Get Started with Cisco Cyber Vision

Certificate Fingerprint

Use the certificate fingerprint to register a **Global Center** with its synchronized centers and vice versa. To access the **Center Fingerprint**, choose **Admin** > **System** from the main menu. Click the copy icon to copy the **Fingerprint** and enroll your center with a global center.

For more information, refer the Centers Installation Guides.

Data Management

The **Data Management** interface allows you to do the following: manage data stored on Cisco Cyber Vision by Clear Data to optimize the Center performances, Expiration Settings, and Ingestion Configuration. To access Data Management, choose **Admin** > **Data Management** from the main menu.

The Cisco Cyber Vision update procedure will not purge data automatically. The Center's 3.2.x database will be migrated to the new 4.0.0 schema. All components, activities, flows, events, etc. will be migrated. Since the migration process can take hours (from 1 to 24 hours), you can perform a data purge in release 3.2.x to shorten the migration process. Launch the purge either from the Clear Data page or from the Command Line Interface (CLI), using the following command. Also, different options are offered.

```
sbs-db --help
```

Once migrated, the database content is managed with version 4.4.1 new data retention policies. Expiration settings apply. By default, the system will purge the following:

- Events after 6 months
- Flows after 6 months
- Variables after 2 years

Important You have 3 days once the migration from 3.2.x to 4.0.0 is done to set Expiration Settings as needed, before the default settings are applied by the system.

Clear Data

Clear data stored on Cisco Cyber Vision to optimize the Center's performances. You can clear data partially or completely, as follows:

- All data
- Components selection and associated data (refer to Purge Components, on page 2)
- Activities, Flows and Variables
- Flows and Aariables
- Variables

To clear data, choose **Admin** > **Data Management** > **Clear Data** from the main menu.

Clear data **very carefully**. Clearing any data can impact monitoring of the network. Please read the implications about all data clearance below.

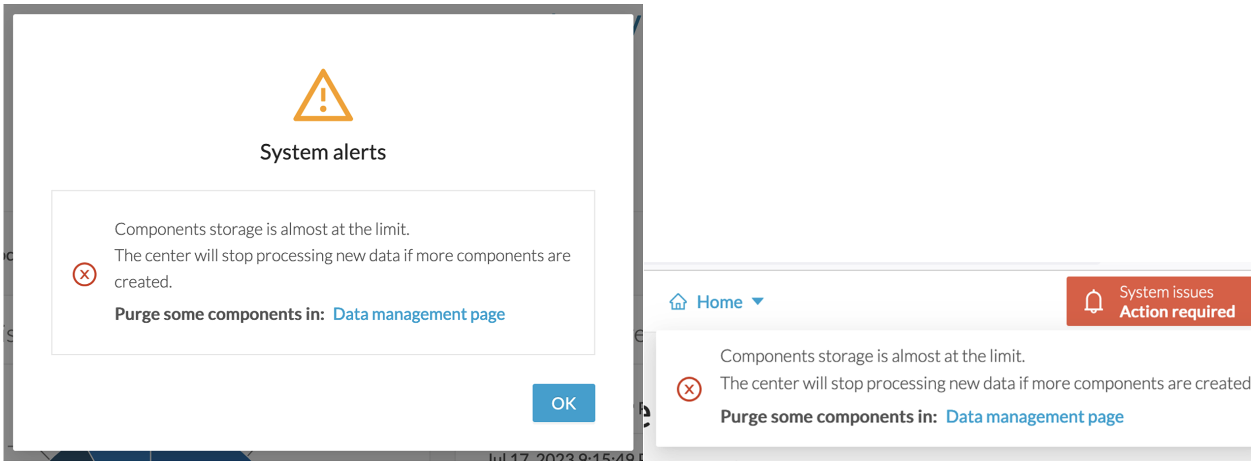
Data Clearance

Use **Clear All data** as a last resort, in case of database overload issues. This action results in the deletion of the entire database content. Network data such as components, flows, events, and baselines are deleted from Cisco Cyber Vision and the GUI becomes empty. All configurations are saved. Existing users and user data configurations (such as capture modes, event severity setup, syslog configuration) persist.

