

## Content

<b>Chapter 1 Commands for Load-balance .....</b>	<b>1-1</b>
1.1 ap load-balance template.....	1-1
1.2 debug wireless load-balance internal .....	1-1
1.3 load-balance.....	1-1
1.4 load-balance denial .....	1-1
1.5 load-balance session window threshold .....	1-1
1.6 load-balance template .....	1-2
1.7 load-balance traffic window threshold .....	1-2
1.8 show wireless ap profile .....	1-3
1.9 show wireless load-balance denial-time.....	1-3
1.10 show wireless load-balance template.....	1-3
<b>Chapter 2 Commands for 5G Priority .....</b>	<b>2-1</b>
2.1 Commands for AC .....	2-1
2.1.1 band-select download .....	2-1
2.1.2 band-select enable.....	2-1
2.1.3 band-select cycle-count <0-50> .....	2-1
2.1.4 band-select cycle-threshold <200-5000>.....	2-1
2.1.5 band-select client-Rssi <0-90> .....	2-2
2.1.6 band-select load-balance session <0-40> [gap <1-8>] .....	2-2
2.1.7 show wireless ap profile <1-1024> band-select status.....	2-2
<b>Chapter 3 Commands for Fair Time .....</b>	<b>3-1</b>
3.1 schedule-mode { default   fair   preferred }.....	3-1
3.2 no schedule-mode.....	3-1
<b>Chapter 4 Commands for Time-limit Policy.....</b>	<b>4-1</b>
4.1 show wireless time-limit ap-profile .....	4-1
4.2 show wireless time-limit ssid .....	4-1

Commands for Client Access Optimization	Content
4.3 show wireless vap status ssid.....	4-1
4.4 time-limit (Network configuration mode).....	4-1
4.5 time-limit(Radio configuration mode) .....	4-2
4.6 time-limit-UTC(Network configuration mode) .....	4-2
4.7 time-limit-UTC(Radio configuration mode) .....	4-3
<b>Chapter 5 Commands for Force-roaming .....</b>	<b>5-1</b>
5.1 debug wireless client force-roaming internal-info.....	5-1
5.2 force-roaming denial-count .....	5-1
5.3 force-roaming denial-timeout .....	5-1
5.4 force-roaming hysteresis .....	5-1
5.5 force-roaming mode auto .....	5-2
5.6 force-roaming mode auto interval.....	5-2
5.7 force-roaming rssi-theshold .....	5-2
5.8 wireless force-roaming start.....	5-2
5.9 show wireless client force-roaming candidate ap status.....	5-3
5.10 show wireless client force-roaming status.....	5-3

# Chapter 1 Commands for Load-balance

## 1.1 ap load-balance template

**Command:** ap load-balance template <1-16>

**no ap load-balance template**

**Function:** Create load-balance template, no command will delete the load-balance template.

**Parameter:** <1-16> template ID number.

**Default:** Template as 1.

**Command Mode:** Wireless global configuration mode

**Usage Guide:** In wireless global configuration mode, use **ap load-balance template <1-16>** to enter the load-balance template configuration mode, if the template is not existing, then system create the load-balance template first. Users can not delete the template 1 which is existing as default.

**Example:** Create load-balance template 1.

```
AC(config-wireless)# ap load-balance template 1
```

```
AC(config-load-balance)#
```

## 1.2 debug wireless load-balance internal

**Command:** debug wireless load-balance internal <macaddr>

**no debug wireless load-balance internal <macaddr>**

**Function:** Enable or disable the internal switch of AC load-balance function.

**Default:** None.

**Command Mode:** Admin mode

**Usage Guide:** If enable the internal switch of AC load-balance function, it will output printing message when an AP is enabled load-balance function or an AP rejects a client connection because the function enabled. otherwise, it will not output the printing message.

**Example:** Enable the internal switch of AC load-balance function.

```
AC#debug wireless load-balance internal 00-03-0f-18-ec-d0
```

## 1.3 load-balance

**Command:** load-balance {session | traffic}

**no load-balance**

**Function:** Enable load-balance function, no command will disable this function.

**Parameter:** **session:** Session mode.

**traffic:** traffic snapshot mode.

**Default:** Disable this function.

**Command Mode:** load-balance configuration mode

**Usage Guide:** Enable load-balance function, and enable the corresponding load-balance mode.

**Example:** Enable load-balance function.

AC(config-load-balance)#load-balance session

AC(config-load-balance)#load-balance traffic

## 1.4 load-balance denial

**Command:** **load-balance denial** <0-10>

**no load-balance denial**

**Function:** Configure the times of AP rejecting the Client before AP receiving the association request of client when enabled load-balance function, no command will restore the number to the default value.

