



Data Collection and Purging

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Control Data Collection Jobs

All data collection tasks (and data purging tasks) are controlled from the Jobs Dashboard. See [Manage Jobs Using the Jobs Dashboard](#). Data collection jobs are listed under System Jobs .

About System Jobs

The following table describes the background data collection jobs Cisco EPN Manager performs.

Table 1: Inventory Data Collection Jobs

| Task Name | Default Schedule | Description | Editable options |
|----------------------------|------------------|---|--|
| Infrastructure jobs | | | |
| Data Cleanup | 2 hours | This job schedules daily data file cleanup. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |

| Task Name | Default Schedule | Description | Editable options |
|-------------------------------------|------------------|--|---|
| Device Config Backup-External | 15 minutes | This Job will Export all device configs (Text-Files in a Zip) to a predefined external repository. You can configure or create the repository using CLI commands and the supported repositories are FTP, SSH FTP (SFTP) and Network File System (NFS). | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. Click the edit icon, and check the Export only Latest Configuration check box, to transfer only the latest configuration. You can edit the job properties based on the user permission set in Role Based Access Control (RBAC). |
| Index search Entities | 3 hours | This Job schedules the Index Search Entities. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |
| Server Backup | 1 day | This job schedules automatic Cisco EPN Manager server backups. The backups created are application backups. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |
| Smart License Compliance Status | Disabled | This job runs for Smart License for the default schedule. | Non Editable. |
| Inventory and Discovery Jobs | | | |
| Switch Inventory | 1 day | This job collects inventory for discovered devices which are reachable periodically as per given schedule. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |
| failedFeatureSync | 30 minutes | This job collects inventory for the only failed features for devices in CWW and do a full sync for devices CF periodically, this job is suspended by default. Customers can enable it based on their choice. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |
| Status Jobs | | | |
| Autonomous AP Operational Status | 5 minutes | This job schedules status polling of autonomous wireless access points. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |

| Task Name | Default Schedule | Description | Editable options |
|---|------------------|---|--|
| Switch Operational Status | 5 minutes | This job checks for the node reachability. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |
| Third Party Access Point Operational Status | 3 hours | This job schedules operational status polling of third party APs. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |
| Third Party Controller Operational Status | 3 hours | This job schedules operational status polling of third party Controllers. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |
| Wireless AP Discovery | 5 minutes | This job schedules Wireless AP discovery. | Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job. |

How Data Retention Settings Affect Web GUI Data

Changes you make on the Data Retention page determine the information that is displayed in the web GUI. You can open the data retention page by choosing **Administration > Settings > System Settings**, then choosing **General > Data Retention**.

For example, if you do not need any historical performance data older than 7 days, you can modify the performance data retention values as follows:

- Short-term Data Retention Period—1 day
- Medium-term Data Retention Period—3 days
- Long-term Data Retention Period—7 days

If you specify these settings, all data displayed in performance reports and on performance dashboards will be for the previous 7 days only. When you generate a performance report, even if you select a reporting period longer than the last 7 days, the report will contain data from the last 7 days only (because that is all of the data you selected to retain).

Similarly, if you view a performance dashboard and select a time frame longer than one week, the dashboard will contain data from the last 7 days only.

When you create the monitoring policy for interfaces, you can define the polling interval for every 15 minutes or every 5 minutes or every 1 minute. According to the selected polling interval, the device data is polled and stored in Oracle Database. The data is aggregated every 1 hour into the AHxxx table; once a day into the ADxxx table irrespective of the polling interval is set to 1/5/15 minutes.

In the Interface Health Policy tab, if the frequency is set at 5 mins, you can view 12 samples for each hour. Every hour the data moves to the aggregated table and an average or mean interface statistics is calculated ,

and there will be one entry in the hourly aggregated table. The aggregation is the same for all the policies no matter what the polling interval is.

You can view data retention details and the age of the data storage, the event time in milliseconds and for each database the entity ID and the event time. View the performance data and aggregate data in the Performance Dashlet, > Interfaces > Traffic Utilization tab.

Performance and System Health Data Retention



Note Cisco recommends you do not change the retention periods for trend, device health, system health, and performance data because the default settings are optimized to get the most helpful information from interactive graphs.

The following table describes the information shown on the Data Retention page.

| Type of Data | Description | Default Retention Settings | Retention Settings Range |
|-----------------------------------|---|--|---|
| Trend Data Retain Periods | Device-related historical information. Trend data is gathered as a whole and summarized as minimums, maximums, or averages. | Hourly data retain period: 15 (days) Daily data retain period: 90 (days) Weekly data retain period: 54 (weeks) | Hourly data: 1 to 31 (days) Daily data: 7 to 365 (days) Weekly data: 2 to 108 (weeks) |
| Device Health Data Retain Periods | SNMP-pollled device data such as device reachability, and utilization for CPU, memory, and interfaces. | Hourly data retain period: 15 (days) Daily data retain period: 90 (days) Weekly data retain period: 54 (weeks) | Hourly data: 1 to 31 (days) Daily data: 7 to 365 (days) Weekly data: 2 to 108 (weeks) |

