

Configure Time Range Settings on a Switch

Objective

Setting up a time range is useful if you want other features of the switch to be triggered or activated at a certain time. In addition, you can also specify how long a range can last for features that you want to disable after a period of time. Recurring time ranges can also be set if you want to continuously enable and disable a feature. Several of these features rely on time ranges to implement security or access control.

Time ranges can be defined and associated with the following types of commands:

- Access Control Lists (ACLs) — Time ranges are used to limit the amount of time the ACL and Access Control Entry (ACE) are in effect. This can be useful to limit network traffic filters at certain times. For example, you could allow users to access specific resources to only business hours.
- 802.1x Port Authentication — Time ranges are used to define a time period at which 802.1x is active on 802.1x-enabled ports. This can be useful to limit access to a network at certain times. For example, you could limit office network access to only business hours.
- Port Settings — You can configure the Up or Down state of the port for a specific period. When the time range is not active, the port is in shutdown. If a time range is configured, it is effective only when the port is administratively Up.
- Time-Based Power over Ethernet (PoE) — PoE can be configured on the device for a specific period. This feature enables you to define, per port, the days in the week and the hours that PoE is enabled. When the time range is not active, PoE is disabled.

There are two types of time ranges:

- Absolute — This type of time range begins on a specific date or immediately and ends on a specific date or extends infinitely. A recurring element can be added to it.
- Recurring — This type of time range contains a time range element that is added to an absolute range, and begins and ends on a recurring basis.

If a time range includes both absolute and recurring ranges, the operations of the associated commands are active only if both absolute start time and the recurring time range have been reached. Operations of the associated commands are inactive when either of the time ranges are reached.

This article provides instructions on how to configure time range settings on your switch.

Applicable Devices

- Sx300 Series
- Sx350 Series
- SG350X Series
- Sx500 Series
- Sx550X Series

Software Version

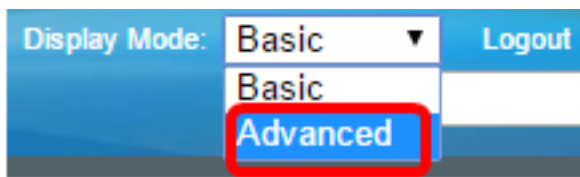
- 1.4.7.06 — Sx300, Sx500
- 2.2.8.04 — Sx350, SG350X, Sx550X

Configure Time Range Settings on a Switch

Configure Absolute Time Range Settings

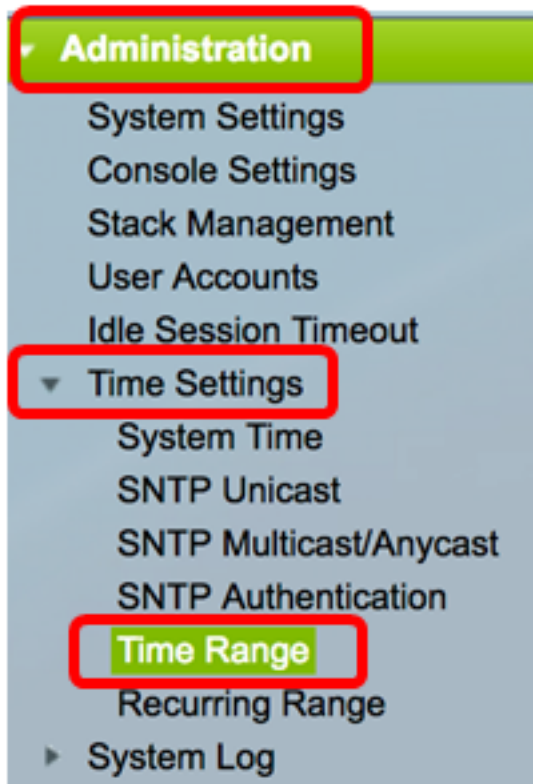
Step 1. Log in to the web-based utility of your switch then choose **Advanced** in the Display Mode drop-down list.

Note: The available menu options may vary depending on the device model. In this example, SG350X-48MP is used.



Note: If you have an Sx300 or Sx500 Series switch, skip to [Step 2](#).

[Step 2](#). Choose **Administration > Time Settings > Time Range**.



Step 3. Click **Add** to add a new time range.

