



## 802.1x

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The following section is used to capture wired user authentication information. This information is used by Cisco Spaces apps such as Right Now, where dot1x has been configured.

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The following section is used to capture wired user authentication information. This information is used by Cisco Spaces apps such as Right Now, where dot1x has been configured.

### How to enable 802.1x port-based authentication on the switch?

There are several ways to configure 802.1x port-based authentication on a switch. This task shows you one of the way to enable 802.1x.

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**Step 1**    aaa new-model

This command enables AAA.

**Step 2**    aaa authentication dot1x default group radius

This command creates a series of authentication methods to determine user privilege. If the user has the necessary privilege, the device can communicate with the AAA server.

**Step 3**    dot1x system-auth-control

This command globally enables 802.1X port-based authentication.

**Example:**

```
Switch# configure terminal  
Switch(config)# aaa new-model  
Switch(config)# aaa authentication dot1x default group radius  
Switch(config)# dot1x system-auth-control  
Switch(config)# end
```

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## How to enable 802.1x port-based authentication on the switch interface?

This task shows you how to enable 802.1x port-based authentication on the switch interface.

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**Step 1**    authentication port-control auto

This command enables port authentication.

**Step 2**    dot1x pae authenticator

This command enables 802.1x port authentication.

**Example:**

```
Switch# configure terminal
Switch(config)# interface <interface-id>
Switch(config-if)# authentication port-control auto
Switch(config-if)# dot1x pae authenticator
Switch(config-if)# end
```

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## How to configure the switch for RADIUS-server communication?

This task shows you how to configure a switch for RADIUS-server communication.

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**Step 1**    radius server RADIUS

This command configures the RADIUS server.

**Step 2**    address ipv4 *radius-ip* auth-port 1645 acct-port 1646

This command configures the server IP address and port.

**Step 3**    keyvar

This command configures the RADIUS key.

**Example:**

```
Switch# configure terminal
Switch(config)# radius server RADIUS
Switch(config)# address ipv4 <radius-ip> auth-port 1645 acct-port 1646
Switch(config)# key <key>
Switch(config)# end
```

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## How to view the current 802.1x status for a switch interface?

The following command displays the details of a switch interface.

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show dot1x interface *interface-id*

```
Switch# show dot1x interface GigabitEthernet 1/0/1 details
```

```
Dot1x Info for GigabitEthernet1/0/1
-----
PAE          = AUTHENTICATOR
QuietPeriod   = 60
ServerTimeout = 0
SuppTimeout    = 30
ReAuthMax      = 2
MaxReq         = 2
TxPeriod       = 30

Dot1x Authenticator Client List
-----
EAP Method     = PEAP
Supplicant      = f076.1cc7.8386
Session ID      = 0000000000000000BA3185562
Auth SM State   = AUTHENTICATED
Auth BEND SM State = IDLE
```

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