C H A P T E R

4

Editing Location Server Properties

This chapter describes how to configure location server properties. This chapter contains the following sections:

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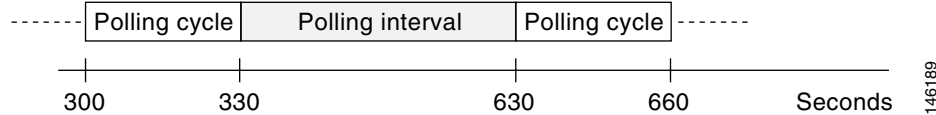
Editing General Properties

You can use Cisco WCS to edit the general properties of location servers registered in the WCS database. These properties are: Contact Name, User Name, Password, and HTTPS. To edit the general properties of a location server, follow these steps:

Step 1   Choose **Location > Location Servers** to display the All Location Servers page.

Step 2   Click the name of the server you want to edit to display its properties.

Step 3   Edit the general properties.

Step 4   Click **Save** to update the Cisco WCS and location server databases.

Editing Polling Parameters

You can use Cisco WCS to modify the time periods (polling intervals) for polling client stations, rogue access points, asset tags, and statistics of clients and asset tags.

The polling interval is the period of time between polling cycles. For example, if a polling cycle requires 30 seconds to complete, and the polling interval is 300 seconds, polling cycles start every 330 seconds, as shown in Figure 4-1.

Figure 4-1   Polling Interval

When configuring polling intervals, use shorter intervals to increase the granularity of data collection. To decrease the granularity of data collection, use longer intervals.

Note The polling intervals are independent of the number of times that WCS users request a data refresh from the location server.

To configure a location server's polling parameters, follow these steps:

Step 1 In Cisco WCS, choose **Location > Location Servers**.

Step 2 Click the name of the server you want to configure.

Step 3 Click **Administration** (left-hand side) to display the administrative configuration options.

Step 4 Click **Polling Parameters**.

Step 5 Configure the following parameters in the Polling Parameters page:

Parameter	Description
Retry Count	Enter the number of times to retry a polling cycle. Default value is 3. Allowed values are from 1 to 99999.
Timeout	Enter the number of seconds before a polling cycle times out. Default value is 5. Allowed values are from 1 to 99999.
Client Stations	Check the **Enable** check box to enable client station polling and enter the polling interval in seconds. Default value is 300. Allowed values are from 1 to 99999.
Rogues	Check the **Enable** check box to enable rogue access point polling and enter the polling interval in seconds. Default value is 600. Allowed values are from 1 to 99999.
Asset Tags	Check the **Enable** check box to enable asset tag polling and enter the polling interval in seconds. Default value is 600. Allowed values are from 1 to 99999. **Note** Before the location server can collect asset tag data from controllers, you must enable the detection of RFID tags using the CLI command **config rfid status enable** on the controllers.
Statistics	Check the **Enable** check box to enable statistics polling, and enter the polling interval in seconds. Default value is 900. Allowed values are from 1 to 99999.

Step 6 Click **Save** to store the new settings in the location server database.

Editing History Parameters

You can use Cisco WCS to specify how often to collect client station, rogue access point, and asset tag histories from the controllers associated with a location server. You can also program the location server to periodically prune (remove) duplicate data from its historical files to reduce the amount of data stored on its hard drive.

Follow these steps to configure location server history settings:

Step 1   In Cisco WCS, choose **Location > Location Servers**.

Step 2   Click the name of the server you want to configure.

Step 3   Click **Administration** (left-hand side) to display the administrative configuration options.

Step 4   Click **History Parameters**.

Step 5   Configure the following parameters in the History Parameters page:

Parameter	Description
Archive for	Number of days for the location server to retain a history of each enabled category. Default value is 30. Allowed values are from 1 to 99999.
Prune data starting at	Enter the number of hours and minutes at which the location server starts data pruning (between 0 and 23 hours, and between 1 and 59 minutes). Also enter the interval in minutes after which data pruning starts again (between 0, which means never, and 99900000). Default start time is 23 hours and 50 minutes, and the default interval is 1440 minutes.
Client Stations	Check the **Enable** check box to turn historical data collection on, and enter the number of minutes between data collection events. Default value is 120. Allowed values are from 1 to 99999.
Rogues	Check the **Enable** check box to turn historical data collection on (disabled by default), and enter the number of minutes between data collection events. Default value is 360. Allowed values are from 1 to 99999.
Asset Tags	Check the **Enable** check box to turn historical data collection on, and enter the number of minutes between data collection events. Default value is 180. Allowed values are from 1 to 99999. Note Before the location server can collect asset tag data from controllers, you must enable the detection of RFID tags using the CLI command **config rfid status enable**.

Step 6   Click **Save** to store your selections in the location server database.

Editing Location Parameters

You can use Cisco WCS to specify whether the location server retains its calculation times and how soon the location server deletes its collected Receiver Signal Strength Indicator (RSSI) measurement times.

To configure location parameters, follow these steps:

Step 1 In Cisco WCS, choose **Location > Location Servers**.

Step 2 Click the name of the server you want to configure.

Step 3 Click **Administration** (left-hand side) to display the administrative configuration options.

Step 4 Click **Location Parameters**.

Step 5 Configure the following parameters in the Location Parameters page:

Parameter	Description
Calculation time	Check the corresponding check box to enable the calculation of the time required to compute location. ⚠️ **Caution** Enable only under Cisco TAC personnel guidance because enabling this parameter slows down overall location calculations.
OW Location	Check the corresponding check box to enable Outer Wall (OW) calculation as part of location calculation.
Relative discard RSSI time	Enter the number of minutes since the most recent RSSI sample after which RSSI measurement should be considered stale and discarded. For example, if you set this parameter to 3 minutes and the location server receives two samples at 10 and 12 minutes, it keeps both samples. An additional sample received at 15 minutes is discarded. Default value is 3. Allowed values are from 0 to 99999.
Absolute discard RSSI time	Enter the number of minutes after which RSSI measurement should be considered stale and discarded, regardless of the most recent sample. Default value is 60. Allowed values are from 0 to 99999.
RSSI Cutoff	Enter the RSSI cutoff value in decibels (dBs) where the location server discards access point measurement. Default value is –75. ⚠️ **Caution** Modify only under Cisco TAC personnel guidance. Modifying this value can reduce the accuracy of location calculation.

Step 6 Click **Save** to store your selections in the Cisco WCS and location server databases.

Editing Advanced Parameters

Follow these steps to edit location server advanced parameters:

Step 1   In Cisco WCS, choose **Location > Location Servers**.

Step 2   Click the name of the server you want to configure.

Step 3   Click **Administration** (left-hand side) to display the administrative configuration options.

Step 4   Click **Advanced Parameters**.

Step 5   In the Advanced Parameters section, you can configure the following settings:

Parameter	Description
Advanced Debug	Check the check box to enable advanced debugging. Uncheck the check box to disable advanced debugging.
	⚠️
	Caution Enable advanced debugging only under the guidance of TAC personnel because advanced debugging slows the location server down.
Number of Days to Keep Events	Enter the number of days to keep logs. Change this value as required for monitoring and troubleshooting.
Session Timeout	Enter the number of minutes before a session times out. Change this value as required for monitoring and troubleshooting.
Absent Data cleanup interval	Interval in minutes for data cleanup.

Step 6   Click **Save** to update the Cisco WCS and location server databases.