**Parameter:** <0-10> times of AP rejecting the Client connection request

**Default:** 3 times.

**Command Mode:** load-balance configuration mode

**Usage Guide:** Configure the times of AP rejecting the Client before AP receiving the association request of client when enabled load-balance function.

**Example:** Configure the times as 4 of AP rejecting the Client before AP receiving the association request of client when enabled load-balance function.

AC(config-load-balance)#load-balance denial 4

## 1.5 load-balance session window threshold

**Command:** **load-balance session window** <1-256> **threshold** <1-8>

**no load-balance session**

**Function:** Configure the threshold of Clients that AP can associate with. And configure the difference of threshold of clients associated with which is between this AP which Client is associated with and other APs in the load-balance group when enable the load-balance configuration. No command is used to restore the default value.

**Parameter:** <1-256>: the threshold of Clients that AP can associated with when enable load-balance.

<1-8>: the difference of threshold of clients associated with which is between

this AP which Client is associated with and other APs in the load-balance group.

**Default:** Default threshold of Clients the AP can associated with is 15 when enabled load-balance. Default difference of clients associated with which is between this AP which Client is associated with and other APs in the load-balance group is 4.

**Command Mode:** load-balance configuration mode.

**Usage Guide:** Configure the threshold of Clients that AP can associate with. And configure the difference of threshold of clients associated with which is between this AP which Client is associated with and other APs in the load-balance group when enable the load-balance configuration.

**Example:** Configure the threshold of Clients that AP can associate with as 35. And configure the difference of threshold of clients associated with which is between this AP which Client is associated with and other APs in the load-balance group when enable the load-balance configuration as 8.

AC(config-load-balance)#load-balance session window 35 threshold 8

## 1.6 load-balance template

**Command:** load-balance template <1-16>

no load-balance template

**Function:** Set the load-balance template for specified AP configuration template. No command will delete the load-balance template of AP configuration template.

**Parameter:** <1-16>: template ID number.

**Default:** The default load-balance template is empty.

**Command Mode:** AP profile configuration mode.

**Usage Guide:** When users input the above command, the system set the load-balance configuration template for specified AP configuration template, or set the load-balance template referenced by the current AP configuration template as null, if the specified template does not exist, the system will show error and return.

**Example:** Set the load-balance template 2 for specified AP configuration template.

AC(config-ap-profile)#load-balance template 2

## 1.7 load-balance traffic window threshold

**Command:** load-balance traffic window <1-100> threshold <1-100>

no load-balance traffic

**Function:** Configure the data traffic threshold on the AP and the difference of data flow threshold between this AP which Client is associated with and other APs in the load-balance group when enable the load-balance configuration. No command is used to

restore the default value.

**Parameter:** <1-100>: the data traffic threshold on the AP when enable the load-balance. The unit is Mbps.

<1-100>: the difference of data flow threshold between this AP which Client is associated with and the other APs in the load-balance group. The unit is Mbps.

**Default:** Default maximum throughput threshold on the AP is 60Mbps when enable the load-balance. Default difference of data flow threshold between current AP and the other APs is 20Mbps when enable the load-balance.

**Command Mode:** load-balance configuration mode.

**Usage Guide:** Configure the data traffic threshold on the AP and the difference of data flow threshold between this AP which Client is associated with and the other APs in the load-balance group when enable the load-balance configuration.

**Example:** Configure the data traffic threshold as 10 on the AP and the difference of data flow threshold between this AP which Client is associated with and the other APs as 5 in the load-balance group when enable the load-balance configuration.

