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
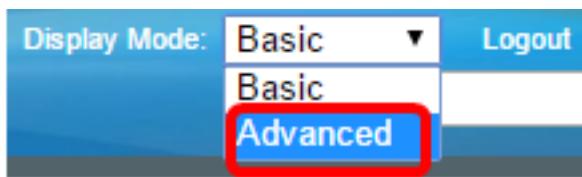- Sx500 Series
- Sx550X Series

Software Version

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

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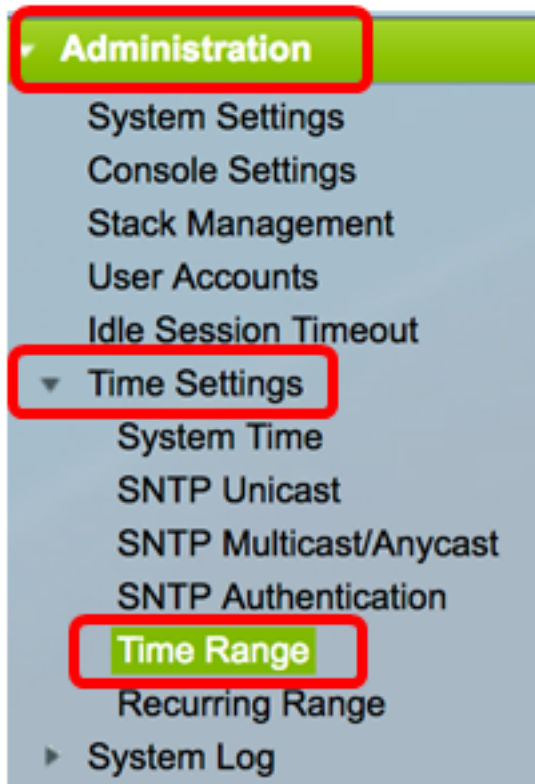
Configure Absolute Time Range Settings

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.

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

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.

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.

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**.

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

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

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

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](#).


You should now have successfully configured the absolute time range settings on your switch.
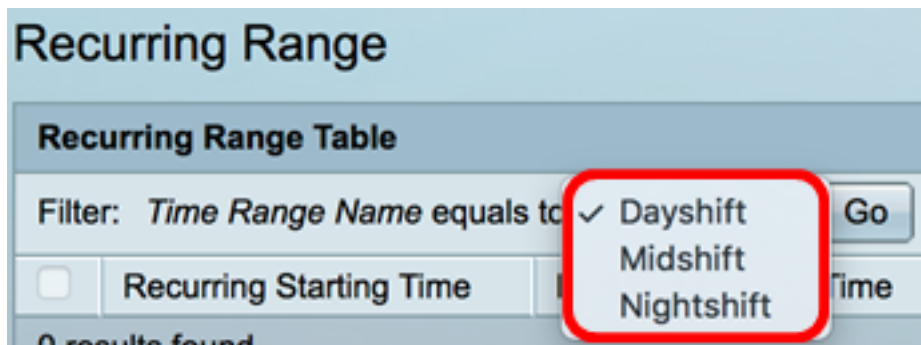
Configure Recurring Time Range Settings

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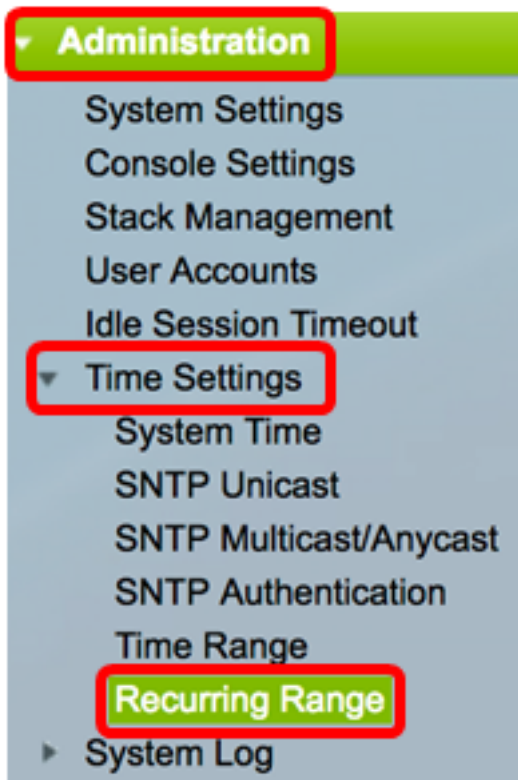
Note: Alternatively, you can click the Recurring Range button in the Time Range page.

. 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.

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

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.

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.

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.

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Recurring Range

Recurring Range Table

Filter: Time Range Name equals to   [Dayshift ⇕]   [Go]

☐	Recurring Starting Time	Recurring Ending Time
☐	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]

☑	Recurring Starting Time	Recurring Ending Time
☑	Mon, 08:00:00	Fri, 17:00:00

[Add...]   [**Delete**]

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

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