Migrate from Snort 2 to Snort 3

Starting with Version 7.0, Snort 3 is the default inspection engine for new Firewall Threat Defense deployments with Cloud-Delivered Firewall Management Center. If you are still using the Snort 2 inspection engine, switch to Snort 3 now for improved detection and performance.

Upgrading Firewall Threat Defense to Version 7.2 through 7.6 also upgrades eligible Snort 2 devices to Snort 3. For devices that are ineligible because they use custom intrusion or network analysis policies, manually upgrade to Snort 3 as described here.

Although you can switch individual devices back, you should not. Snort 2 will be deprecated in a future release and will eventually prevent Firewall Threat Defense upgrade.

Snort 3 Inspection Engine

Snort 3 is the default inspection engine for newly registered Firewall Threat Defense devices of version 7.0 and later. However, for Firewall Threat Defense devices of lower versions, Snort 2 is the default inspection engine. When you upgrade a managed Firewall Threat Defense device to version 7.0 or later, the inspection engine remains on Snort 2. To use Snort 3 in upgraded Firewall Threat Defenses of version 7.0 and later, you must explicitly enable it. When Snort 3 is enabled as the inspection engine of the device, the Snort 3 version of the intrusion policy that is applied on the device (through the access control policies) is activated and applied to all the traffic passing through the device.

You can switch Snort versions when required. Snort 2 and Snort 3 intrusion rules are mapped and the mapping is system-provided. However, you may not find a one-to-one mapping of all the intrusion rules in Snort 2 and Snort 3. If you change the rule action for one rule in Snort 2, that change is not retained if you switch to Snort 3 without synchronizing Snort 2 with Snort 3. For more information on synchronization, see Synchronize Snort 2 Rules with Snort 3 , on page 7.

Snort 2 versus Snort 3

Snort 3 is architecturally redesigned to inspect more traffic with equivalent resources when compared to Snort 2. Snort 3 provides simplified and flexible insertion of traffic parsers. Snort 3 also provides new rule syntax that makes rule writing easier and shared object rule equivalents visible.

The table below lists the differences between the Snort 2 and the Snort 3 versions in terms of the inspection engine capabilities.

Feature	Snort 2	Snort 3
Packet threads	One per process	Any number per process
Configuration memory use	Number of processes * *x* GB	*x* GB in total; more memory available for packets
Configuration reload	Slower	Faster; one thread can be pinned to separate cores
Rule syntax	Inconsistent and requires line escapes	Uniform system with arbitrary whitespace
Rule comments	Comments only	#, #begin and #end marks; C language style

Additional reference: Differences between Snort 2 and Snort 3 in Firepower.

Requirements for network analysis and intrusion policies

To allow the Snort inspection engine to process traffic for intrusion and malware analysis, you must have the Intrusion Prevention System (IPS) license enabled for the Firewall Threat Defense device.

You must be an Admin user to manage network analysis, intrusion policies, and perform migration tasks.

How to Migrate from Snort 2 to Snort 3

Migrating from Snort 2 to Snort 3 requires you to switch the inspection engine of the Firewall Threat Defense device from Snort 2 to Snort 3.

Depending on your requirements, the tasks to complete the migration of your device from Snort 2 to Snort 3 is listed in the following table:

Step	Task	Links to Procedures
1	Enable Snort 3	• Enable Snort 3 on an Individual Device, on page 3 • Enable Snort 3 on Multiple Devices, on page 4

Step	Task	Links to Procedures
2	Convert Snort 2 custom rules to Snort 3	• Convert all Snort 2 Custom Rules across all Intrusion Policies to Snort 3, on page 5 • Convert Snort 2 Custom Rules of a Single Intrusion Policy to Snort 3, on page 6
3	Synchronize Snort 2 rules with Snort 3	Synchronize Snort 2 Rules with Snort 3 , on page 7

Prerequisites for Migrating from Snort 2 to Snort 3

The following are the recommended prerequisites that you must consider before migrating your device from Snort 2 to Snort 3.

- Have a working knowledge of Snort. To learn about the Snort 3 architecture, see Snort 3 Adoption.
- Back up your management center. See Backup the Management Center.
- Back up your intrusion policy. See Exporting Configurations.
- Clone your intrusion policy. To do this, you can use an existing policy as the base policy to create a copy of your intrusion policy. In the **Intrusion Policies** page, click **Create Policy** and choose an existing intrusion policy from the **Base Policy** dropdown list.

Enable Snort 3 on an Individual Device

Important During the deployment process, there could be a momentary traffic loss because the current inspection engine needs to be shut down.

Procedure

Step 1 Choose **Devices** > **Device Management**.

Step 2 Click the device to go to the device home page.

Note
The device is marked as Snort 2 or Snort 3, showing the current version on the device.

Step 3 Click the **Device** tab.

Step 4 In the Inspection Engine section, click **Upgrade**.

Note
In case you want to disable Snort 3, click **Revert to Snort 2** in the Inspection Engine section.

Step 5 Click **Yes**.

What to do next

Deploy the changes on the device. See, Deploy Configuration Changes, on page 8.

The system converts your policy configurations during the deployment process to make them compatible with the selected Snort version.