Time Range

Time Range Table			
<input type="checkbox"/>	Time Range Name	Absolute Starting Time	Absolute Ending Time
0 results found.			
<input type="button" value="Add..."/>	<input type="button" value="Edit..."/>	<input type="button" value="Delete"/>	
<input type="button" value="Recurring Range"/>			

Step 4. Enter the time range name in the *Time Range* field. The range is from one to 32 characters.

☀ Time Range Name: (8/32 characters used)

Note: In this example, the time range name is Dayshift.

Step 5. In the Absolute Starting Time area, click a radio button to determine the starting point of the time range. The options are:

- Immediate — Choose this for the time range to start immediately.
- Date and Time — Enter the date and time that the time range begins.

Absolute Starting Time: Immediate Date 2017 Jan 01 Time 08 00 HH:MM

Note: In this example, the time range starts on January 1, 2017 at 8:00 in the morning.

Step 6. In the Absolute Ending Time area, click a radio button to determine the end time of the time range. The options are:

- Infinite — Choose this for the time range to never end.
- Date and Time — Enter the date and time that the time range ends.

Absolute Ending Time: Infinite Date 2017 Dec 31 Time 17 00 HH:MM

Note: In this example, the time range ends on December 31, 2017 at 17:00 in the afternoon.

Step 7. Click **Apply** then click **Close**.

⚙ Time Range Name: (8/32 characters used)

Absolute Starting Time: Immediate
 Date Time HH:MM

Absolute Ending Time: Infinite
 Date Time HH:MM

Step 8. (Optional) Click **Save** to save settings to the startup configuration file.

cisco Language:

3-Port Gigabit PoE Stackable Managed Switch

Time Range

Time Range Table

<input type="checkbox"/>	Time Range Name	Absolute Starting Time	Absolute Ending Time
<input type="checkbox"/>	Dayshift	2017-Jan-01 08:00:00	2017-Dec-31 17:00:00

Step 9. (Optional) To edit a time range, check the check box of the time range you wish to edit and click **Edit**.

Time Range

Time Range Table

<input checked="" type="checkbox"/>	Time Range Name	Absolute Starting Time	Absolute Ending Time
<input checked="" type="checkbox"/>	Dayshift	2017-Jan-01 08:00:00	2017-Dec-31 17:00:00

Step 10. (Optional) To delete a time range, check the check box of the time range you wish to delete and click **Delete**.

Time Range

Time Range Table			
<input checked="" type="checkbox"/>	Time Range Name	Absolute Starting Time	Absolute Ending Time
<input checked="" type="checkbox"/>	Dayshift	2017-Jan-01 08:00:00	2017-Dec-31 17:00:00

Step 11. (Optional) To configure the recurring time range settings of the configured absolute time range, click the **Recurring Range** button then proceed to [Step 2](#).

Time Range

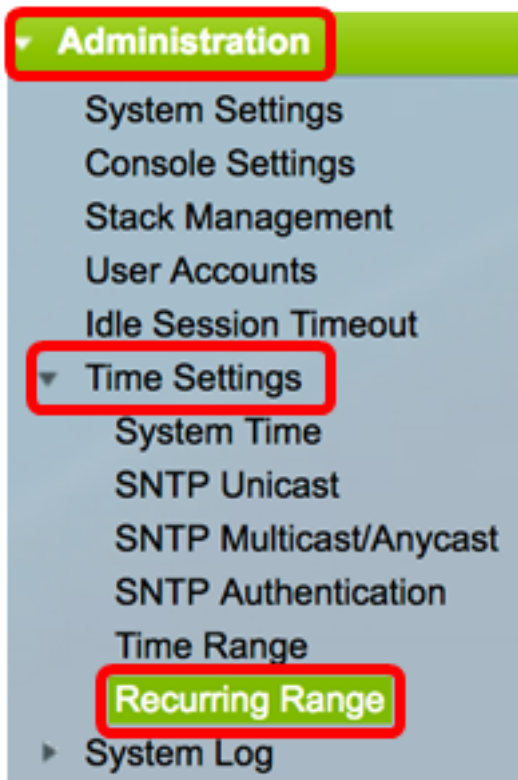
Time Range Table			
<input type="checkbox"/>	Time Range Name	Absolute Starting Time	Absolute Ending Time
<input type="checkbox"/>	Dayshift	2017-Jan-01 08:00:00	2017-Dec-31 17:00:00

You should now have successfully configured the absolute time range settings on your switch.