Purge Components

In Cisco Cyber Vision, a component represents an object of the industrial network from a network point of view. It can be the network interface of a PLC, a PC, a SCADA station, or a broadcast or multicast address. The system protects itself by limiting the number of components stored in the database.

When the system reaches over 120,000 components, a pop-up and red banner alert appear to inform you that a purge is required. Components purge is based on several criteria.



Components storage is almost at the limit.
The center will stop processing new data if more components are created.
Purge some components in: Data management page

Components storage is almost at the limit.
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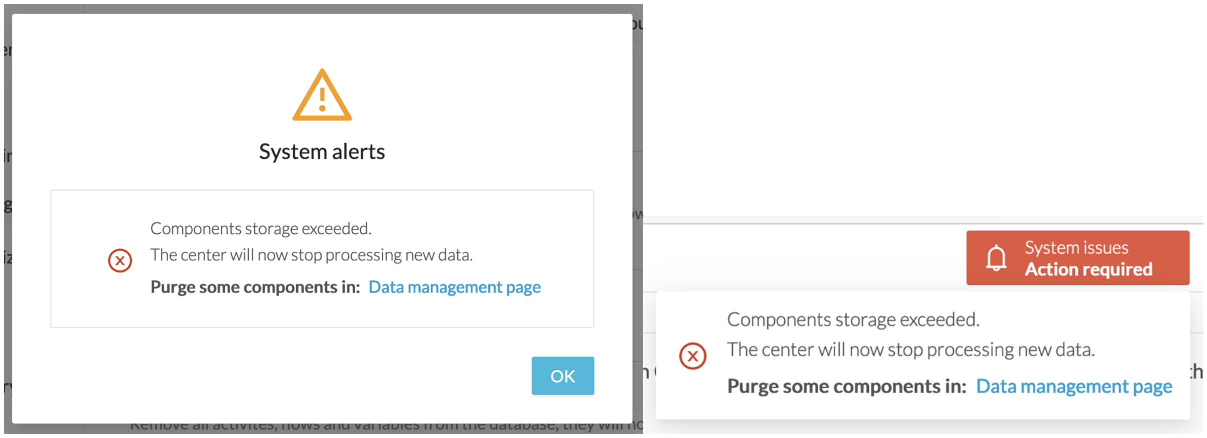
Purge some components in: Data management page

If the system reaches 150,000 components, ingestion stops. The system deletes incoming sensor data without processing or storing it. A pop-up and a red banner alert appear to inform you that a purge is required.



Components storage exceeded.
The center will now stop processing new data.
Purge some components in: Data management page

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To purge components:

Procedure

Step 1 From the main menu, choose **Admin** > **Data Management** > **Clear Data**.

Step 2 Click the **Components selection** radio button.

Step 3 Select the component type (**IT** or **OT**).

Step 4 Enter the **IP Subnet**.

Step 5 Click the calendar icon to add an **Inactivity since** date.

Step 6 Click the calendar icon to add a **Creation time** date.

Step 7 Click the calender incon to add a **End Time (optional)** date.

Step 8 Click **Clear data**.

Expiration Settings

To configure the **Expiration Settings**, choose **Admin** > **Data Management** > **Expiration Settings** from the main menu.

On this page, you can manage the duration for which data and reports remain available. Select expiration times for reports and their versions. Use the drop-down menu to choose expiration periods of 3 months, 6 months, 1 year, 2 years, or 3 years. You can also set the maximum number of report versions from 1 to 100.