Enable Snort 3 on Multiple Devices

To enable Snort 3 on multiple devices, ensure all the required Firewall Threat Defense devices are on version 7.0 or later.

Important During the deployment process, there could be a momentary traffic loss because the current inspection engine needs to be shut down.

Procedure

Step 1 Choose **Devices** > **Device Management**.

Step 2 Select all the devices on which you want to enable or disable Snort 3.

Note
The devices are marked as Snort 2 or Snort 3, showing the current version on the device.

Step 3 Click **Select Bulk Action** drop-down list and choose **Upgrade to Snort 3**.

Step 4 Click **Yes**.

What to do next

Deploy the changes on the device. See, Deploy Configuration Changes, on page 8.

The system converts your policy configurations during the deployment process to make them compatible with the selected Snort version.

Convert Snort 2 Custom IPS Rules to Snort 3

If you are using a rule set from a third-party vendor, contact that vendor to confirm that their rules successfully convert to Snort 3 or to obtain a replacement rule set written natively for Snort 3. If you have custom rules that you have written yourself, familiarize with writing Snort 3 rules prior to conversion, so you can update your rules to optimize Snort 3 detection after conversion. See the links below to learn more about writing rules in Snort 3.

- https://blog.snort.org/2020/08/how-rules-are-improving-in-snort-3.html

- https://blog.snort.org/2020/10/talos-transition-to-snort-3.html

You can refer to other blogs at https://blog.snort.org/ to learn more about Snort 3 rules.

See the following procedures to convert Snort 2 rules to Snort 3 rules using the system-provided tool.

- Convert all Snort 2 Custom Rules across all Intrusion Policies to Snort 3, on page 5
- Convert Snort 2 Custom Rules of a Single Intrusion Policy to Snort 3, on page 6

Important Snort 2 network analysis policy (NAP) settings *cannot* be copied to Snort 3 automatically. NAP settings have to be manually replicated in Snort 3.

Convert all Snort 2 Custom Rules across all Intrusion Policies to Snort 3

Procedure

Step 1 Choose **Policies** > **+ Show more** > **Security policies** > **Intrusion Rules**.

Step 2 Click **Snort 3 All Rules** tab.

Step 3 Ensure **All Rules** is selected in the left pane.

Step 4 Click the **Tasks** drop-down list and choose:

- **Convert Snort 2 rules and import**—To automatically convert all the Snort 2 custom rules across all the intrusion policies to Snort 3 and import them into Firewall Management Center as Snort 3 custom rules.
- **Convert Snort 2 rules and download**—To automatically convert all the Snort 2 custom rules across all the intrusion policies to Snort 3 and download them into your local system.

Step 5 Click **OK**.

Note

- If you selected **Convert and import** in the previous step, then all the converted rules are saved under a newly created rule group **All Snort 2 Converted Global** under **Local Rules**.
- If you selected **Convert and download** in the previous step, then save the rules file locally. You can review the converted rules in the downloaded file and later upload them by following the steps in Add Custom Rules to Rule Groups.

Refer to the video Converting Snort 2 Rules to Snort 3 for additional support and information.

What to do next

Deploy configuration changes; see Deploy Configuration Changes, on page 8.

Convert Snort 2 Custom Rules of a Single Intrusion Policy to Snort 3

Procedure

Step 1 Choose **Policies** > **Security policies** > **Intrusion**.

Step 2 In the **Intrusion Policies** tab, click **Show Snort 3 Sync status**.

Step 3 Click the **Sync** icon **Snort out-of-Sync** (🡒) of the intrusion policy.

Note
If the Snort 2 and the Snort 3 versions of the intrusion policy are synchronized, then the **Sync** icon is in blue**Snort in-Sync** (🡒). It indicates that there are no custom rules to be converted.

Step 4 Read through the summary and click the **Custom Rules** tab.

Step 5 Choose:

- **Import converted rules to this policy**—To convert the Snort 2 custom rules in the intrusion policy to Snort 3 and import them into Firewall Management Center as Snort 3 custom rules.
- **Download converted rules**—To convert the Snort 2 custom rules in the intrusion policy to Snort 3 and download them into your local system. You can review the converted rules in the downloaded file and later upload the file by clicking the upload icon.

Step 6 Click **Re-Sync**.

What to do next

Deploy configuration changes; see Deploy Configuration Changes, on page 8.

View Snort 2 and Snort 3 Base Policy Mapping

Note Snort 2 is not supported on threat defense Version 7.7. For information on Snort 2 features that are supported in versions earlier than 7.7, refer to the Cloud-Delivered Firewall Management Center guide that matches your Firewall Threat Defense version.

Procedure

Step 1 Choose **Policies** > **Security policies** > **Intrusion**.

Step 2 Ensure the **Intrusion Policies** tab is selected.

Step 3 Click **IPS Mapping**.

Step 4 In the **IPS Policy Mapping** dialog box, click **View Mappings** to view the Snort 3 to Snort 2 intrusion policy mapping.

Step 5 Click **OK**.

Synchronize Snort 2 Rules with Snort 3

To ensure that the Snort 2 version settings and custom rules are retained and carried over to Snort 3, the Firewall Management Center provides the synchronization functionality. Synchronization helps Snort 2 rule override settings and custom rules, which you may have altered and added over the last few months or years, to be replicated on the Snort 3 version. This utility helps to synchronize Snort 2 version policy configuration with Snort 3 version to start with similar coverage.