AC(config-load-balance)#load-balance traffic window 10 threshold 5

## 1.8 show wireless ap profile

**Command:** show wireless ap profile [<1-1024>]

**Function:** Show the detailed information of a profile.

**Parameter:** <1-1024>:profile ID

**Default:** None.

**Command Mode:** Admin mode

**Usage Guide:** Show the detailed information of a profile.

**Example:**

AC#show wireless ap profile 1

```

AP Profile ID..... 1
Profile Name..... Default
Hardware Type..... 3 - DCWL-7962AP(R3), Indoor Dual Radio a/n, b/g/n
Load-balance Template ID..... 1
Wired Network Detection VLAN ID..... 1
Profile Status..... Associated
Valid APs Configured..... 3
Managed APs Configured..... 1

```

## 1.9 show wireless load-balance denial-time

**Command:** show wireless load-balance <clientMacAddr> denial-time

**Function:** Show the time information that a client is rejected to associate in recent times.

**Parameter:** clientMacAddr: client MAC address.

**Default:** None.

**Command Mode:** Admin mode

**Usage Guide:** Show the time information that a client is rejected to associate in recent times.

**Example:** Show the time information that a client With the MAC address of b0-48-7a-12-25-a6 is rejected to associate in recent times.

AC#show wireless load-balance b0-48-7a-12-25-a6 denial-time

Denial-sequence	Denial-Time
-----	-----
1	00:00:01
2	00:01:20

## 1.10 show wireless load-balance template

**Command:** show wireless load-balance template [<1-16>]

**Function:** Show parameters information of all load-balance templates or the detailed information of the specified template of the system.

**Parameter:** <1-16>:load balance template ID.

**Default:** None.

**Command Mode:** Admin mode

**Usage Guide:** If the template ID number is not appointed, only show the current available load balance configuration template of the system, and each template load-balance mode. If the template ID number is appointed, show the detailed parameter information of this template.

**Example:**

Show the detailed information of template 1.

AC# show wireless load-balance template 1

```
Load-balance .....Enable
Mode.....Session
Session window.....40
Session threshold.....8
Traffic window.....60
Traffic threshold.....20
```

Denial.....3

Show all the load-balance template parameters information of the system.

AC# show wireless load-balance template

Template-id	Load-balance	Load-balance mode
-----	-----	-----
1	Enable	Session
2	Disable	



## Chapter 2 Commands for 5G Priority

### 2.1 Commands for AC

#### 2.1.1 band-select download

**Command:** band-select download

**Function:** Issue the 5G priority access function.

**Parameters:** None.

**Command Mode:** wireless profile config.

**Default:** Disable.

**Usage Guide:** Please check whether the current ap is the dual radio when issuing, if not, there will be the prompt that it cannot be issued. At the same time, this issuing is immediate.

**Example:** Configure the 5G priority under the profile and issue.

AC(config-ap-profile)#band-select download

#### 2.1.2 band-select enable

**Command:** band-select enable

no band-select enable

**Function:** Enable/disable the 5G priority access function.

**Parameters:** None.

**Command Mode:** wireless profile config.

**Default:** Disable.

**Usage Guide:** Enable the 5G priority access function. The issuing can be effective only after this function is enabled.

**Example:** Enable the 5G priority function under the profile and issue.

AC (config-ap-profile)#band-select enable

AC (config-ap-profile)#band-select download

#### 2.1.3 band-select cycle-count <0-50>

**Command:** band-select cycle-count <0-50>

no band-select cycle-count

**Function:** Configure the band-select cycle-count. The no command recovers it to be the

default value.

**Parameters:** <0-50>: the 5G priority access should be enabled. It is the band-select cycle-count of the client access type probing.

**Command Mode:** wireless profile config.

**Default:** 30.

**Usage Guide:** After user input this command, the system can configure the 5G priority access parameter (cycle-count) for the appointed AP template.

**Example:** Enable the 5G priority function, and configure the band-select cycle-count of the client access type probing as 40.

```
AC (config-ap-profile)# band-select enable
```

```
AC (config-ap-profile)# band-select cycle-count 40
```

```
AC (config-ap-profile)#band-select download
```

## 2.1.4 band-select cycle-threshold <200-5000>

**Command:** band-select cycle-threshold <200-5000>

**no band-select cycle-threshold**

**Function:** Configure the scanning interval of the band-select cycle-count to probe the client. The no command recovers it to be the default value.

**Parameters:** <200-5000>: unit is ms. It is the scanning interval of the band-select cycle-count.

**Command Mode:** wireless profile config.

**Default:** 1000ms.

**Usage Guide:** After user input this command, the system can configure the 5G priority access cycle-threshold for the appointed AP template.

