

Custom Classification of Rogue APs

- About Allowed List Workflow, on page 1
- About Custom Rogue Rule Creation, on page 3
- About Rogue Rule Profile, on page 5
- About Allowed Vendor List, on page 8

About Allowed List Workflow

The Cisco DNA Center Rogue Management and aWIPS workflow allows you to review and mark the MAC address of rogue access points, that you want to move to the allowed list in bulk, and process the bulk allowed list of selected AP MAC addresses.

Rogue Management and aWIPS workflow supports APs that are associated with Cisco AireOS Controllers and Cisco Catalyst 9800 Series Wireless Controllers.

You can move the following rogue AP types to the allowed list using the information provided in Set Up the Allowed List Workflow, on page 1:

- · Rogue on Wire
- Honeypot
- Interferer
- Neighbor

You cannot move the following rogue AP types to the allowed list:

- · Beacon Wrong Channel
- · Beacon DS Attack
- AP Impersonation
- Friendly

Set Up the Allowed List Workflow

This procedure shows how to move rogue AP MAC addresses to the allowed list in bulk. These addresses are the ones that you do not want to report as high threat in Cisco DNA Center.

Before you begin

To perform the following task, you must have SUPER-ADMIN-ROLE or NETWORK-ADMIN-ROLE permissions.

- Step 1 From the top-left corner, click the menu icon and choose Workflows > Set up Rogue Management and aWIPS.
 - The Set up Rogue Management and aWIPS window is displayed.
- Step 2 Click Let's Do it.

To skip this step in the future, check the **Don't show this to me again** check box.

The **Bulk upload allowed access points** window is displayed.

- Using the **Search** field, search for the MAC addresses that were already added in the About Allowed List Workflow, on page 1.
- **Step 4** Click **Export** to export the allowed list.
- Step 5 Click the **Download the sample CSV template from here** link to download the sample CSV template file and manually add the MAC address, operation, and category to create the bulk allowed list template.

Hover your cursor over the notification symbol to view the format of allowed MAC addresses, operations, and categories.

You can either drag and drop the CSV file into the boxed area or click **Choose a file** and browse to the CSV file on your system. The maximum size of the CSV file should be 1.2 MB.

Note Cisco DNA Center performs a validation check. An error message is displayed if the uploaded CSV file does not meet the following requirements:

- The MAC address is not a valid rogue point MAC address.
- All the rogue access point MAC addresses exist in the system already, or no rogue access point MAC addresses are eligible for the delete operation.
- A green check mark indicates that the uploaded CSV file content is valid.
- Step 7 Click Next.
- Step 8 In the Summary window, the Uploaded bulk allowed list MAC addresses table displays the list of allowed MAC addresses in bulk, and the respective operation and action:
 - All: Shows the list of all the MAC addresses in bulk, and their respective operation and action.
 - Create: Shows the list of created MAC addresses in bulk, and their respective operation and action.
 - **Delete**: Shows the list of deleted MAC addresses in bulk, and their respective operation and action.
 - No Action: Shows the list of MAC addresses that are already deleted, and their respective operation and action.
- **Step 9** Click **Continue to allowed list**, and, in the dialog box that is displayed, click **Yes**.

The **Done! Allowed List Updated** window appears.

Step 10 Click Go to Rogue and aWIPS Home Page.

The **Rogue and aWIPS** dashboard is displayed.

Click the **Threats** tab, that displays **Threat** table, Cisco DNA Center now categorizes the specified rogue AP MAC addresses as **Allowed List** under the **Type** column.

Step 11 To add or delete a rogue AP MAC address individually, click the rogue MAC address listed under the **Threat MAC** address column.

The **Threat 360** window is displayed.

Step 12 From the Action drop-down list, choose Add to Allowed list.

To remove a rogue AP MAC address from the allowed list individually, from the **Action** drop-down list, choose **Remove from Allowed list**.

About Custom Rogue Rule Creation

Rogue rules are an easy way to segregate and manage rogues with different risk profiles. Rogue rules are easy to configure and they are applied in order of priority. They reduce false positives, noise for sites with interferers, number of alerts, and provide the ability to adjust organizational risk profiles on global and site basis.

You can move the following rogue AP types to the custom classification type:

- Interferer
- Neighbor

Create a Custom Rogue Rule

You can create a rule with specific conditions and associate this rule to a rule profile.

