

Configure Time Settings on the WAP125 and WAP581

Objective

The system clock in a Wireless Access Point (WAP) provides a network-synchronized time-stamping service for any events occurring on the device and runs from the moment the system starts up. It then keeps track of the date and time. The occurring events on the device can be software-related events happening in the network such as message logs.

The Time Settings page on the WAP is used to set the system time manually or to configure the system to acquire its time settings from a preconfigured Network Time Protocol (NTP) server. By default, the WAP is configured to obtain its time from a predefined list of NTP servers.

Why do we need to configure Time Settings on a device?

Configuring the time settings on your Wireless Access Point (WAP) is important because it can help troubleshoot network issues such as system log services that display each and every log entry with a time stamp. Without synchronized time, accurate correlation of log files between devices is difficult to maintain.

The system time can be configured either manually or automatically. Manual configuration is helpful when your network is not connected to a (NTP) server. NTP is used to synchronize the client or server time with another server time or reference time source.

This article provides you with instructions on how to configure time settings on your WAP125 or WAP581 in two ways: manually and automatically.

Applicable Devices

- WAP125
- WAP581

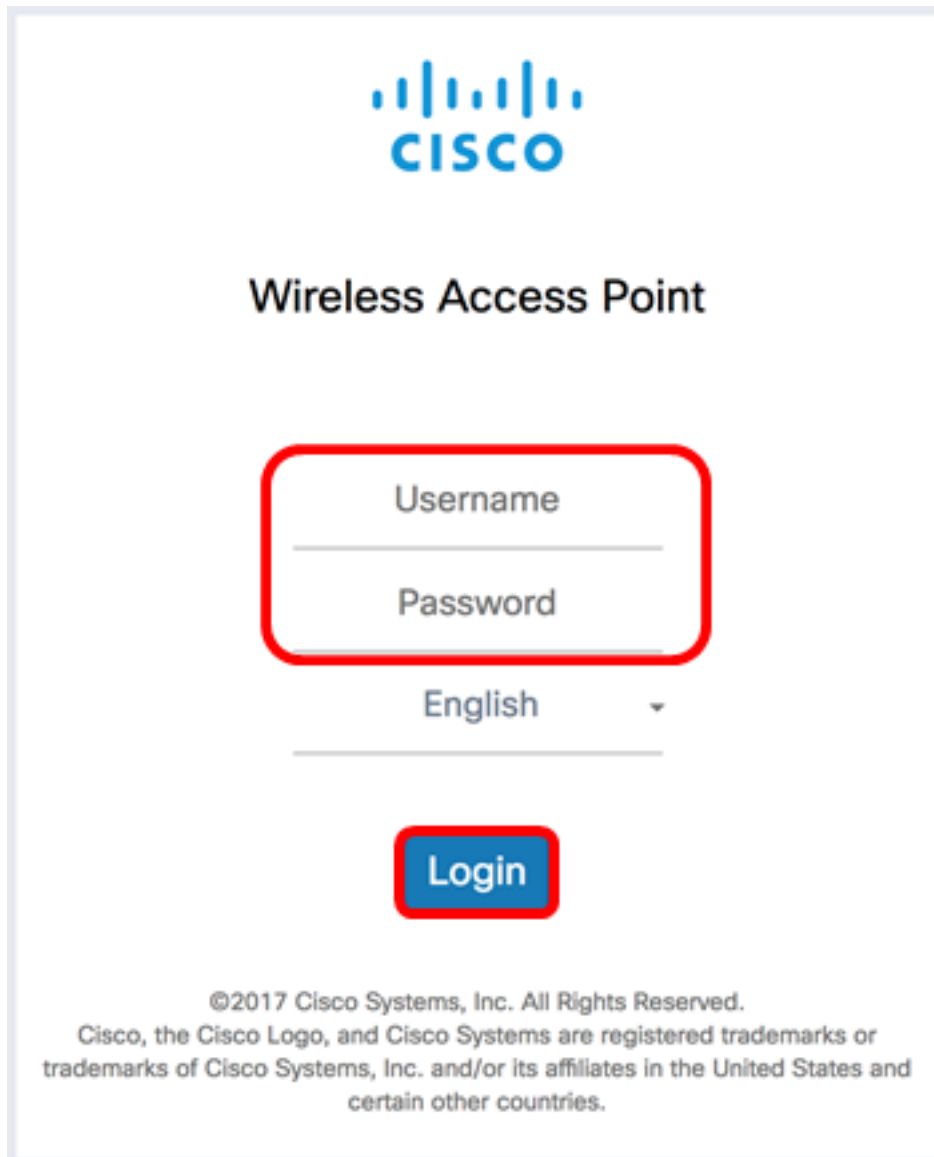
Software Version

- 1.0.0.5 — WAP125
- 1.0.0.4 — WAP581

Configure Time Settings

Note: The images below are taken from the WAP581.