**Example:** Enable the 5G priority function, and configure the scanning interval of the band-select cycle-count as 2000ms. We assume the default cycle-count is 30, so the cyle-threshold is  $2000 \times 30 = 60000\text{ms} = 60\text{s}$ .

```
AC (config-ap-profile)# band-select enable
```

```
AC (config-ap-profile)# band-select cycle-threshold 2000
```

```
AC (config-ap-profile)#band-select download
```

## 2.1.5 band-select client-Rssi <0-90>

**Command:** band-select client-rssi <0-90>

**no band-select client-rssi**

**Function:** Configure the signal strength threshold of the 5G priority client. The no command recovers it to be the default value.

**Parameters:** <0-90>: unit is dbm, it means the configuration range.

**Command Mode:** wireless profile config.

**Default:** 0.

**Usage Guide:** After user input this command, the system can configure the 5G priority access client-rssi for the appointed AP template. The clients whose signal strength value is higher than the configured threshold can access normally.

**Example:** Enable the 5G priority function, and configure the 5G priority access client-rssi as 20(-75dbm).

```
AC (config-ap-profile)# band-select enable
```

```
AC (config-ap-profile)# band-select client-Rssi 20
```

```
AC (config-ap-profile)#band-select download
```

## 2.1.6 band-select load-balance session <0-40> [gap <1-8>]

**Command:** band-selectload- balance session <0-40> [gap <1-8>]  
no band-select load-balance

**Function:** Enable and configure the load-balance threshold of 5G priority function. The no command disables it.

**Parameters:** session <0-40>: it means the threshold of the connected clients on 5GHz, the default value is 0 (disable);

gap <1-8>: means the difference of the clients of 5GHz and 2.4GHz, the default value is 4.

**Command Mode:** wireless profile config.

**Default:** The default value of session is 0 (disable) and the default value of gap is 4.

**Usage Guide:** Enable the load-balance function of 5G priority and configure the parameters.

**Example:** Enable the 5G priority function, and enable the load-balance function. Configure the session as 8 and configure the gap as 3.

```
AC (config-ap-profile)# band-select enable
```

```
AC (config-ap-profile)# band-select load-balance session 8 gap 3
```

```
AC (config-ap-profile)#band-select download
```

## 2.1.7 show wireless ap profile <1-1024> band-select status

**Command:** show wireless ap profile <id> band-select status

**Function:** Check the status of the 5G priority on-off and parameters of the current AP.

**Parameters:** <1-1024>: input the profiles ID which needs to be shown.

**Command Mode:** wireless profile config.

**Default:** None.

**Usage Guide:** Read the 5G priority function status under the profile and print it onto the screen.

**Example:** Show the 5G priority configuration information.

(AC)#show wireless ap profile 1 band-select status

```
AP Profile ID..... 1
band-select..... Disable
band-select cycle count..... 30
band-select cycle threshold..... 1000
band-select ageout suppression..... 80
band-select ageout dualBand..... 60
band-select client RSSI..... 80
band-select load-balance session..... 5
band-select load-balance gap..... 4
```

## Chapter 3 Commands for Fair Time

### 3.1 schedule-mode { default | fair | preferred }

**Command:** schedule-mode { default | fair | preferred }

**Function:** Enable the fair time function on AC and configure it as fair mode or preferred mode.

**Parameters:** **default:** Configures the schedule-mode as default. It means not to enable the fair time function.

**fair:** Configures the schedule-mode as fair.

**preferred:** Configures the schedule-mode as preferred.

**Command Mode:** AP Profile Radio Config.

**Default:** default.

**Usage Guide:** Configure the different schedule-mode under the radio to make the AP's performance be optimal.

**Example:** Configure the schedule-mode under the radio as fair and issue it.

```
AC(config-ap-profile-radio)#schedule-mode fair
```

```
AC#wireless ap profile apply X
```

### 3.2 no schedule-mode

**Command:** no schedule-mode

**Function:** Disable the fair time function on AC. It means to use the default mode.

**Parameters:** None.

**Command Mode:** AP Profile Radio Config.

**Default:** Disable the fair time function. It means to use the default mode.

**Usage Guide:** Disable the schedule-mode under the radio and use the default mode.

**Example:** Configure the schedule-mode under the radio as fair and issue it.

```
AC(config-ap-profile-radio)#no schedule-mode
```

```
AC#wireless ap profile apply X
```

# Chapter 4 Commands for Time-limit Policy

## 4.1 show wireless time-limit ap-profile

**Command:** show wireless time-limit ap-profile [<1-1024> [radio <1-2>]]

**Function:** Show the configured parameters based on radio time-limit policy.

**Parameter:** <1-1024>: profile ID of AP.

<1-2>: radio number.

