

Deny Wireless Client Session Establishment Using Calendar Profiles

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Information About Denial of Wireless Client Session Establishment

Denial of client session establishment feature allows the controller to stop client session establishment based on a particular time. This helps control the network in efficient and controlled manner without any manual intervention.

In Embedded Wireless Controller, you can deny the wireless client session based on the following recurrences:

- · Daily
- Weekly
- Monthly

The Calendar Profiles created are then mapped to the policy profile. By attaching the calendar profile to a policy profile, you will be able to create different recurrences for the policy profile using different policy tag.



Note

You need to create separate Calendar Profile for Daily, Weekly, and Monthly sub-categories.

The following is the workflow for denial of wireless client session establishment feature:

- Create a calendar profile.
- Apply the calendar profile to a policy profile.



Note

A maximum of 100 calendar profile configuration and 5 calendar profile association to policy profile is supported.

Points to Remember

If you boot up your controller, the denial of client session establishment feature kicks in after a minute from the system boot up.

If you change the system time after the calendar profile is associated to a policy profile, you can expect a maximum of 30 second delay to adapt to the new clock timings.



Note

You cannot use the **no action deny-client** command to disable action while associating the calendar profile to a policy profile.

If you want to disable the action command, you need to disassociate the calendar profile from the policy profile, and re-configure again.

Configuring Daily Calendar Profile

	Command or Action	Purpose	
Step 1	configure terminal	Enters global configuration mode.	
	Example:		
	Device# configure terminal		
Step 2	wireless profile calendar-profile name name	Configures a calendar profile.	
	Example:	Here,	
	Device(config)# wireless profile calendar-profile name daily_calendar_profile	name refers to the name of the calendar profile.	
Step 3	start start_time end end_time	Configures start and end time for the calendar	
	Example:	profile.	

	Command or Action	Purpose	
	Device(config-calendar-profile) # start 09:00:00 end 17:00:00	Here, start_time is the start time for the calendar profile. You need to enter start time in HH:MM:SS format. end_time is the end time for the calendar profile. You need to enter end time in HH:MM:SS format.	
Step 4	recurrence daily	Configures daily recurrences for a calendar	
	Example:	profile.	
	<pre>Device(config-calendar-profile)# recurrence daily</pre>		
Step 5	end	Returns to privileged EXEC mode.	
	Example: Device(config-calendar-profile) # end	Alternatively, you can also press Ctrl-Z to exit global configuration mode.	
		When the calendar profile kicks in, the AP power profile rules (for example, radio state and USB device state) that are defined for the Ethernet speed are not applied and continue to be as per the fixed power profile.	

Configuring Weekly Calendar Profile

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 2	wireless profile calendar-profile name name	Configures a calendar profile.
	Example:	Here,
	Device(config) # wireless profile calendar-profile name weekly_calendar_profile	name refers to the name of the calendar profile.
Step 3	start start_time end end_time Example:	Configures start and end time for the calendar profile.
	Device(config-calendar-profile) # start 18:00:00 end 19:00:00	Here,

	Command or Action	Purpose	
		start_time is the start time for the calendar profile. You need to enter start time in HH:MM:SS format.	
		end_time is the end time for the calendar profile. You need to enter end time in HH:MM:SS format.	
Step 4	recurrence weekly	Configures weekly recurrences for the calendar	
	Example:	profile.	
	<pre>Device(config-calendar-profile)# recurrence weekly</pre>		
Step 5	day {friday monday saturday sunday thursday tuesday wednesday}	Configure days when the weekly calendar needs to be active.	
	Example:	Note You can configure multiple days using this command.	
	Device(config-calendar-profile)# day friday Device(config-calendar-profile)# day monday		
Step 6	end	Returns to privileged EXEC mode.	
	<pre>Example: Device(config-calendar-profile)# end</pre>	Alternatively, you can also press Ctrl-Z to exit global configuration mode.	

Configuring Monthly Calendar Profile

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 2	wireless profile calendar-profile name name	Configures a calendar profile.
	Example:	Here,
	<pre>Device(config)# wireless profile calendar-profile name monthly_calendar_profile</pre>	name refers to the name of the calendar profile.
Step 3	start start_time end end_time	Configures start and end time for the calendar
	Example:	profile.
	Device(config-calendar-profile)# start 18:00:00 end 19:00:00	Here,

	Command or Action	Purpose start_time is the start time for the calendar profile. You need to enter start time in HH:MM:SS format. end_time is the end time for the calendar profile. You need to enter end time in HH:MM:SS format.	
	l r		
Step 4	recurrence monthly	Configures monthly recurrences for the calendar	
	Example:	profile.	
	<pre>Device(config-calendar-profile)# recurrence monthly</pre>		
Step 5	date value	Configures a date for the calendar profile.	
	Example: Device(config-calendar-profile) # date 25	Note If the requirement is to perform denial of service in certain timing, such as, 2,10, and 25 of every month, all three days need to be configured using the date command. There is no range for date. You need to configure the dates as per your requirement.	
Step 6	end	Returns to privileged EXEC mode.	
	<pre>Example: Device(config-calendar-profile)# end</pre>	Alternatively, you can also press Ctrl-Z to exit global configuration mode.	

Mapping a Daily Calendar Profile to a Policy Profile

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 2	wireless profile policy profile-name	Creates policy profile for the WLAN.
	Example:	The <i>profile-name</i> is the profile name of the
	Device(config)# wireless profile policy default-policy-profile	policy profile.
Step 3	calender-profile name calendar-profile-name	Maps a calendar profile to a policy profile.
	Example:	The <i>calendar-profile-name</i> is the name of the calendar profile name created in #unique_1262.