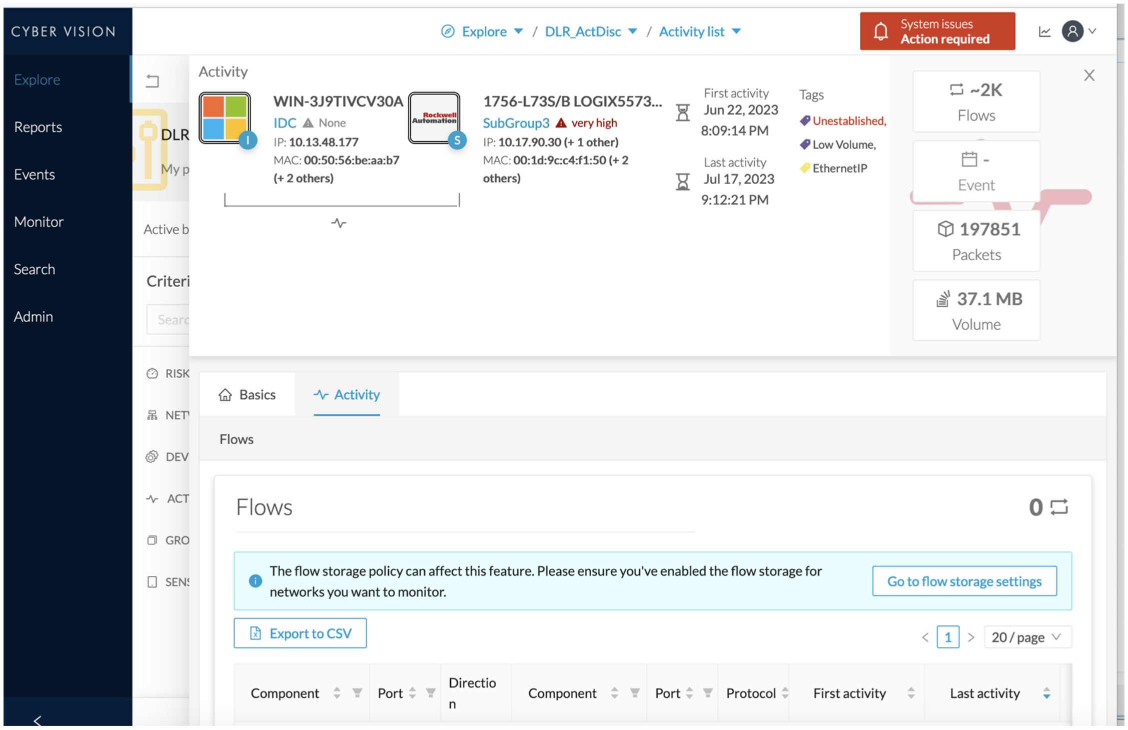
Note Selecting a high value may rapidly fill up storage and adversely affect system performance. The recommended value is 10 versions.

Ingestion Configuration

The **Ingestion Configuration** page allows you to configure flow and variable traffic storage. You can choose whether to store flows and variables. Flows and variables storage is disabled by default.

To access the **Ingestion Configuration**, choose **Admin** > **Data Management** > **Ingestion Configuration**from the main menu.

Messages can appear in Cisco Cyber Vision's user interface to indicate to the user that features may be limited due to absence of flows in the database. For example, in the activity technical sheet, at the top of the flows table:



The flow storage policy can affect this feature. Please ensure you've enabled the flow storage for networks you want to monitor.

In this case, you can click **Go to flow storage settings** and enable **Flow Storage**.

If **Flow Storage** is enabled, it is possible to choose from which subnetworks flows should be stored. These subnetworks can be set on the Network organization page. The option "others" includes flows that are not part of the industrial private network.

An automatic purge will occur on selected flows when a period of inactivity exceeds 7 days.

You can click the **Flows Aggregation** and **port scan detection** toggle buttons to enable them.

Users

Management

You can create, edit and delete users through the **Users management** page. To access the **Users management** page, choose **Admin** > **Users** > **Management** from the main menu.