**Default:** None.

**Command Mode:** Admin mode

**Usage Guide:** Use this command to check the time-limit status, start-time and end-time based on radio.

**Example:** Show the time-limit configuration parameter of AP Profile ID of 1 and radio number of 1.

AC#show wireless time-limit ap-profile 1 radio 1

AP Profile	Radio(Current Status)	Weekday	From-Time	To-Time
1	1(Off)	Sunday	09:00:00	10:00:00
1	1(Off)	Monday	11:00:00	12:00:00

Config 2 time limit policy!

## 4.2 show wireless time-limit ssid

**Command:** show wireless time-limit ssid [<ssid>]

**Function:** Show the configuration parameters based on SSID time-limit policy.

**Parameter:** <ssid>: SSID name.

If the parameter is not input, show all SSID time-limit policies.

**Default:** None.

**Command Mode:** Admin mode

**Usage Guide:** Use this command to show the start-time and end-time of policies based on SSID time-limit.

**Example:** Show SSID1 configuration parameters.

AC#show wireless time-limit ssid SSID1

Network ID	SSID	Weekday	From-Time	To-Time
1	SSID1	Sunday	09:00:00	10:00:00
1	SSID1	Friday	09:00:00	10:00:00

1	SSID1	Friday	13:00:00	15:00:00
---	-------	--------	----------	----------

Config 3 time limit policy!

## 4.3 show wireless vap status ssid

**Command:** show wireless vap status ssid <ssid>

**Function:** Show the running status of all VAP associated with specified SSID.

**Parameter:** <ssid> configured SSID.

**Default:** None.

**Command Mode:** Admin mode

**Usage Guide:** Inquire and show the running status of all VAP associated with specified SSID.

**Example:** Show the running status of all VAP associated with ssid of SSID..

AC#show wireless vap status ssid SSID

All vap status associate with SSID ricky:

AP Profile	Radio	VAP	Status
1	1	1	Enabled
2	1	1	Disabled

## 4.4 time-limit (Network configuration mode)

**Command:** time-limit from <hh:mm> to <hh:mm> weekday {monday | tuesday | wednesday | thursday | friday | saturday | sunday | all}

**no time-limit** [from <hh:mm> to <hh:mm> weekday {monday | tuesday | wednesday | thursday | friday | saturday | sunday | all}]

**Function:** Configure the time-limit based on SSID policies, in this time, the SSID stops providing access services for Clients, the Clients associated with the SSID will be forced offline. No command will cancel some or all non-UTC time-limit policies of the SSID configuration.

**Parameter:** <hh:mm> is the start or end time of time-limit, range of hh is 0 to 23, range of mm is 0 to 59.

**Weekday** means on which days of one week limit the Client access, if the parameter is all, means to limit the Client Access during that period every day.

**Default:** Allow the Client access.

**Command Mode:** Network configuration mode.

**Usage Guide:** Each network can be configured serval limited period, if periods overlap, the system will prevent users to configure, the administrator need to check the previous

policy, reconfigure it after weigh.

**Example:** Configure a policy in network 16 that limit client access from 15:00 to 18:00 every day.

```
AC#config
```

```
AC(config)#wireless
```

```
AC(config-wireless)#network 16
```

```
AC(config-network)#time-limit from 15:00 to 18:00 weekday all
```

```
AC(config-network)#
```

## 4.5 time-limit(Radio configuration mode)

**Command:** time-limit from <hh:mm> to <hh:mm> weekday {monday | tuesday | wednesday | thursday | friday | saturday | sunday | all}

no time-limit [from <hh:mm> to <hh:mm> weekday {monday | tuesday | wednesday | thursday | friday | saturday | sunday | all}]

**Function:** Configure the non-UTC time-limit based on radio policy; no command will cancel some or all non-UTC time-limit policies of the radio.

