

Data Collection and Purging

- Control Data Collection Jobs, on page 1
- How Data Retention Settings Affect Web GUI Data, on page 9
- Performance and System Health Data Retention, on page 9
- Alarm, Event, and Syslog Purging, on page 10
- Log Purging, on page 11
- Report Purging, on page 11
- Backup Purging, on page 11
- Device Configuration File Purging, on page 12
- Software Image File Purging, on page 12

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
APIC EM Integration Jobs			
APIC-EM Site Sync	6 hours	Schedules synchronization of sites and devices between APIC-EM and Cisco EPN Manager .	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
APIC Server Status Periodic	5 minutes	Schedules checks on APIC-EM server reachability.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.

Task Name	Default Schedule	Description	Editable options
PnP Status Polling	5 minutes	Tracks the status of the PnP devices created on APIC-EM and adds them to Prime Inventory when successful.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Infrastructure jobs			
Mobility Service Status	5 minutes	Schedules mobility services status polling.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Autonomous Client Status	5 minutes	Lets you schedule status polling of autonomous AP clients.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Bulk Recompute RF Prediction	15 days	Schedules status polling of Bulk Recompute RF Prediction.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Controller Configuration Backup	1 day	Displays the controller configuration backup activities.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Data Cleanup	2 hours	Schedules daily data file cleanup.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Device Config Backup-External	15 minutes	Transfers device configuration periodically to external repository. You can configure or create the repository using	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
		CLI commands and the supported repositories are FTP, SSH FTP (SFTP) and Network File System (NFS).	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).
Guest Accounts Sync	1 day	Schedules guest account polling and synchronization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.

Task Name	Default Schedule	Description	Editable options
Index serach Entities	3 hours	Schedules the Index Search Entities job.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Mobility Service Backup	7 days	Schedules automatic mobility services backups.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Mobility Service Synchronization	1 hour	Schedules mobility services synchronization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
On Demand Reports Cleanup	6 hours	Schedules reports cleanup.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Server Backup	1 day	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	Runs for Smart License for the default schedule.	Non Editable.
wIPS Alarm Sync	2 hours	Schedules wIPS alarm synchronization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Inventory and Discovery Jobs			
Autonomous AP Inventory	1 day	Collects inventory information for autonomous APs.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Switch Inventory	1 day	Collects inventory information for Switches.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Wireless Controller Inventory	1 day	Collects inventory information for Wireless Controllers.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Status Jobs			

Task Name	Default Schedule	Description	Editable options
Appliance Status	5 minutes	Schedules appliance polling. This task populates the appliance polling details from the Administration > Appliance > Appliance Status page. It also populates information like the performance and fault checking capabilities of the appliance.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Autonomous AP Operational Status	5 minutes	Schedules status polling of autonomous wireless access points.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Controller Operational Status	5 minutes	Schedules controller operational status polling.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Device Data Collector	30 minutes	Schedules data collection based on specified command-line interface (CLI) commands at a configured time interval.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Identity Services Engine Status	15 minutes	Schedules Identity Services Engine polling.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Interferers	15 minutes	Schedules interferer information collection.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
License Status	4 hours	Schedules the license-status information collection.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Lightweight AP Ethernet Interface Status	1 minute	Schedules Lightweight AP Ethernet Interface Status information collection.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Lightweight AP Operational Status	5 minutes	Schedules Lightweight AP Operational Status information collection.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.

Task Name	Default Schedule	Description	Editable options
Lightweight Client Status	5 minutes	Schedules information collection for Lightweight AP Clients from Network.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Mobility Service Performance	15 minutes	Schedules status polling of mobility services performance.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Mobility Status Task	15 minutes	Schedules status polling of mobility services engines.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
OSS Server Status	5 minutes	Schedules status polling of OSS Servers.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Redundancy Status	1 hour	Schedules redundancy status polling of primary and secondary controllers.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Switch NMSP and Location Status	4 hours	Schedules Switch Network Mobility Services Protocol (NMSP) and Civic Location status polling.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Switch Operational Status	5 minutes	Schedules switch operational status polling.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Third Party Access Point Operational Status	3 hours	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	Schedules operational status polling of third party Controllers.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Unmanaged APs	15 minutes	Collects poll information for unmanaged access points.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.