| Type of Data | Description | Default Retention Settings | Retention Settings Range |
|-----------------------------------|--|---|--|
| Performance Data Retain Periods | <p>Assurance data such as traffic statistics.</p> <ul style="list-style-type: none"> Short-term data is aggregated every 5 minutes. Medium-term data is aggregated every hour. Long-term is aggregated daily. <p>Note You can click Advanced Settings to configure the Age (In days) and Max Records of the available attributes.</p> | <p>Short term data retain period: 7 (days)</p> <p>Medium term data retain period: 31 (days)</p> <p>Long term data retain period: 378 (days)</p> | <p>Short term range: 1 to 31 (days)</p> <p>Medium term range: 7 to 365 (days)</p> <p>Long term range: 2 to 756 (days)</p> |
| User Job Data Retain Period | All records for the user jobs in the completed state. | User job data retain period: 7 (days) | 2 to 365 (days) |
| System Health Data Retain Periods | Includes most data shown on the Admin dashboards | <p>Hourly data retain period: 1 (days)</p> <p>Daily data retain period: 7 (days)</p> <p>Weekly data retain period: 54 (weeks)</p> | <p>Hourly data range: 1 to 31 (days)</p> <p>Daily data range: 7 to 365 (days)</p> <p>Weekly data range: 2 to 108 (weeks)</p> |

For example, these are the retention settings for optical performance data:

- Optical 30 seconds performance data (short-term) is saved for 1 hour.
- Optical 15-minute performance data (short-term) is saved for one day by default. You can vary it 1–14 days.
- Optical 1-day performance data (medium-term) is saved for 30 days by default. You can vary it 30–90 days.

Specifying Data Retention By Database Table

Administrators can use the “Other Data Retention Criteria” section of the Data Retention page to configure retention periods for specific Cisco EPN Manager database tables. You specify the retention period using the following attributes:

- Age (in hours)** : Specifies the maximum data retention period in hours for all records in the database.
- Max Records** : Specifies the maximum number of records to retain in a particular database table. A Max Records value of NA means that the only retention criteria considered is the Age attribute.

The section is categorized into multiple subsections. Each subsection list each database table name, along with the current Age and Max Records used to determine whether an individual record in the table will be retained or discarded. The page also lists the table Age Attribute used to compute the age of the data in the table.

Cisco strongly recommends that you consult with Cisco Technical Assistance Center before changing the values for any of the tables in this section. Doing so without help may affect system performance negatively.

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- Step 1** Choose **Administration > Settings > System Settings > General > Data Retention**.
- Step 2** Expand the **Other Data Retention Criteria** section.
- Step 3** Expand the database table subsection for which you want to specify Age and Max Records values.
- Step 4** Click on the database table listing and enter the new values as needed.
- Step 5** Click **Save**.
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Alarm, Event, and Syslog Purging



Note These default purging settings are provided to ensure optimal performance. Use care when adjusting these settings, especially if Cisco EPN Manager is managing a very large network (where increasing these settings may have an adverse impact).

Cisco EPN Manager stores a maximum of 8000000 events and 2000000 syslogs in the database.

To protect system performance, Cisco EPN Manager purges alarms, events, and syslogs according to the settings in the following table. All of these settings are enabled by default. Data is deleted on a daily basis. Alarm tables are checked hourly, and if the alarm table exceeds the 300,000 limit, Cisco EPN Manager deletes the oldest cleared alarms until the alarms table size is within the limit.

| Data Type | Deleted after: | Default Setting |
|------------------------------------|----------------|-----------------|
| Alarms—Cleared security alarms | 30 days | Enabled |
| Alarms—Cleared non-security alarms | 7 days | Enabled |
| Events | 60 days | Enabled |
| Syslogs | 30 days | Enabled |
| Alarms | 30 days | Disabled |

To change the settings, choose **Administration > Settings > System Settings**, then choose **Alarms and Events > Alarms and Events** and modify the settings in the Alarm and Event Cleanup Options area.

Log Purging

You can adjust the purging settings for logs by choosing **Administration > Settings > Logging**. Logs are saved until they reach the maximum size. At that point, a number is appended to the log file and a new log is started. When the number of logs exceeds the maximum, the oldest log is deleted.

The following table lists the default purging values for General and SNMP logs.

| Log Type | Size of Logs | Number of Logs | To change the setting, see: |
|----------|--------------|----------------|--|
| General | 10 MB | 10 | Adjust General Log File Settings and Default Sizes |
| SNMP | 10 MB | 5 | View and Manage General System Logs |

Report Purging

By default, reports stored in the repositories are deleted after 7 days.

The directory paths for the repositories are:

- **Scheduled Reports Repository** - /localdisk/ftp/reports
- **Ondemand Reports Repository** - localdisk/ftp/reportsOnDemand

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- Step 1** Choose **Administration > Settings > System Settings**, then choose **General > Reports**.
- Step 2** If required, adjust the location for the reports repository on the server. The repository must reside under the FTP root partition.
- Step 3** If you want to change the default purging age, update the **File Retain Period** field with a value in the range 1–366 days. The default retention period is 7 days.
- Step 4** Click **Save**.
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Once you've updated the retention period, Cisco EPN Manager doesn't purge the reports immediately and does so only after one night.

Backup Purging

By default, 2 backups are saved for backups in local repositories. If you are using remote repositories, there is no automatic backup purging mechanism; you must manually delete old backups. See [Change the Number of Automatic Application Backups That Are Saved](#).

Device Configuration File Purging

For each device, 5 configuration files are saved in the configuration archive. Any file that is older than 30 days is purged. Device configuration files cannot be manually deleted. For more information on device configuration files, see [Manage Device Configuration Files](#).

Software Image File Purging

Device software image files are not automatically purged from the database. They must be manually removed using the GUI client. For more information, see [Delete Software Image Files from the Image Repository](#).