Note Snort 2 is not supported on threat defense Version 7.7. For information on Snort 2 features that are supported in versions earlier than 7.7, refer to the Cloud-Delivered Firewall Management Center guide that matches your Firewall Threat Defense version.

If the Firewall Management Center is upgraded from 6.7 or earlier to 7.0 or later version, the system synchronizes the configuration. If the Firewall Management Center is a fresh 7.0 or later version, you can upgrade to a higher version, and the system will not synchronize any content during upgrade.

Before upgrading a device to Snort 3, if changes are made in Snort 2 version, you can use this utility to have the latest synchronization from Snort 2 version to Snort 3 version so that you start with a similar coverage.

Note On moving to Snort 3, it is recommended that you manage the Snort 3 version of the policy independently and do not use this utility as a regular operation.

Important

- Only the Snort 2 rule overrides and custom rules are copied to Snort 3 and not the other way around. You may not find a one-to-one mapping of all the intrusion rules in Snort 2 and Snort 3. Your changes to rule actions for rules that exist in both versions are synchronized when you perform the following procedure.
- Synchronization *does not* migrate the threshold and suppression settings of any custom or system-provided rules from Snort 2 to Snort 3.

Procedure

Step 1 Choose **Policies** > **Security policies** > **Intrusion**.

Step 2 Ensure the **Intrusion Policies** tab is selected.

Step 3 Click **Show Snort 3 Sync status**.

Step 4 Identify the intrusion policy that is out-of-sync.

Step 5 Click the **Sync** icon **Snort out-of-Sync** ( ).

Note
If the Snort 2 and the Snort 3 versions of the intrusion policy are synchronized, then the **Sync** icon is in blue**Snort in-Sync** (🔵).

Step 6 Read through the summary and download a copy of the summary if required.

Step 7 Click **Re-Sync**.

Note
- The synchronized settings will be applicable on the Snort 3 intrusion engine only if it is applied on a device, and after a successful deployment.
- Snort 2 custom rules can be converted to Snort 3 using the system-provided tool. If you have any Snort 2 custom rules click the Custom Rules tab and follow the on-screen instructions to convert the rules. For more information, see Convert Snort 2 Custom Rules of a Single Intrusion Policy to Snort 3, on page 6.

What to do next

Deploy configuration changes; see Deploy Configuration Changes, on page 8.

Deploy Configuration Changes

After you change configurations, deploy them to the affected devices.

Note This topic covers the basic steps involved in deploying configuration changes. We *strongly* recommend that you refer the *Deploy Configuration Changes* topic in the latest version of the *Cisco Secure Firewall Management Center Device Configuration Guide* to understand the prerequisites and implications of deploying the changes before proceeding with the steps.

Caution When you deploy, resource demands may result in a small number of packets dropping without inspection. Additionally, deploying some configurations restarts the Snort process, which interrupts traffic inspection. Whether traffic drops during this interruption or passes without further inspection depends on how the target device handles traffic.

Procedure

Step 1 On the Cloud-Delivered Firewall Management Center menu bar, click **Deploy** and choose **Deployment**.

The GUI page lists the devices with out-of-date configurations having **Pending**status.

- The **Modified By** column lists the users who have modified the policies or objects. Expand the device listing to view the users who have modified the policies for each policy listing.

Note
Usernames are not provided for deleted policies and objects.

- The **Inspect Interruption** column indicates if traffic inspection interruption might occur in the device during deployment.

  If this column is blank for a device, it indicates that there will be no traffic inspection interruptions on that device during deployment.
- The **Last Modified Time** column specifies the last time you made configuration changes.
- The **Preview** column allows you to preview the changes for the next deployment.
- The **Status** column provides the status for each deployment.

Step 2 Identify and choose the devices on which you want to deploy configuration changes.

- Search—Search for the device name, type, domain, group, or status in the search box.
- Expand—Click **Expand Arrow (**›**)** to view device-specific configuration changes to be deployed.

  When you check a check box adjacent to a device, all the changes made to the device and listed under the device, are pushed for deployment. However, you can use **Policy selection** ( ) to select individual policies or specific configurations to deploy while withholding the remaining changes without deploying them.

Note
- When the status in the **Inspect Interruption** column indicates (**Yes**) that deploying will interrupt inspection, and perhaps traffic, on a Firewall Threat Defense device, the expanded list indicates the specific configurations causing the interruption with the **Inspect Interruption** ( ).
- When there are changes to interface groups, security zones, or objects, the impacted devices are shown as out-of-date on the Firewall Management Center. To ensure that these changes take effect, the policies with these interface groups, security zones, or objects, also need to be deployed along with these changes. The impacted policies are shown as out-of-date on the **Preview**page on the Firewall Management Center.

Step 3 Click **Deploy**.

Step 4 If the system identifies errors or warnings in the changes to be deployed, it displays them in the **Validation Messages** window. To view complete details, click the arrow icon before the warnings or errors.

You have the following choices:

- Deploy—Continue deploying without resolving warning conditions. You cannot proceed if the system identifies errors.
- Close—Exit without deploying. Resolve the error and warning conditions, and attempt to deploy the configuration again.