- Step 1 From the top-left corner, click the menu icon and choose Workflows > Create a Rogue Rule.
- Step 2 In the Create a Rogue Rule window, click Get Started.
- **Step 3** In the **Rule Name** field, enter a unique name for the rule.

While creating new rogue rules, you cannot enter the rogue rule names that were deleted earlier.

- **Step 4** In the **Description** field, enter a description for the rule.
- Step 5 Click Next.
- Step 6 In the Create Rogue Rule window, choose one of the following threat level options: High, Potential, and Informational.
- **Step 7** (Optional) Check the **Enable Auto-Containment** check box to autocontain the rogue rule.

Note

- Cisco Catalyst 9800 Series Wireless Controllers have a limit of only 625 Rogue Containment configurations at a time. Once the limit is reached, containment won't work for any new rogue on those devices.
- Autocontainment is only applicable to the rogue rules classified with the **High** threat level. By default, **Enable Auto-containment** is disabled for the **Potential** and **Informational** threat levels.
- **Step 8** From the **Match** drop-down list, choose either **All** to match all the conditions, or **Any** to match your choice of conditions.

Step 9 From the **Add Condition** drop-down list, choose the rule conditions.

You can add multiple conditions to a rule. The available rule conditions are: **SSID**, **RSSI**, **Encryption Condition**, and **Minimum Rogue Client Count**.

Step 10 Click Next.

Step 11 (Optional) To assign this rule to an existing rule profile, click Yes in the Do you want to assign this rule to a rule profile? dialog box.

Note Creating only rogue rules will not work as an entity. Rogue rules must be assigned to a rule profile.

Step 12 In the **Available rule profiles** table, check the check box next to the corresponding profile name, and click **Next**.

You can select one or more rule profiles.

Note You cannot assign more than five rules to a rule profile.

Step 13 In the confirmation dialog box, click **Proceed**.

The new rule is set to the lowest priority. You can edit the rule profile to change the priority.

Note After the rogue rule is created, you cannot use the same rogue rule name to create another rogue rule.

Step 14 Review the rogue rule configuration in the **Summary** window.

Note Previous classification based on old rules is not modified even if the new rule conditions match. The change affects only the new data classification.

- **Step 15** (Optional) To create another rogue rule, click the **Create Another Rogue Rule** button and repeat Step 3 through Step 13 in this procedure.
- Step 16 (Optional) To view the created rogue rules, click View all Rogue Rules and Profiles.

The **Rogue Rules** tab lists all the rogue rules that have been created.

You can also view the created rogue rules by clicking the menu icon and choosing **Assurance** > **Rogue and aWIPS** > **Rules** > **Rogue Rules**.

Edit a Rogue Rule

- Step 1 From the top-left corner, click the menu icon and choose Assurance > Rogue and aWIPS > Rules.
- **Step 2** In the **Rogue Rules** table, click the rule name that you want to edit.
- **Step 3** On the **Edit Rogue Rule** window, make changes, if any.

Note The previous classification, based on old rules, is not modified even if the rule conditions are modified. The change affects only the new data classification.

Step 4 (Optional) Check the **Enable Auto-Containment** check box to autocontain the rogue rule.

Note

- Cisco Catalyst 9800 Series Wireless Controllers have a limit of 625 Rogue Containment configurations at a time. Once the limit is reached, containment won't work for any new rogue on those devices.
- You can only autocontain **Honeypot** and the custom rule with the **High** level threat.
- If you want to disable autocontainment after enabling autocontainment, you must disable autocontainment manually because it cannot be disabled automatically.

Step 5 Click Save.

Verify whether the rogue containment is enabled or not in the **Auto-Containment** column.

Delete a Rogue Rule

- Step 1 From the top-left corner, click the menu icon and choose Assurance > Rogue and aWIPS > Rules.
- Step 2 In the Rogue Rules table, click the Rule Name that you want to delete and click Delete.

Note If you delete the only rogue rule in a rule profile, the rule profile is also deleted.

Step 3 In the confirmation dialog box, click **Delete**.

Note Honeypot is a predefined rule; you cannot delete it.

Step 4 (Optional) To view the deleted rules, click the **Inactive** tab in the **Rogue Rules** table.