Task Name	Default Schedule	Description	Editable options
Wired Client Status	2 hours	Schedules Wireless Client status polling	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Wireless AP Discovery	5 minutes	Schedules Wireless AP discovery.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Wireless Configuration Audit	1 day	Schedules Wireless Configuration Agent audit collection.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Utilization Collection Jobs			
UtilizationCollector_15Min	15 minutes	Schedules physical interface utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
UtilizationProvider_15Min	15 minutes	Schedules physical links utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
UtilizationCollector_1Hour	1 hour	Schedules physical interface utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
UtilizationProvider_1h	1 hour	Schedules physical links utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
UtilizationCollector_6Hour	6 hours	Schedules physical interface utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
UtilizationProvider_6h	6 hours	Schedules physical links utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
UtilizationCollector_24Hour	24 hours	Schedules physical interface utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.

Task Name	Default Schedule	Description	Editable options
UtilizationProvider_1d	24 hours	Schedules physical links utilization.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Wireless Monitoring Jobs			
AP Ethernet Statistics	15 minutes	Schedules AP Ethernet statistics collection.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
AP Image Pre-Download Status	15 minutes	Allows you to see the Image Predownload status of the associated APs in the controllers. To see the status of the access points, the "Pre-download software to APs" checkbox should be selected while downloading software to the controller.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Autonomous AP CPU and Memory Utilization	15 minutes	Schedules collection of information on memory and CPU utilization of Autonomous APs.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Autonomous AP Radio Performance	15 minutes	Schedules collection of information about radio performance information as well as radio up or down status for autonomous APs.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Autonomous AP Tx Power and Channel Utilization	15 minutes	Schedules collection of information about radio performance of Autonomous APs.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
CCX Client Statistics	1 hour	Schedules collection of the Dot11 and security statistics for CCX Version 5 and Version 6 clients.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
CleanAir Air Quality	15 minutes	Schedules collection of information about CleanAir air quality.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.

Task Name	Default Schedule	Description	Editable options
Client Statistics	15 minutes	Schedules retrieval of statistical information for autonomous and lightweight clients.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Map Info Polling Job	1 minute		Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Media Stream Clients	15 minutes	Schedules collection of information about media stream clients.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Mesh Link Status	5 minutes	Schedules collection of status of mesh links.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Mesh link Performance	10 minutes	Schedules collection of information about the performance of mesh links.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Radio Performance	15 minutes	Schedules collection of statistics from wireless radios.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Radio Voice Performance	15 minutes	Schedules collection of voice statistics from wireless radios.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Rogue AP	2 hours	Schedules collection of information about rogue access points.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Switch CPU and Memory Poll	30 minutes	Schedules polling of switch CPU and memory information.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Traffic Stream Metrics	8 minutes	Retrieves traffic stream metrics for the clients.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.

Task Name	Default Schedule	Description	Editable options
Wireless Controller Performance	30 minutes	Schedules collection of performance statistics for wireless controllers.	Select Edit Schedule > Recurrence and select the appropriate settings to schedule the job.
Wireless QoS Statistics	15 minutes	Schedules collection of information QoS Statistics for Wireless Controllers.	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 date from the last 7 days only.

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
Trend	Device-related historical information. Trend data is gathered as a whole and summarized as minimums, maximums, or averages.	Hourly data: 15 Daily data: 90 Weekly data: 54 weeks
Device health	SNMP-polled device data such as device reachability, and utilization for CPU, memory, and interfaces.	Hourly data: 15 Daily data: 90 Weekly data: 54 weeks
Performance	Assurance data such as traffic statistics. • Short-term data is aggregated every 5 minutes. • Medium-term data is aggregated every hour. • Long-term is aggregated daily	Short-term data: 7 Medium-term data: 31 Long-term data: 365 days
Network audit	Audit records for configurations triggered by users, and so on.	90 days
System health	Includes most data shown on the Admin dashboards	Hourly data: 15 Daily data: 90 Weekly data: 54 weeks

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

- Optical 15-minute performance data (short-term) is saved for 7 days.
- Optical 1-day performance data (medium-term) is saved for 31 days.

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 the 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 are stored in a repository named /localdisk/ftp/reports and are deleted after 31 days from that directory. Reports filters that you set from the filters page are saved in the database and are not purged.

- 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, enter a new value in the File Retain Period field.
- Step 4 Click Save.

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.