**Parameter:** <hh:mm> the start and end time of limited period, range of HH is 0~23, range of MM is 0~59.

**Weekday** means on which days of one week limit the Client access, if the parameter is all, means to limit the Client Access during that period every day.

**Default:** Allow the Client access.

**Command Mode:** Radio configuration mode.

**Usage Guide:** In this period, radio is in disabled state, it stops receiving and sending data packets and stop providing services for the Client associated with the radio. Each network can be configured serval limited period, if periods overlap, the system will prevent users to configure, the administrator need to check the previous policy, reconfigure it after weigh.

**Example:** Configure the time period based on radio 2 as 13:00 to 14:30 every day to limit policies access.

```
AC#config
```

```
AC(config)#wireless
```

```
AC(config-wireless)#ap profile 1
```

```
AC(config-ap-profile)#radio 2
```

```
AC(config-ap-profile-radio)#time-limit from 13:00 to 14:30 weekday all
```

```
AC(config-ap-profile-radio)#
```



## 4.6 time-limit-UTC(Network configuration mode)

**Command:** time-limit-UTC from <YYYY-MM-DD> <hh:mm> to <YYYY-MM-DD>  
<hh:mm> {on | off}

no time-limit-UTC [from <YYYY-MM-DD> <hh:mm> to <YYYY-MM-DD>  
<hh:mm>]

**Function:** Configure the limit time based on SSID time-limit policy, in this period, the SSID will provide or pause access service for the Client according to the parameters of on and off; no command will delete some or all UTC limit policies of this SSID.

**Parameter:** <YYYY-MM-DD> <hh:mm> is the start or end time of time-limit period, YYYY is the year, MM is month, DD is date, range is from 1 to the last day of the month, hh is hour, range is 0 to 23, mm is minute, range is 0 to 59.

**on:** allow Client access.

**off:** forbid Client access.

**Default:** Allow Client access.

**Command Mode:** Network configuration mode

**Usage Guide:** This configuration is exclusive for governments or schools to disable or enable the SSID on holidays, during this period, it is not affected by the general configuration strategy. Both the start time and end time of the period are UTC time.

**Example:** Configure to access client strategy from the early morning of October 1, 2006 to 23:59 Oct 7.

AC#config

AC(config)#wireless

AC(config-wireless)#network 16

AC(config-network)#time-limit-UTC from 2006-10-1 0:0 to 2006-10-7 23:59 on

AC(config-network)#

## 4.7 time-limit-UTC(Radio configuration mode)

**Command:** time-limit-UTC from <YYYY-MM-DD> <hh:mm> to <YYYY-MM-DD>  
<hh:mm> {on | off}

no time-limit-UTC from <YYYY-MM-DD> <hh:mm> to <YYYY-MM-DD>  
<hh:mm>

**Function:** Configure the limit time period based on Radio policy; no command will cancel some or all UTC time-limit policies of this Radio configured.

**Parameter:** <YYYY-MM-DD> <hh:mm>: is the start or end time of time-limit period, YYYY is the year, MM is month, DD is date, range is from 1 to the last day of the month, hh is hour, range is 0 to 23, mm is minute, range is 0 to 59.

**on:** allow Client access.

**off:** forbid Client access.

**Default:** Allow Client access.

**Command Mode:** Radio configuration mode

**Usage Guide:** This configuration is exclusive for governments or schools to disable or enable the SSID on holidays, during this period, it is not affected by the general configuration strategy.

**Example:** Configure the time-limit-UTC time period of 15:00-16:00 of Jan 25, 2006 based on radio 2 and forbid the Client access in this period.

AC#config

AC(config)#wireless

AC(config-wireless)#ap profile 1

AC(config-ap-profile)#radio 2

AC(config-ap-profile-radio)#time-limit-UTC from 2006-1-25 15:0 to 2006-1-25 16:0 off

## Chapter 5 Commands for Force-roaming

### 5.1 debug wireless client force-roaming internal-info

**Command:** debug wireless client force-roaming internal-info

**no debug wireless client force-roaming internal-info**

**Function:** Enable the debug information of force-roaming. The no command will disable the debug information.

**Parameter:** None.

**Command Mode:** Admin mode.

**Default:** Default is disable this function.

**Usage Guide:** Use this command to check the debug information of force-roaming. It can check the debug information in AC force-roaming process.