About Rogue Rule Profile

You can create a rogue rule with specific conditions, and then associate it to a rule profile. You can prioritize rogue rules after associating them to a rogue rule profile.

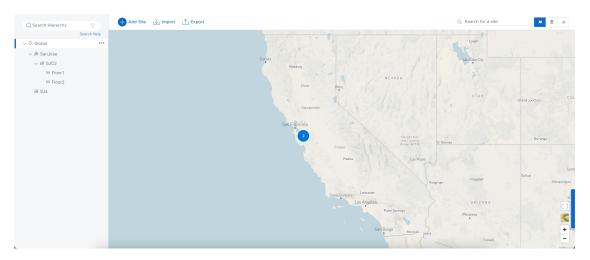
When a rogue rule profile is assigned to a site, the rogues reported from the site are verified against the rules in the rule profile.

Note that you can assign only one rogue rule profile to a site.

Because of site inheritance, all the floors under a particular site inherit the rogue rule profile that is mapped at the area, site, or building level. For example, as shown in the following figure, **Floor1** and **Floor2** will inherit the rogue rule profile that is mapped at the **SanJose** level.

A rogue rule profile mapped to a floor has precedence over a rogue rule inherited from a parent site. For example, as shown in the following figure, Rogue Rule Profile A is directly mapped to **Floor1**, Rogue Rule Profile A takes precedence over Rule Profile B that is assigned to the parent site, **SJC2**.

Figure 1: Network Hierarchy



Create a Rogue Rule Profile

You can create a rule with specific conditions and then associate it to a rogue rule profile.

- Step 1 From the top-left corner, click the menu icon and choose Workflows > Create a Rogue Rule Profile.
- Step 2 In the Create Rogue Rule Profile window, click Get Started.
- **Step 3** In the **Profile Name** field, enter a unique name for the rule profile.
- **Step 4** (Optional) Check the **Enable Auto-Containment** check box to autocontain the rogue rule.

Note

- Cisco Catalyst 9800 Series Wireless Controllers have a limit of 625 Rogue Containment configurations at a time. When the limit is reached, containment won't work for any new rogues on those devices.
- You can only autocontain **Honeypot** and the custom rules classified with the **High** threat level.
- **Step 5** In the confirmation window, click **Yes**.
- Step 6 Click Next.
- **Step 7** In the **Rule List** table, check the check box next to the rule name, and click **Next**.

You can add up to five rogue rules in a profile.

- Step 8 In the Sort rules in order of priority window, drag and drop a rule into the desired priority with the highest priority on top to reorder rules based on your priority.
- **Step 9** Click **Next** to associate a rogue rule profile to a location.
- **Step 10** Check the check box next to a site to associate this rule profile to that site, and click **Next**.

Rule profiles can exist without being assigned to any site. Rules are not checked unless the rule profile is assigned to a site.

Note If a vendor rule and rule profile are mapped to the same site, the vendor rule takes precedence.

- **Step 11** In the **Summary** window, review the rogue rule profile configuration.
- **Step 12** Click the **Back** button to make changes, if any, to the values entered in the previous window.

Step 13 Click Create Rule Profile.

A message is displayed, stating that the rule profile is created successfully.

Step 14 (Optional) To view all the rogue rules and profiles, click **View all Rogue Rules and Profiles**.

The **Rogue Rule Profiles** tab lists all the created rogue rules and rule profiles.

You can also view the created rule profiles by clicking the menu icon and choosing **Assurance** > **Rogue and aWIPS** > **Rules** > **Rogue Rule Profiles**.

Edit a Rogue Rule Profile

- Step 1 From the top-left corner, click the menu icon and choose Assurance > Rogue and aWIPS > Rules.
- Step 2 Click the Rogue Rule Profiles tab.
- **Step 3** In the **Rogue Rule Profiles** table, click the profile name that you want to edit.
- **Step 4** In the **Edit Rule Profile** window, make the necessary changes.

Note Edited rule profiles do not modify any previously classified data. The edits only apply to the new modified data that is processed after changes are made.

Step 5 (Optional) Check the **Enable Auto-Containment** check box to autocontain the rogue rule.