What to do next

During deployment, if there is a deployment failure, there is a possibility that the failure may impact traffic. However, it depends on certain conditions. If there are specific configuration changes in the deployment, the

deployment failure may lead to traffic being interrupted. For details, see the Deploy Configuration Changes topic in the latest version of the *Cisco Secure Firewall Management Center Device Configuration Guide*.

Examples for Migration

Migrate from Snort 2 to Snort 3

Snort is an intrusion detection and prevention system that has undergone a significant change from Version 2 to Version 3. To leverage the enhanced features and capabilities of Snort 3, migration of the existing rule sets from Snort 2 becomes crucial. This migration process involves converting and adapting the Snort 2 rules to the Snort 3 rule syntax and optimizing them for improved detection and performance.

In some cases, organizations can have the threat defense devices managed by the Secure Firewall Management Center. Organizations can opt for a hybrid deployment approach during the migration from Snort 2 to Snort 3. This approach allows for a gradual transition and minimizes potential disruptions, if any.

Benefits of Migrating to Snort 3

- **Enhanced protocol support**—Snort 3 provides improved protocol support, allowing you to monitor and detect threats across a wide range of modern protocols, including encrypted traffic.
- **Streamlined rule management**—Snort 3 offers a more user-friendly rule language and rule management system, making it easier to create, modify, and manage rules effectively.
- **Improved performance**—Snort 3 has been optimized to handle higher traffic volumes more efficiently, reducing the risk of performance bottlenecks and ensuring timely threat detection.

Sample Business Scenario

Alice works as a security analyst in a large organization that heavily relies on the Snort inspection engine to monitor and protect their network infrastructure. The organization has been using Snort Version 2 for several years, but they have encountered some limitations and challenges.

Bob, the network administrator, is looking to migrate from Snort 2 to Snort 3 to overcome these issues and enhance his organization's network security capabilities.

This migration will also improve network security monitoring, enhance performance, and streamline rule management.

Best Practices for Migrating from Snort 2 to Snort 3

- Back up your intrusion policy before performing the migration. See the Export Configurations task in the *Cisco Secure Firewall Management Center Administration Guide*.
- Before upgrading a device to Snort 3, if changes are made in Snort 2, use the synchronize utility to include the latest synchronization from Snort 2 to Snort 3 so that you can start with a similar coverage. See Synchronize Snort 2 Rules with Snort 3 , on page 7.
- Snort 2 custom rules are not automatically converted to Snort 3 and must be manually migrated. See Convert Snort 2 Custom IPS Rules to Snort 3, on page 4.

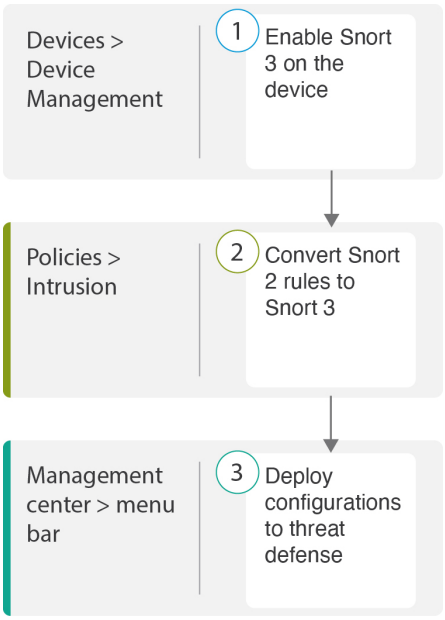
- Synchronization does not migrate Snort 2 rules with thresholds or suppressions. These rules must be created again in Snort 3.

Prerequisites

- Have a working knowledge of Snort. To learn about the Snort 3 architecture, see Snort 3 Adoption.
- Back up your management center. See Backup the Management Center.
- Back up your intrusion policy. See Exporting Configurations.

End-to-End Migration Workflow

The following flowchart illustrates the workflow for migrating Snort 2 to Snort 3 in Secure Firewall Management Center.



Step	Description
1	Enable Snort 3 on the device. See Enable Snort 3 on Threat Defense, on page 12.
2	Convert Snort 2 rules to Snort 3. See Convert Snort 2 Rules of a Single Intrusion Policy to Snort 3, on page 13.
3	Deploy configuration. See Deploy Configuration Changes, on page 8.

Enable Snort 3 on Threat Defense

Attention During the deployment process, there could be a momentary traffic loss because the current inspection engine needs to be shut down.

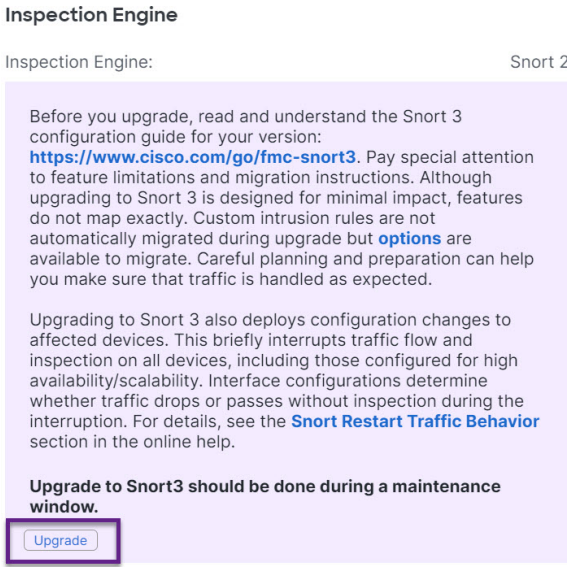
Procedure

Step 1 Choose **Devices** > **Device Management**.