**Example:** Enable the debug information of force-roaming.

AC#debug wireless client force-roaming internal-info

### 5.2 force-roaming denial-count

**Command:** force-roaming denial-count <1-10>

**no force-roaming denial-count**

**Function:** Set the refusal times threshold of automatic force-roaming. The no command will restore the default value.

**Parameter:** <1-10> denial times.

**Command Mode:** Wireless global configuration mode.

**Default:** Default is 3 times.

**Usage Guide:** This command is used to set the refusal times threshold of automatic force-roaming. When the Client is forced roaming, if it re-selects the connection of the original AP, the original AP should reject this connection. If the refusal times number has achieved the threshold, the original AP is no longer refuse the client's connection request. If Client reconnect with the original AP successfully, then in the aging time, it will be no longer forced roaming.

**Example:** Set the refusal times threshold as 10.

AC(config-wireless)# force-roaming denial-count 10

## 5.3 force-roaming denial-timeout

**Command:** force-roaming denial-timeout <1-12>

**no force-roaming denial-timeout**

**Function:** Set the aging time of the refusal times threshold of automatic force-roaming. No command will restore the aging time to the default value.

**Parameter:** <1-12> is the aging time of the refusal times threshold, unit is hour.

**Command Mode:** Wireless global configuration mode.

**Default:** Default value is 1 hour.

**Usage Guide:** Use this command to set the aging time of the refusal times threshold of automatic force-roaming. When the Client is forced roaming, if it re-selects the connection of the original AP, the original AP should reject this connection. If the refusal times number has achieved the threshold, the original AP is no longer refuse the client's connection request. If Client reconnect with the original AP successfully, then in the aging time, it will be no longer forced roaming.

**Example:** Set the aging time as 12 hours of the refusal times threshold of automatic force-roaming.

AC(config-wireless)#force-roaming denial-timeout 12

## 5.4 force-roaming hysteresis

**Command:** force-roaming hysteresis <4-28>

**no force-roaming hysteresis**

**Function:** Configure the signal strength difference which confirms the force roaming. Unit is percentage. The no command recovers to be default.

**Parameter:** <4-28> is the difference of signal strength, unit is percent.

**Command Mode:** Wireless global configuration mode.

**Default:** Default value is 10%.

**Usage Guide:** Use this command to set the signal strength difference which confirms the force roaming. Force the client to roam only there is the AP with better signal around clients. Allow client roaming to this Neighbor AP only when **[(Neighbor AP's RSSI) – (Home AP's RSSI)]** is higher than the configured difference.

**Example:** Set the difference of signal strength as 28%.

AC(config-wireless)#force-roaming hysteresis 28

## 5.5 force-roaming mode auto

**Command:** force-roaming mode auto

### **no force-roaming mode auto**

**Function:** Enable the automatic force-roaming function. The no command will disable this function.

**Parameter:** None.

**Command Mode:** Wireless global configuration mode.

**Default:** Default is disable this function.

**Usage Guide:** Use this command to enable the automatic force-roaming function. Force the client with weak communication quality roaming to the AP with better signal according to the wireless environment during WLAN running.

**Example:** Enable the automatic force-roaming function.

AC(config-wireless)#force-roaming mode auto

## **5.6 force-roaming mode auto interval**

**Command:** force-roaming mode auto interval <15-300>

### **no force-roaming mode auto interval**

**Function:** Set the interval of automatic force-roaming function. The no command will restore the default value.

**Parameter:** <15-300> is the interval of automatic force-roaming.

**Command Mode:** Wireless global configuration mode.

**Default:** Default value is 30 minutes.

**Usage Guide:** Use this command to set the interval of automatic force-roaming function. Conduct the automatic force-roaming with the configured cycle parameters when enabled the function.

**Example:** Set the interval as 15 minutes of automatic force-roaming.

AC(config-wireless)#force-roaming mode auto interval 15

## **5.7 force-roaming rssi-threshold**

**Command:** force-roaming rssi-threshold <1-45>

### **no force-roaming rssi-threshold**

**Function:** Set the RSSI threshold of force-roaming, unit is percent. The no command will restore the default value.

**Parameter:** <1-45> is the RSSI threshold of force-roaming, unit is percent.

**Command Mode:** Wireless global configuration mode.

**Default:** Default value is 8, in percent.

**Usage Guide:** Use this command to set the RSSI threshold of force-roaming, if the user's RSSI value detected is less than the threshold, then the user's communication quality is

not good, force the user to roam to the AP with better signal.