Configure Recurring Time Range Settings

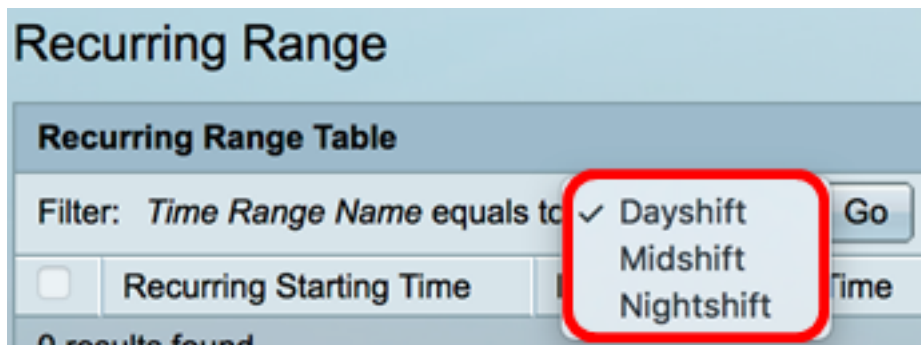
A recurring time element can be added to an absolute time range. This limits the operation to certain time periods within the absolute range.

Step 1. In the web-based utility of your switch, choose **Administration > Time Settings > Time Range**.



Note: Alternatively, you can click the Recurring Range button in the Time Range page.

[Step 2.](#) Choose a time range name from the Time Range Name drop-down list.



Note: In this example, Dayshift is chosen.

Step 3. Click **Go**. The table will display any recurring ranges already configured for the chosen time range name.

Note: In this example, no recurring range is configured.

Recurring Range

Recurring Range Table

Filter: *Time Range Name* equals to Dayshift

Recurring Starting Time Recurring Ending Time

0 results found.

Step 4. Click **Add** to add a new recurring time range.

Recurring Range

Recurring Range Table

Filter: *Time Range Name* equals to Dayshift

Recurring Starting Time Recurring Ending Time

0 results found.

The Time Range Name area displays the time range that you are configuring.

Step 5. In the Recurring Starting Time area, use the drop-down lists to specify a day of the week and a time (in 24-hour format) that the time range begins on a recurring basis.

Time Range Name: Dayshift

Recurring Starting Time: Day of the Week Mon 08 00

Note: In this example, the recurring time range starts every Monday at 8:00 in the morning.

Step 6. In the Recurring Ending Time area, use the drop-down lists to specify a day of the week and a time (in 24-hour format) that the time range ends on a recurring basis.

Recurring Ending Time: Day of the Week Fri 17 00

Note: In this example, the recurring time range ends every Friday at 17:00 in the afternoon.

Step 7. Click **Apply** then click **Close**.

Time Range Name: Dayshift

Recurring Starting Time: Day of the Week Mon Time 08 00 HH:MM

Recurring Ending Time: Day of the Week Fri Time 17 00 HH:MM

Apply Close

Step 8. (Optional) Click **Save** to save settings to the startup configuration file.

Save cisco Language: English

3-Port Gigabit PoE Stackable Managed Switch

Recurring Range

Recurring Range Table

Filter: *Time Range Name* equals to Dayshift **Go**

<input type="checkbox"/>	Recurring Starting Time	Recurring Ending Time
<input type="checkbox"/>	Mon, 08:00:00	Fri, 17:00:00

Add... **Delete**

Time Range

Step 9. (Optional) To delete a recurring time range, check the check box of the time range you wish to delete and click **Delete**.

Recurring Range Table

Filter: *Time Range Name* equals to Dayshift **Go**

<input checked="" type="checkbox"/>	Recurring Starting Time	Recurring Ending Time
<input checked="" type="checkbox"/>	Mon, 08:00:00	Fri, 17:00:00

Add... **Delete**

Step 10. (Optional) To configure a time range, click the **Time Range** button.

Recurring Range

Recurring Range Table

Filter: *Time Range Name* equals to

<input type="checkbox"/>	Recurring Starting Time	Recurring Ending Time
<input type="checkbox"/>	Mon, 08:00:00	Fri, 17:00:00

You should now have successfully configured the recurring time range settings on your switch.