Step 2 Click the corresponding device to go to the device home page.

Step 3 Click the **Device** tab.

Step 4 In the **Inspection Engine** section, click **Upgrade**.



Step 5 Click **Yes**.

What to do next

Deploy the changes on the device. See Deploy Configuration Changes, on page 8.

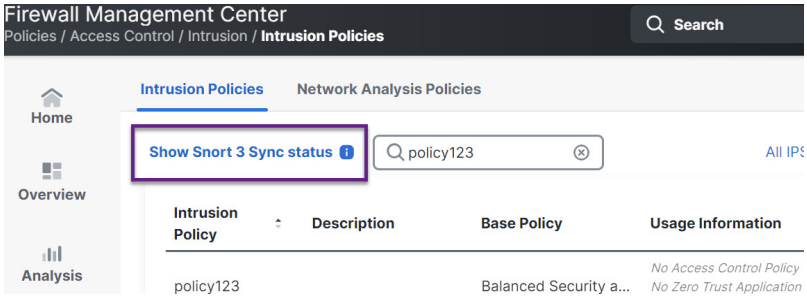
The system converts your policy configurations during the deployment process to make them compatible with the selected Snort version.

Convert Snort 2 Rules of a Single Intrusion Policy to Snort 3

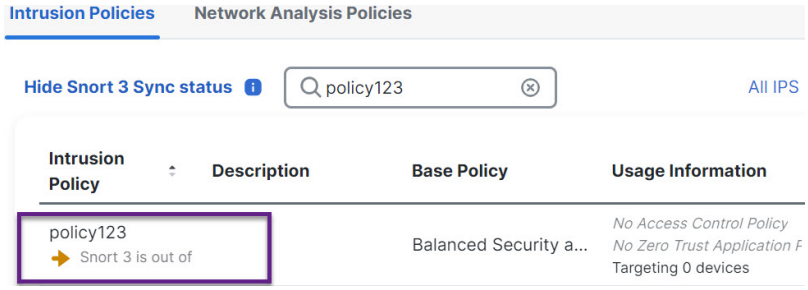
Procedure

Step 1 Choose **Policies** > **Security policies** > **Intrusion** > **Intrusion Policies**.

Step 2 In the **Intrusion Policies** tab, click **Show Snort 3 Sync status**.

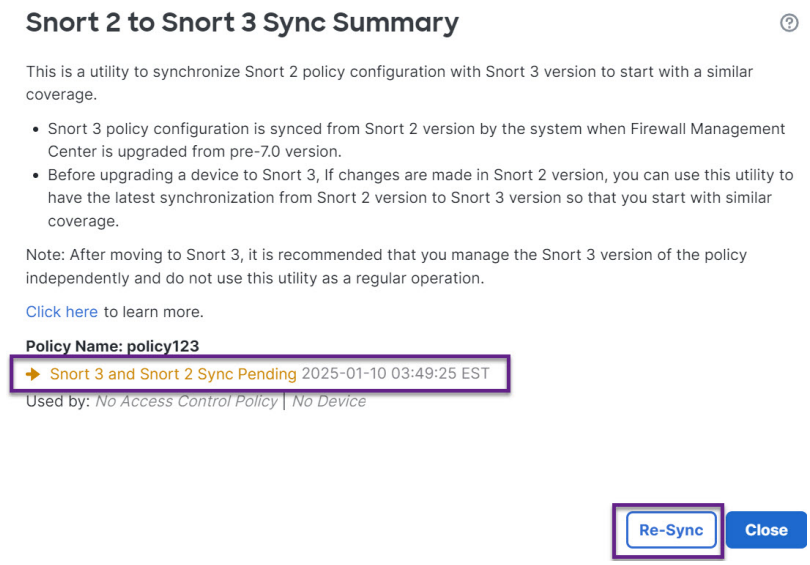


If your policy displays an orange arrow, it indicates that the Snort 2 and the Snort 3 versions of the intrusion policy are not synchronized.



Step 3 Click the orange arrow.

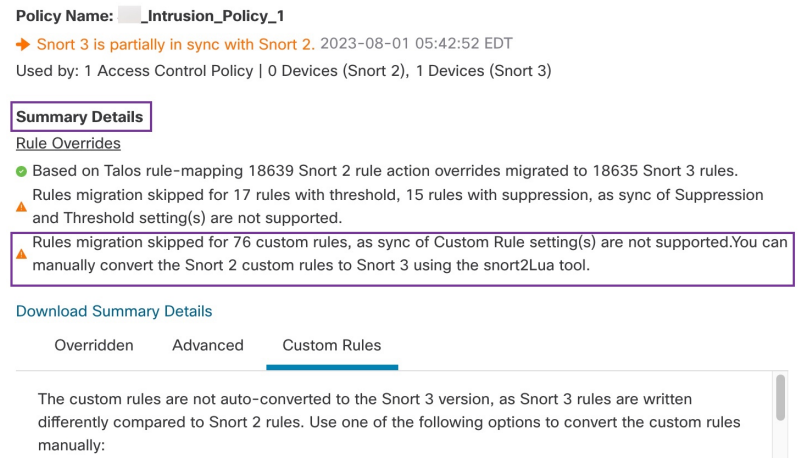
The **Snort 2 to Snort 3 Sync Summary** page displays that the Snort 2 to Snort 3 sync is pending.



