUS servers time out, all supplicants are denied access to the LAN, preventing traffic from flowing from the supplicant through the interface. This is the default. ■ Server-fail permit—When the RADIUS server is unavailable, a supplicant is still permitted access to the LAN as if the supplicant had been successfully authenticated by the RADIUS server. ■ Server-fail use-cache—If the RADIUS servers time out during reauthentication, previously authenticated supplicants are reauthenticated, but new supplicants are denied LAN access. ■ Server-fail VLAN—A supplicant is configured to be moved to a specified VLAN if the RADIUS server is unavailable to reauthenticate the supplicant. (The VLAN must already exist on the switch.)	detail
Authenticated VLAN	The VLAN to which the supplicant is connected.	detail
Dynamic filter	User policy filter sent by the RADIUS server.	detail
Session Reauth interval	The configured reauthentication interval.	detail
Reauthentication due in	The number of seconds in which reauthentication will occur again for the connected supplicant.	detail

show dot1x interface brief

```
user@switch> show dot1x interface [ge-0/0/1 ge-0/0/2 ge0/0/3] brief

Interface Role          State          MAC address
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ge-0/0/1  Authenticator Authenticated  00:a0:d2:18:1a:c8
                        Authenticating 00:a0:e5:32:97:af
ge-0/0/2  Authenticator Connecting     -
ge-0/0/3  Supplicant    Authenticated  00:a6:55:f2:94:ae
```

show dot1x interface detail

```
user@switch> show dot1x interface ge-0/0/16.0 detail

 ge-0/0/16.0
  Role: Authenticator
  Administrative state: Auto
  Supplicant mode: Single
  Number of retries: 3
  Quiet period: 60 seconds
  Transmit period: 30 seconds
```

```
Mac Radius: Enabled
Mac Radius Strict: Disabled
Reauthentication: Enabled Reauthentication interval: 40 seconds
Supplicant timeout: 30 seconds
Server timeout: 30 seconds
Maximum EAPOL requests: 1
Guest VLAN member: <not configured>
Number of connected supplicants: 1
  Supplicant: abc, 00:30:48:8C:66:BD
    Operational state: Authenticated
    Authentication method: Radius
    Authenticated VLAN: v200
    Reauthentication due in 17 seconds
```

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