	Command or Action	Purpose	
	Device (config-wireless-policy) # calender-profile name daily_calendar_profile	Note You need to disable Policy Profile before associating a calendar profit to a policy profile. The following needs to be done: Device (config-wireless-policy shutdown	
Step 4	action deny-client	Configures deny client session establishment	
	Example:	during calendar profile interval.	
	<pre>Device(config-policy-profile-calender)# action deny-client</pre>	Note Client associations are denied daily between timeslot 9:00:00 to 17:00:00. For start and end time details, see #unique_1262.	
Step 5	end	Returns to privileged EXEC mode.	
	Example:	Alternatively, you can also press Ctrl-Z to exit	
	Device(config-policy-profile-calender)# end	global configuration mode.	

Mapping a Weekly Calendar Profile to a Policy Profile

	Command or Action	Purpose	
Step 1	configure terminal	Enters global configuration mode.	
	Example:		
	Device# configure terminal		
Step 2	wireless profile policy profile-name	Creates policy profile for the WLAN.	
	<pre>Example: Device(config) # wireless profile policy default-policy-profile</pre>	The <i>profile-name</i> is the profile name of the policy profile.	
Step 3	calender-profile name calendar-profile-name	Maps a calender profile to a policy profile.	
	Device(config-wireless-policy)#	The calendar-profile-name is the name of the	
		calendar profile name created in #unique_1264.	
		Note You need to disable Policy Profile before associating a calendar profile to a policy profile. The following needs to be done:	
		Device(config-wireless-policy)# shutdown	

	Command or Action	Purpose
Step 4	action deny-client	Configures deny client session establishment
	Example:	during calendar profile interval.
	<pre>Device(config-policy-profile-calender)# action deny-client</pre>	Note Client associations are denied daily between timeslot 9:00:00 to 17:00:00. For start and end time details, see #unique_1264.
		On Monday and Tuesday, clients are denied between 17:30:00 and 19:00:00 besides regular time 9:00:00 to 17:00:00.
		On 25th of every month, clients are denied between 18:00:00 and 19:00:00 besides regular time 9:00:00 to 17:00:00.
Step 5	end	Returns to privileged EXEC mode.
	<pre>Example: Device(config-policy-profile-calender)# end</pre>	Alternatively, you can also press Ctrl-Z to exit global configuration mode.

Mapping a Monthly Calendar Profile to a Policy Profile

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 2	wireless profile policy profile-name	Creates policy profile for the WLAN.
	Example:	The <i>profile-name</i> is the profile name of the
	Device(config)# wireless profile policy default-policy-profile	policy profile.
Step 3	calender-profile name calendar-profile-name	Maps a calender profile to a policy profile.
	Example:	The <i>calendar-profile-name</i> is the name of the
	<pre>Device(config-wireless-policy)# calender-profile name monthly_calendar_profile</pre>	calendar profile name created in #unique_1266.
Step 4	action deny-client	Configures deny client session establishment
	Example:	for the defined calendar profile interval.

	Command or Action	Purpose	Purpose	
	Device(config-policy-profile-calender)# action deny-client	Note Every day client associations a denied between timeslot 9:00:0 to 17:00:00. For start and end times details, see #unique_1266.	Note	0:00
		On Monday and Tuesday, clier are denied between 17:30:00 at 19:00:00 besides regular time 9:00:00 to 17:00:00.		and
		On 25th of every month, client are denied between 18:00:00 at 19:00:00 besides regular time 9:00:00 to 17:00:00.		and
Step 5	end	Returns to privileged EXEC mode.	Returns to	
	<pre>Example: Device(config-policy-profile-calender)# end</pre>	Alternatively, you can also press Ctrl-Z to e global configuration mode.	alabal aar	o exit

Verifying Calendar Profile Configuration

To view the summary of calendar profiles, use the following command:

Device# show wireless profile calendar-profile summary
Number of Calendar Profiles: 3

Profile-Name
-----monthly_25_profile
weekly_mon_profile
daily_calendar_profile

To view the calendar profile details for a specific profile name, use the following command:

Device# show wireless profile calendar-profile detailed daily_calendar_profile

Calendar profiles : daily_calendar_profile

Recurrence : DAILY
Start Time : 09:00:00
End Time : 17:00:00

Verifying Policy Profile Configuration

To view the detailed parameters for a specific policy profile, use the following command:

Device# show wireless profile policy detailed default-policy-profile

Tunnel Profile

Profile Name : Not Configured

Calendar Profile

Profile Name : monthly_25_profile
Wlan Enable : Not Configured

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Client Block
                             : Client Block Configured
 _____
 Profile Name
                             : weekly mon profile
 Wlan Enable
                             : Not Configured
 Client Block
                             : Client Block Configured
 Profile Name
                              : daily_calendar_profile
 Wlan Enable
                             : Not Configured
 Client Block
                             : Client Block Configured
Fabric Profile
 Profile Name
                              : Not Configured
```

To view the configured calendar profile information under policy profile, use the following command:

Device# show wireless profile policy all

Tunnel Profile
Profile Name: Not Configured
Calendar Profile
Profile Name: daily_calendar_profile
Wlan Enable: Not Configured
Client Block: Client Block Configured

Profile Name: weekly_calendar_profile
Wlan Enable: Not Configured
Client Block: Client Block Configured
Client Block: Client Block Configured
Fabric Profile
Profile Name: Not Configured



Note

The anchor priority is always displayed as local. Priorities can be assigned on the foreign controller.

Verifying Policy Profile Configuration