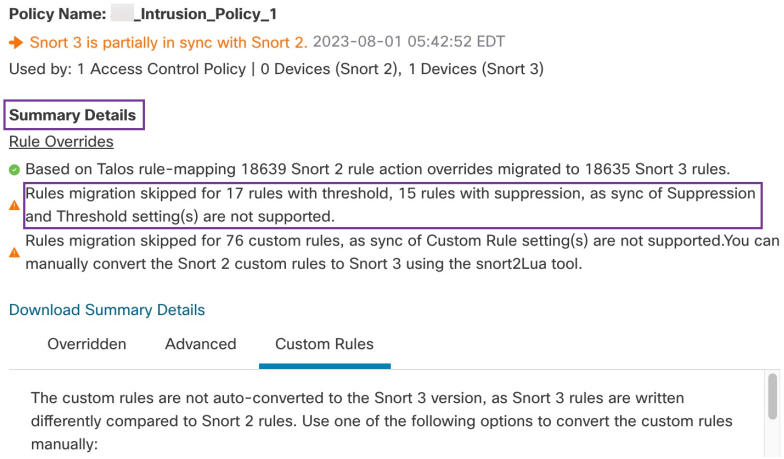
Step 4 Click **Re-Sync** to start the synchronization.

Note
When you click **Re-Sync**, the snort2Lua tool converts the rules from Snort 2 to Snort 3.

The **Summary Details** section lists the rules that were migrated or skipped. In our use case, there are 76 custom Snort 2 rules, 17 rules with thresholds, and 15 rules with suppression that were skipped during the sync process. To migrate the custom rules, go to the next step.

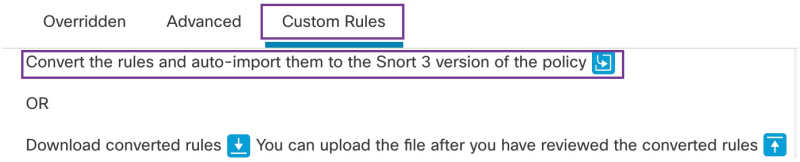


To migrate rules with thresholds and suppressions, go to Step 6.



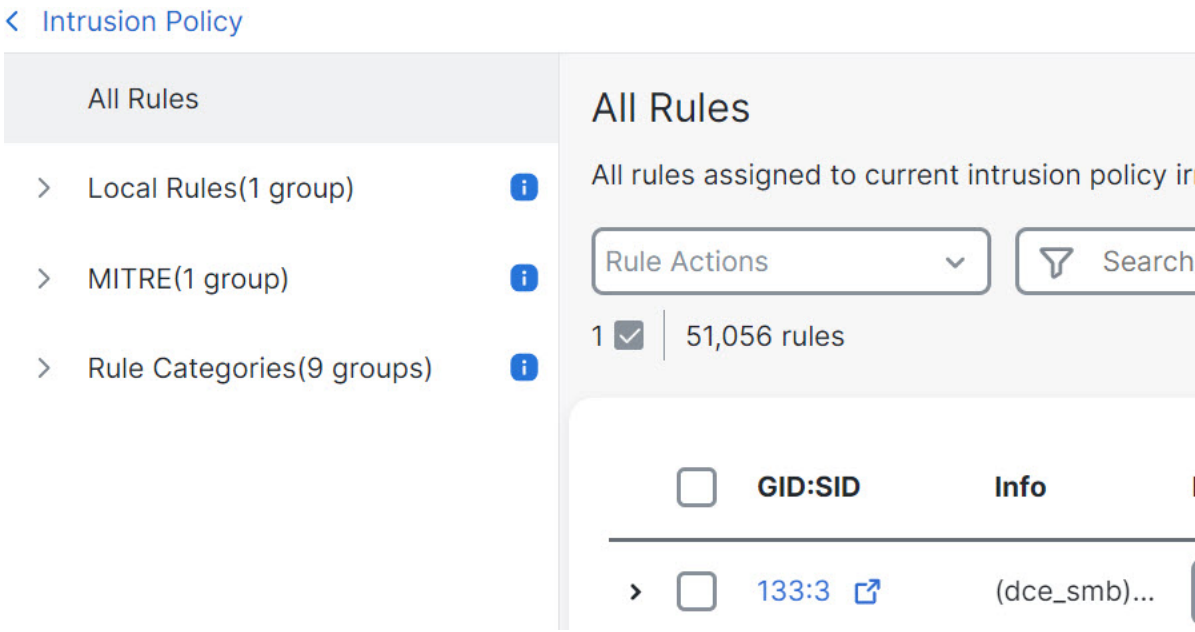
Step 5 To migrate the 76 custom rules, perform either one of these steps:

- In the **Custom Rules** tab, click the **Import** icon to convert and auto-import the local rules to the Snort 3 version of the policy.