**Example:** Set the RSSI threshold as 15% of the force-roaming.

AC(config-wireless)#force-roaming rssi-threshold 15

## 5.8 wireless force-roaming start

**Command:** wireless force-roaming [*<macaddr>*] start

**Function:** Manually initiate force-roaming.

**Parameter:** *<macaddr>* Client MAC address.

**Command Mode:** Admin mode.

**Default:** None.

**Usage Guide:** Use this command to initiate force-roaming manually, If a client is no appointed, the system will pass by all clients; if client signal is poor and it can be forced to roam, force it to roam. If a client is appointed, the Client be directly disassociated by system and it will be marked as as force-roaming client.

**Example:** Manually initiate force-roaming.

AC#wireless force-roaming start

## 5.9 show wireless client force-roaming candidate ap status

**Command:** show wireless client [*<macaddr>*] force-roaming candidate ap status

**Function:** Show the neighbor AP status information of the force-roaming Client.

**Parameter:** *<macaddr>* Client MAC address.

**Command Mode:** Admin mode.

**Default:** None.

**Usage Guide:** Use this command to check the neighbor AP status of the force roaming client.

**Example:** Show the neighbor AP status information of the force-roaming Client.

AC#show wireless client 00-22-43-8e-0f-e2 force-roaming candidate ap status

AP MAC Address	Status	Radio	RSSI (%)	Signal (dBm)	Noise (dBm)	Detected Time
00-03-0f-08-03-00	Managed	1	5	-87	-86	0d:01:05:53
00-03-0f-11-22-00	Managed	1	4	-88	-74	0d:01:05:52

## 5.10 show wireless client force-roaming status

**Command:** show wireless client [*<macaddr>*] force-roaming status

**Function:** Show the force-roaming configuration parameters on AC and the history records of the Client which is forced roaming.

**Parameter:** *<macaddr>* is client mac address.

**Command Mode:** Admin mode.

**Default:** None.

**Usage Guide:** Use this command to check the force-roaming configuration parameters on AC and the history records of the Client which is forced roaming. If the Client is not appointed, show the force-roaming configuration parameters on AC and the relevant statistic information. If the client is appointed, show the detailed force-roaming history information of this Client.

**Example:** Show the parameter configured and the statistic information.

AC#show wireless client force-roaming status

```
Auto Force Roaming..... Disable
Force Roaming Interval ..... 30
Force Roaming RSSI Threshold ..... 8
Force Roaming Denial Count ..... 3
Force Roaming Denial Timeout ..... 3
Force Roaming Hysteresis ..... 4
```

MAC Address	AP MAC Address
-------------	----------------

```
-----
00-1d-0f-02-16-25 <- 00-03-0f-18-ec-90 <- 00-03-0f-08-03-00 <- 00-03-0f-18-ec-90
                        <- 00-03-0f-18-ec-90 <- 00-03-0f-08-03-00
```

```
00-1d-0f-31-f4-28 <- 00-03-0f-18-ec-90
```

```
00-22-43-8e-0f-e2 <- 00-03-0f-18-ec-90 <- 00-03-0f-08-03-00 <- 00-03-0f-18-ec-50
```

Show the specified Client force-roaming parameters.

AC#show wireless client 5c-ac-4c-3e-1b-6b force-roaming status

```
Client MAC Address.....5c-ac-4c-3e-1b-6b
```

```
SSID ..... dcn_wlan_portal
```

```
Authenticated AP.....00-03-0f-18-ec-50
```

```
Denial Count.....3
```

AP MAC Addr(Radio)	VAP MAC Address	RSSI(%)	Time since Last Event
--------------------	-----------------	---------	--------------------------

-----  
00-03-0f-18-ec-50(1) 00-03-0f-18-ec-50 80 0d:03:27:34  
00-03-0f-18-ec-90(1) 00-03-0f-18-ec-90 70 0d:03:29:53  
00-03-0f-18-ec-50(1) 00-03-0f-18-ec-50 60 0d:03:47:31