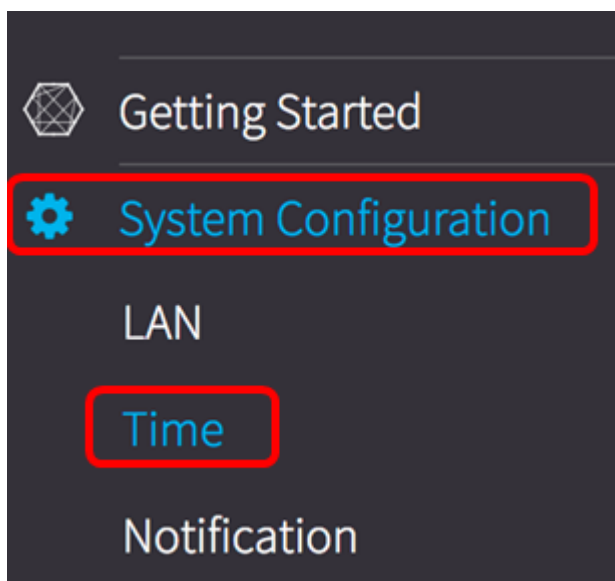
Step 1. Log in to the access point web-based utility by entering your Username and Password in the fields provided and then click **Login**.



The image shows the login page for a Cisco Wireless Access Point. At the top is the Cisco logo. Below it is the title "Wireless Access Point". The login form consists of three main sections: a "Username" field, a "Password" field, and a language dropdown menu currently set to "English". A blue "Login" button is positioned below the form. At the bottom, there is a copyright notice: "©2017 Cisco Systems, Inc. All Rights Reserved. Cisco, the Cisco Logo, and Cisco Systems are registered trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries."

Note: The default username/password is cisco/cisco.

Step 2. In the web-based utility, choose **System Configuration > Time**.



Step 3. Click a radio button to choose the desired time source from the System Clock Source. The options are:

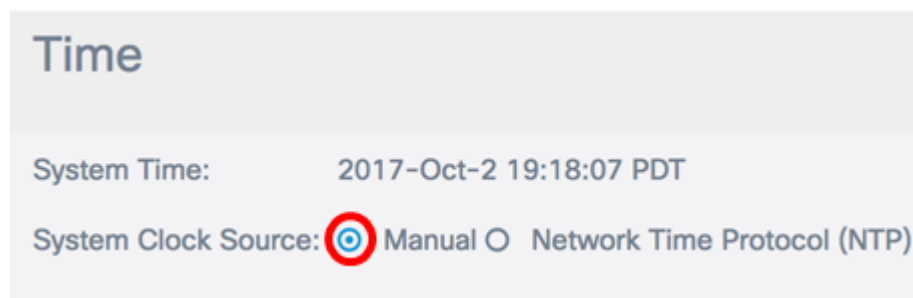
- Manual — You can manually configure the time settings on the WAP. If you choose this option, go to the [Manual Time Settings](#) section.
- Network Time Protocol (NTP) — Allows the WAP to automatically acquire the time settings from an NTP server. The NTP is designed to time-synchronize a network of devices. An NTP network usually gets its time from an authoritative time source, such as a radio clock or an atomic clock attached to a time server and then distributes this time across the network. NTP runs over the User Datagram Protocol (UDP) as the transport protocol through port 123 as both the source and destination, which in turn runs over IP. NTP is commonly used in the network for the following reasons:

- Network synchronization — The NTP is designed to time-synchronize a network of devices including servers and clients. Time synchronization is important to efficiently perform tasks like scheduled data backups, network accelerators, network management systems, network intrusion logs, time-specific events from multiple network devices and so on. An out of sync clock in any one of your machines in the network can possibly cause valuable data loss.

- UTC calibration — The Coordinated Universal Time (UTC) standard is the main time standard being used worldwide. NTP communications use this in encoding times. The time service is mainly about the system clock that runs from the moment the system starts and monitors the current date and time. The system clock keeps track of time internally based on UTC. You can configure information about the local time zone and daylight savings time so that the time is displayed correctly relative to the local time zone. It also keeps track of whether the time is authoritative or not. If it is not authoritative, the time will be available only for display purposes and will not be redistributed.

- Time accuracy — As the time kept on a network device is a critical resource for efficient network management, use of security features of NTP is strongly recommended if you want to ensure accuracy and avoid accidental or malicious setting of incorrect time.

Note: If you choose this option, go to the [Automatic Time Settings](#) section.