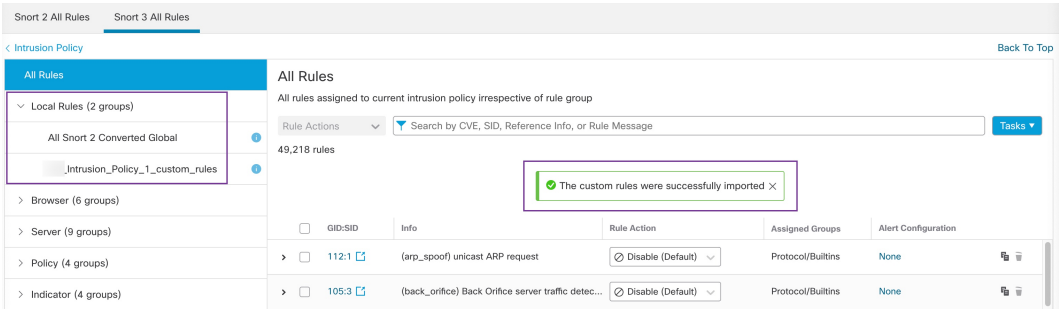


  A confirmation message is displayed after the rules are successfully imported.

- Choose **Policies** > **+ Show more** > **Security policies** > **Intrusion Rules** and click **Snort 3 All Rules**.
  a. Click **Local Rules** in the left panel to check if any rules have been migrated. Notice that no custom rules from Snort 2 have been migrated.
  b. From the **Tasks** drop-down list, choose **Convert Snort 2 rules and import**.

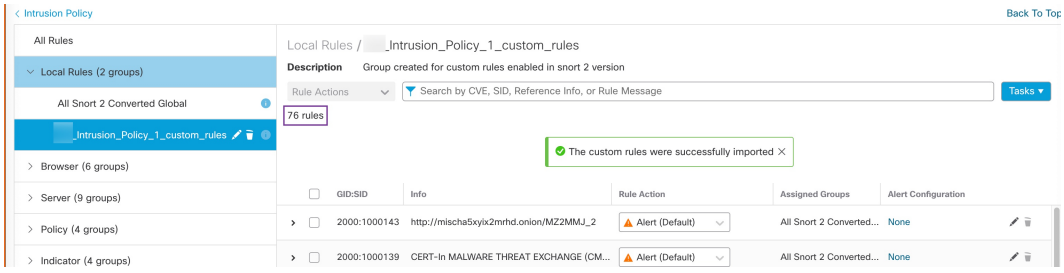


c. Click **OK**.



A newly created rule group (**All Snort 2 Converted Global**) is created under **Local Rules** in the left panel.

Notice that all 76 custom rules have been migrated, as shown in the following figure.



Alternatively, you can select the **Convert Snort 2 rules and download** in the previous step to save the rules file locally. You can review the converted rules in the downloaded file and later upload them using the **Upload Snort 3 rules** option.

Step 6 Click the **Download Summary Details** link to download the rules in .txt format.

The following is a sample of the summary that is displayed.


```
  "id": "00505691-15DC-0ed3-0000-004294988561",
  "name": "_Intrusion_Policy_1",
  "type": "IntrusionPolicy",
  "syncStatus": {
    "source": {
      "id": "bdce2d6a-1ebe-11ee-8e88-220032eb1fb5",
      "type": "IntrusionPolicy"
    },
    "status": "WARN",
    "description": "Migration is partially successful. Some of the rules are not copied to
 Snort3.",
    "timestamp": 1690883954814,
    "lastUser": {
      "name": "admin"
    },
    "details": [
      {
        "type": "Summary",
        "status": "INFO",
        "description": "Based on Talos rule-mapping 18639 Snort 2 rule action overrides
migrated to 18635 Snort 3 rules."
      },
      {
        "id":
"1:1000156=alert,1:1000114=alert,1:1000160=alert,1:1000135=alert,1:1000115=alert,1:1000118=alert,


1:1000092=alert,1:1000139=alert,1:1000123=alert,1:1000159=alert,1:1000149=disabled,1:1000167=alert,


1:1000133=alert,1:1000095=alert,1:1000143=alert,1:1000106=alert,1:1000153=alert,1:1000097=alert,1:1000141=alert,


1:1000148=alert,1:1000090=alert,1:1000119=alert,1:1000112=alert,1:1000138=alert,1:1000128=alert,1:1000132=alert,


1:1000134=alert,1:1000145=disabled,1:1000110=disabled,1:1000107=alert,1:1000163=alert,1:1000124=alert,1:1000125=alert,


1:1000094=alert,1:1000113=disabled,1:1000147=alert,1:1000161=alert,1:1000105=disabled,1:1000140=alert,1:1000111=alert,


1:1000102=alert,1:1000129=disabled,1:1000108=alert,1:1000144=disabled,1:1000088=alert,1:1000091=alert,1:1000131=alert,


1:1000157=alert,1:1000120=alert,1:1000126=alert,1:1000165=alert,1:1000146=alert,1:1000162=alert,1:1000116=alert,1:1000142=alert,


1:1000170=disabled,1:1000169=alert,1:1000104=alert,1:1000099=disabled,1:1000171=alert,1:1000093=alert,1:1000087=alert,1:1000100=alert,


1:1000137=alert,1:1000158=alert,1:1000103=alert,1:1000098=alert,1:1000127=disabled,1:1000130=alert,1:1000164=alert,1:1000089=alert,

         1:1000109=alert,1:1000136=alert,1:1000117=alert,1:1000166=alert,1:1000168=alert",
        "type": "PolicyInfo",
        "description": "Corresponding Snort 2 policy overridden custom (local) rules."
      },
      {
        "type": "AssignedDevices",
        "status": "INFO",
        "description": "Snort3:0 , Snort2:0"
      },
```

```
{
  "id": "122:6",
  "type": "Threshold",
  "status": "ERROR",
  "description": "PSNG_TCP_FILTERED_DECOY_PORTSCAN"
},
{
  "id": "122:15",
  "type": "Threshold",
  "status": "ERROR",
  "description": "PSNG_IP_PORTSWEEP_FILTERED"
 },
{
  "id": "122:1",
  "type": "Threshold",
  "status": "ERROR",
  "description": "PSNG_TCP_PORTSCAN"
},
```