During their creation each user must be assigned with one of the following user roles (from full rights to read-only) or with a custom role (refer to Role Management).

- **Admin**

  The Admin user has full rights on the platform. Users who have this role assigned oversee all sensitive actions like user rights management, system updates, syslog configuration, reset and capture modes configuration on sensors.

- **Product**

  The product user has access to several features of the system administration page (i.e. the system, sensors and events administration pages). This access level is for users who manage sensors from a remote location. In addition, they can manage the severity of events and, if enabled by the Admin user, can manage their export to syslog.

- **Operator**

  This access level is for users who use the Monitor mode and manage groups but do not have to work with the platform administration. Thus, the Operator user has access to all pages, except the system administration page.

- **Auditor**

  This access level provides read-only access to the Explore, Reports, Events and Search pages. Auditors can use sorting features (such as search bars and filters) that do not require persistent changes to the data (unlike Autolayout), and generate reports.

You can create as many users as needed with any user rights. Thus, several administrators can use and administrate the whole platform. To access the **CREATE A NEW USER** window, choose **Admin** > **Users** > **Management** from the main menu. Click **Add a new user**, and the window appears.

However, each user must have their own account. That is:

- Accounts must be nominative.
- One email address for several accounts is not allowed (note that email will be requested for login access).

  Passwords must contain at least 6 characters and comply with the rules below. Passwords:

  - Must contain a lower case character: a-z.

- Must contain an upper case character: A-Z.
- Must contain a numeric character: 0-9.
- Cannot contain the user id.
- Must contain a special character: ~!"#$%&’()*+,-./:;<=>?@[]^_{|}.

Important Passwords should be changed regularly to ensure the platform and the industrial network security.

Passwords' lifetime is defined in the Security Settings.

You can create custom user roles in the Role Management.

You can map Cisco Cyber Vision user roles with an external directory's user groups in the LDAP settings page.

Role Management

In addition to the four Cisco Cyber Vision default roles (i.e. Admin, Auditor, Operator and Product), customized roles can be created and modified from the Role management page. To access the **Role management** page, choose **Admin** > **Users** > **Role Management** from the main menu.

These roles will help you defining specific privileges and accesses for each group of users.

Default roles cannot be edited or deleted.

You can map Cisco Cyber Vision custom roles with an external directory's user groups in the LDAP settings page.

Create Roles

This section explains how to create customized user roles on Cisco Cyber Vision. The user roles can later be mapped to groups in Active Directory.

Procedure

Step 1 From the main menu, choose **Admin** > **Users** > **Role Management**.

Step 2 Click the + button at the end of the user roles.

A **NEW ROLE** tab appears.

Step 3 Enter a **Role Name** and **Description** in their respective fields.

Step 4 Click the dropdown arrow from the **Search/Add existing permission** field.

Step 5 Select an existing role from the dropdown list, or click **Add New Permissions** to build the new user role from scratch.

Step 6 Check the checkboxes to select or deselect permissions from the **Administrative Rights** list as read or write.

Hover over "i" icon next to the **Administrative Rights** to know all the rights.

Step 7 Click **Save**.

A message **User role has been created successfully** appears.

The new user role is displayed in the tab list.

Note
You can modify or delete directly in the tab.

What to do next

Custom roles created can be mapped with an external directory's user groups in the LDAP settings page.

Security Settings

From the **Users security settings** page, you can configure the security settings of users' password, such as its lifetime, the number of authorized login attempts, and the number of days before a password can be reused, etc.

To access **Users security settings**, from the main menu, choose **Admin** > **Users** > **Security settings**.

Center Web Server Certificate

The **Center web server certificate** page is to configure Cisco Cyber Vision user interface security with an enterprise certificate. You will have the option to upload a .p12 or to generate a CSR.

To access **Center web server certificate** page, from the main menu, choose **Admin** > **Web Server Certificate**.

For more information, see to the corresponding Center Installation Guide.