Time

System Time: 2017-Oct-2 19:18:07 PDT

System Clock Source: ☒ Manual ☐ Network Time Protocol (NTP)

Note: In this example, Manual is chosen. The System Time area displays the current system time.

[Manual Time Settings](#)

Step 4. Click on the *System Date* field and choose the Month and Day from the calendar that would appear.

10/02/2017 (MM/DD/YY)

October 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

(24HH : MM

Sync Time

at 02 :

at 02 :

Note: In this example, October 2, 2017 is chosen as the date.

Step 5. Click on the drop-down lists in the System Time area to choose the time in hour, minutes, and seconds.

System Date: 10/02/2017

System Time: 08 : 31 : 02

Note: In this example, 08:31:02 is chosen as the time.

Step 6. Choose the Time Zone for your location from the drop-down list.

System Date: 10/02/2017 (MM/DD/YY)

System Time: 08 : 31 : 02 (24HH : MM : SS)

Time Zone: (UTC-08:00)USA (Pacific)

Sync Time with PC

Note: In this example, (UTC-08:00)USA (Pacific) is chosen.

Step 7. (Optional) If you want to sync the time with the time on the computer you are using, click the **Sync time with PC** button.

System Date: 10/02/2017 (MM/DD/YY)

System Time: 08 : 31 : 02 (24HH : MM : SS)

Time Zone: (UTC-08:00)USA (Pacific)

Sync Time with PC

Step 8. (Optional) If Daylight Savings Time (DST) is applicable to your time zone, check the **Adjust for Daylight Saving Time** checkbox.

Time Zone: (UTC-08:00)USA (Pacific)

Adjust for Daylight Saving Time: ☒

Step 9. (Optional) Choose the week, day, month, and time when DST starts from the *Starts* fields.

Starts: second Sunday in March at 02 : 00

Note: In this example, second Sunday in March at 2AM is chosen.

Step 10. (Optional) Choose the week, day, month, and time when DST ends from the *Ends* fields.

Ends: First Sunday in November at 02 : 00

Note: In this example, First Sunday in November at 2AM is chosen.

Step 11. (Optional) Specify the number of minutes to move the clock forward when DST begins and backward when it ends from the *Daylight Saving Offset* fields.

Daylight Saving Offset: 60 Minutes

Note: In this example, 60 Minutes is chosen.

Step 12. Click the  button.

You should now have successfully configured the Manual Time settings on the WAP125 or WAP581.

Automatic Time Settings through NTP

Step 1. Click the Network Time Protocol (NTP) radio button in the System Clock Source area.

System Time: 2017-Oct-2 19:18:07 PDT
System Clock Source: ☐ Manual ☒ Network Time Protocol (NTP)

Step 2. Specify the IPv4 address, IPv6 address, or host name of an NTP server(s) in the field(s) provided. Up to four NTP Server addresses or host names can be entered. A default NTP server is listed.

A host name can consist of one or more labels, which are sets of up to 63 alphanumeric characters. If a host name includes multiple labels, each is separated by a period (.). The entire series of labels and periods can be up to 253 characters long.

NTP Server 1 IPv4/IPv6 Address/Name: ? 0.ciscosb.pool.ntp.org

NTP Server 2 IPv4/IPv6 Address/Name: ?

NTP Server 3 IPv4/IPv6 Address/Name: ?

NTP Server 4 IPv4/IPv6 Address/Name: ?

Note: In this example, 0.ciscosb.pool.ntp.org is used. This is the default setting.

Step 3. Choose the Time Zone for your location from the drop-down list.

Time Zone: (UTC-08:00)USA (Pacific)

Note: In this example, (UTC-08:00)USA (Pacific) is chosen.

Step 4. (Optional) If Daylight Savings Time (DST) is applicable to your time zone, check the **Adjust for Daylight Saving Time** check box.

Time Zone: (UTC-08:00)USA (Pacific)

Adjust for Daylight Saving Time: ☒

Step 5. (Optional) Choose the week, day, month, and time when DST starts from the *Starts* fields.

Starts: second Sunday in March at 02 : 00

Note: In this example, second Sunday in March at 2AM is chosen.

Step 6. (Optional) Choose the week, day, month, and time when DST ends from the *Ends* fields.

Ends: First Sunday in November at 02 : 00

Note: In this example, First Sunday in November at 2AM is chosen.

Step 7. (Optional) Specify the number of minutes to move the clock forward when DST begins and backward when it ends from the *Daylight Saving Offset* fields.

Daylight Saving Offset: 60 Minutes

Note: In this example, 60 Minutes is chosen.

Step 8. Click the **Save** button.

You should now have successfully configured the Automatic Time settings through NTP on

the WAP125 or WAP581.