Step 7 Click **Close** to close the **Sync Summary** dialog box.

Step 8 To check the rules with status: ERROR, choose **Policies** > **Security policies** > **Intrusion** and click the **Snort 2** version of the intrusion policy.

Step 9 Under **Policy Information**, click **Rules** and filter for the rule. For example, enter **PSNG_TCP_PORTSCAN** in the **Filter**field to find the rule.

Step 10 Click **Show Details** to view the detailed version of the rule.

Step 11 Create the rule again in Snort 3 using Snort 3 rule guidelines and save the file as a .txt or .rules file. For more information, see www.snort3.org.

Step 12 Upload the custom rule that you just created locally to the list of all the Snort 3 rules. See Add Custom Rules to Rule Groups.

What to do next

Deploy configuration changes. See Deploy Configuration Changes, on page 8.

Deploy Configuration Changes

After you change configurations, deploy them to the affected devices.

Note This topic covers the basic steps involved in deploying configuration changes. We *strongly* recommend that you refer the *Deploy Configuration Changes* topic in the latest version of the *Cisco Secure Firewall Management Center Device Configuration Guide* to understand the prerequisites and implications of deploying the changes before proceeding with the steps.

Caution When you deploy, resource demands may result in a small number of packets dropping without inspection. Additionally, deploying some configurations restarts the Snort process, which interrupts traffic inspection. Whether traffic drops during this interruption or passes without further inspection depends on how the target device handles traffic.

Procedure

Step 1 On the Cloud-Delivered Firewall Management Center menu bar, click **Deploy** and choose **Deployment**.

The GUI page lists the devices with out-of-date configurations having **Pending**status.

- The **Modified By** column lists the users who have modified the policies or objects. Expand the device listing to view the users who have modified the policies for each policy listing.

  Note
  Usernames are not provided for deleted policies and objects.

- The **Inspect Interruption** column indicates if traffic inspection interruption might occur in the device during deployment.

  If this column is blank for a device, it indicates that there will be no traffic inspection interruptions on that device during deployment.

- The **Last Modified Time** column specifies the last time you made configuration changes.
- The **Preview** column allows you to preview the changes for the next deployment.
- The **Status** column provides the status for each deployment.

Step 2 Identify and choose the devices on which you want to deploy configuration changes.

- Search—Search for the device name, type, domain, group, or status in the search box.
- Expand—Click **Expand Arrow** (›) to view device-specific configuration changes to be deployed.

  When you check a check box adjacent to a device, all the changes made to the device and listed under the device, are pushed for deployment. However, you can use **Policy selection** ( ) to select individual policies or specific configurations to deploy while withholding the remaining changes without deploying them.

  Note
  - When the status in the **Inspect Interruption** column indicates (**Yes**) that deploying will interrupt inspection, and perhaps traffic, on a Firewall Threat Defense device, the expanded list indicates the specific configurations causing the interruption with the **Inspect Interruption** ( ).
  - When there are changes to interface groups, security zones, or objects, the impacted devices are shown as out-of-date on the Firewall Management Center. To ensure that these changes take effect, the policies with these interface groups, security zones, or objects, also need to be deployed along with these changes. The impacted policies are shown as out-of-date on the **Preview**page on the Firewall Management Center.

Step 3 Click **Deploy**.

Step 4 If the system identifies errors or warnings in the changes to be deployed, it displays them in the **Validation Messages** window. To view complete details, click the arrow icon before the warnings or errors.

You have the following choices:

- Deploy—Continue deploying without resolving warning conditions. You cannot proceed if the system identifies errors.

- Close—Exit without deploying. Resolve the error and warning conditions, and attempt to deploy the configuration again.

What to do next

During deployment, if there is a deployment failure, there is a possibility that the failure may impact traffic. However, it depends on certain conditions. If there are specific configuration changes in the deployment, the deployment failure may lead to traffic being interrupted. For details, see the Deploy Configuration Changes topic in the latest version of the *Cisco Secure Firewall Management Center Device Configuration Guide*.