Configuring Retransmission Interval and Retry Count

Finding Feature Information

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Prerequisites for Configuring the Access Point Retransmission Interval and Retry Count

- You can configure the retransmission intervals and retry count both at a global and a specific access point level. A global configuration applies these configuration parameters to all the access points. Alternatively, when you configure the retransmission level and retry count at a specific access point level, the values are applied to that particular access point. The access point specific configuration has a higher precedence than the global configuration.

Information About Retransmission Interval and Retry Count

The switch and the access points exchange packets using the Control and Provisioning of Wireless Access Points (CAPWAP) reliable transport protocol. For each request, a response is defined. This response is used to acknowledge the receipt of the request message. Response messages are not explicitly acknowledged; therefore, if a response message is not received, the original request message is retransmitted after the retransmit interval. If the request is not acknowledged after a maximum number of retransmissions, the session is closed and the access points reassociate with another switch.

How to Configure Access Point Retransmission Interval and Retry Count

Configuring the Access Point Retransmission Interval and Retry Count (CLI)

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ap capwap retransmit interval** *interval_time*
4. **ap capwap retransmit count** *count_value*
5. **end**
6. **ap name** *Cisco_AP* **capwap retransmit interval** *interval_time*
7. **ap name** *Cisco_AP* **capwap retransmit count** *count_value*
8. **show ap capwap retransmit**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Switch# enable`	Enters privileged EXEC mode.
Step 2	**configure terminal** **Example:** `Switch# configure terminal`	Enters global configuration mode.
Step 3	**ap capwap retransmit interval** *interval_time* **Example:** `Switch(config)# ap capwap retransmit interval 2`	Configures the control packet retransmit interval for all access points globally. **Note** The range for the interval parameter is from 2 to 5.

	Command or Action	Purpose
Step 4	**ap capwap retransmit count** *count_value* **Example:** `Switch(config)# ap capwap retransmit count 3`	Configures the control packet retry count for all access points globally. **Note** The range for the count is from 3 to 8.
Step 5	**end** **Example:** `Switch(config)# end`	Returns to privileged EXEC mode. Alternatively, you can also press **Ctrl-Z** to exit global configuration mode.
Step 6	**ap name** *Cisco_AP* **capwap retransmit interval** *interval_time* **Example:** `Switch# ap name AP02 capwap retransmit interval 2`	Configures the control packet retransmit interval for the individual access point that you specify. **Note** The range for the interval is from 2 to 5. **Note** You must be in privileged EXEC mode to use the **ap name** commands.
Step 7	**ap name** *Cisco_AP* **capwap retransmit count** *count_value* **Example:** `Switch# ap name AP02 capwap retransmit count 3`	Configures the control packet retry count for the individual access point that you specify. **Note** The range for the retry count is from 3 to 8.
Step 8	**show ap capwap retransmit** **Example:** `Switch# show ap capwap retransmit`	Displays the CAPWAP retransmit details.

Configuring the Access Point Retransmission Interval and Retry Count (GUI)

Procedure

- Global configuration applicable to all APs:
  a) Choose **Configuration** > **Wireless** > **Access Points** > **Global AP Configuration**.

     The **Global Configuration** page is displayed.

  b) In the **AP Retransmit Config Parameters** area, enter the values for the following parameters:
     - **AP Retransmit Count**—Number of times you want the access point to retransmit the request to the switch. The valid range is between 3 and 8.
     - **AP Retransmit Interval**—Duration between the retransmission of requests. The valid range is between 2 and 5.

  c) Click **Apply**.
  d) Click **Save Configuration**.
- Configuration that is applicable to a specific AP:
  a) Choose **Configuration** > **Wireless** > **Access Points** > **All APs**.

The **All APs** page is displayed with a list of access points.

b) Click the access point name.

The **AP > Edit** page is displayed.

c) Click the **Advanced** tab.
d) In the **AP Retransmit Config Parameters** area, enter the values for the following **AP Retransmit Count** and **AP Retransmit Interval** parameters:

- **AP Retransmit Count**—Number of times you want the access point to retransmit the request to the switch. The valid range is between 3 and 8.
- **AP Retransmit Interval**—Duration between the retransmission of requests. The valid range is between 2 and 5.

e) Click **Apply**.
f) Click **Save Configuration**.

Viewing CAPWAP Maximum Transmission Unit Information (CLI)

SUMMARY STEPS

1. **enable**
2. **show ap name** *Cisco_AP* **config general**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Switch# enable`	Enters privileged EXEC mode.
Step 2	**show ap name** *Cisco_AP* **config general** **Example:** `Switch# show ap name Maria-1250 config general | include MTU`	Displays the maximum transmission unit (MTU) for the CAPWAP path on the switch. The MTU specifies the maximum size of any packet (in bytes) in a transmission.

Related Topics

Viewing the CAPWAP Retransmission Details: Example, on page 5
Viewing Maximum Transmission Unit Information: Example, on page 5

Viewing CAPWAP Maximum Transmission Unit Information (GUI)

Step 1 Choose **Configuration** > **Wireless** > **Access Points** > **All APs**.

The **All APs** page is displayed.

Step 2 Click the AP name.

The **AP > Edit** page is displayed.

Step 3 Click the **Advanced** tab.

The **CAPWAP MTU** field shows the CAPWAP maximum retransmission unit information.

Configuration Examples for Configuring Access Point Retransmission Interval and Retry Count

Viewing the CAPWAP Retransmission Details: Example

Enter the following command:

```
Switch# show ap capwap retransmit
Global control packet retransmit interval : 3
Global control packet retransmit count : 5

AP Name                          Retransmit Interval             Retransmit Count

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3602a                            5                               3
```

Viewing Maximum Transmission Unit Information: Example

This example shows how to view the maximum transmission unit (MTU) for the CAPWAP path on the switch. The MTU specifies the maximum size of any packet (in bytes) in a transmission:

```
Switch# show ap name cisco-ap-name config general | include MTU
CAPWAP Path MTU..................................... 1500
```