Note

- Cisco Catalyst 9800 Series Wireless Controllers has a limit of 625 Rogue Containment configurations at a time. Once the limit is reached, containment won't work for any new rogue on those devices.
- Honeypot is a predefined rule, that is added to all the newly created rogue rule profiles by default.
- If you want to disable autocontainment after enabling autocontainment, you must disable autocontainment manually because it cannot be disabled automatically.
- **Step 6** In the confirmation window click **Yes**.
- **Step 7** (Optional) You can toggle between **User Defined** and **Predefined** to view the corresponding rules.
- **Step 8** Verify whether the rogue containment is enabled or not in the **Auto-containment** column.
- Step 9 Click Save.

Delete a Rogue Rule Profile

- Step 1 From the top-left corner, click the menu icon and choose Assurance > Rogue and aWIPS > Rules.
- Step 2 Click the Rogue Rule Profiles tab.
- **Step 3** In the **Rogue Rules** table, click the profile name that you want to delete and click **Delete**.
- **Step 4** In the confirmation dialog box, click **Delete**.

About Allowed Vendor List

With the **Allowed Vendor List** feature, you can define whether APs from specific vendors will trigger a specific threat level. You can create a list of allowed vendors, so that threats from these vendors are not marked as **High** threats. You can decide whether they need to be marked as **Potential** or **Informational** threats. In a given workflow, you can add up to five vendors to the allowed list.

An allowed vendor rule that is mapped at any level takes precedence over the inherited rule. For example, if allowed vendor rule A is mapped to a floor level, vendor rule A takes precedence over allowed vendor rule B that is present at the site, area, or building level.

Create a List of Allowed Vendors

You can create a list of vendors to be on the allowed list, so that threats from these vendors are not marked as **High** threats.

You can add five vendors in a single workflow for a set of sites.

Step 1 From the top-left corner, click the menu icon and choose Workflows > Create Allowed Vendor List.

You can also create a list of allowed vendors by clicking the menu icon and choosing **Assurance** > **Rogue and aWIPS** > **Allowed List**.

Step 2 In the Create Allowed Vendor List window, click Let's Do it.

To skip this window in the future, check the **Don't show this to me again** check box.

The Create Allowed Vendor List window appears.

- Step 3 From the Selection Criteria drop-down list, choose a selection criteria (Exactly Matches or Contains) for the vendor
- **Step 4** In the **Vendor Name** field, enter the vendor name.

The vendor name match is case-sensitive.

Step 5 Click • to add another vendor to the allowed list.

In a given workflow, you can add a maximum of five vendors to the allowed list.

Step 6 In the Site Selection window, check the check box next to the site to which you want to apply your allowed vendor list

Because of site inheritance, all the floors under a particular site inherit the vendor rule that is mapped to the area, site, or building level.

- Step 7 Click Next.
- **Step 8** In the **Summary** window, view the details about the allowed vendor and site selection.
- Step 9 Click Done.

The **Allowed Vendor List Created** window appears.

Step 10 (Optional) To create another allowed vendor list, click Create New Allowed Vendor List and repeat Step 3 to Step 8.

Step 11 (Optional) To view the created vendor lists, click **View all allowed Lists**.

View Vendor Rule List Information

- Step 1 From the top-left corner, click the menu icon and choose Assurance > Rogue and aWIPS.
- Step 2 Click the Allowed List tab.

The **Allowed Vendor List** table shows the list of allowed vendors with the following details. Each vendor rule is displayed as an entity:

- Vendor Name
- Match Criteria
- Threat Level
- Associated Site(s)
- · Last Changed

Edit a Vendor Rule

- Step 1 From the top-left corner, click the menu icon and choose Assurance > Rogue and aWIPS.
- Step 2 Click the Allowed List tab.
- **Step 3** In the **Allowed Vendor List** table, click the vendor name that you want to edit.
- **Step 4** In the **Edit Allowed Vendor List** window, edit the following parameters, as necessary:
 - Threat Level
 - · Match Criteria
 - Vendor Name
 - Associated Sites
- Step 5 Click Save.

Delete a Vendor Rule

- Step 1 From the top-left corner, click the menu icon and choose Assurance > Rogue and aWIPS.
- Step 2 Click the Allowed List tab.
- **Step 3** In the **Allowed Vendor List** table, check the check box of the vendor name that you want to delete, and click **Delete**.

The following message Deleting the selected allowed vendor(s) will impact all sites associated with it. There is 1 site associated with this allowed vendor(s).

Step 4 Click Delete.