Cisco Secure Network Analytics

Endpoint License and NVM Configuration Guide 7.4.0



Table of Contents

| Introduction | . 3 |
|--|-----|
| Overview | . 3 |
| Requirements | 3 |
| Updating to v7.4.0 | . 3 |
| Endpoint License Capabilities | . 4 |
| Configuration | . 5 |
| Configure NVM profile on AnyConnect Secure Mobility Client | 5 |
| Configure the Flow Collector | . 7 |
| Configure the Flow Collector for Off-Network Cached Flows (optional) | 8 |
| Verification | 10 |
| Flow Search | 10 |
| Opening Report Builder (Data Store only) | 10 |
| Contacting Support | 11 |

Introduction

Overview

Use this guide to configure Cisco Secure Network Analytics (formerly Stealthwatch) and the Cisco AnyConnect Secure Mobility Client Network Visibility Module (NVM) to allow:

- Storage of AnyConnect NVM fields
- Viewing the NVM fields
- Existing policy violation rules to trigger from NVM flows

A Secure Network Analytics with NVM supports UDP, but it does not support DTLS.

Requirements

- Secure Network Analytics v7.4.x with Cisco Secure Network Analytics Endpoint license. For more information about Endpoint license, refer to the <u>Smart Software</u> <u>Licensing Guide 7.4</u>
- AnyConnect Secure Mobility Client v4.7 and later

Updating to v7.4.0

We moved Report Builder from a separate app to the core Secure Network Analytics in v7.4.0. If you have a previous version of the app installed, your app will be removed automatically as part of the update to Secure Network Analytics v7.4.0. Make sure you follow the instructions in the <u>Update Guide</u>.

Do not uninstall your existing Report Builder app. If you uninstall Report Builder, all files associated with it, including your saved reports and temporary files, are deleted.

You do not need to uninstall your existing app. If you uninstall Report Builder, all files associated with it, including your saved reports and temporary files, are deleted. Do not delete the Report Builder existing app.

Endpoint License Capabilities

Endpoint license is now supported for Cisco Secure Network Analytics Data Store and provides:

- Full visibility to the endpoint, including on-network and off-network data
- Visibility to any NVM fields from the Endpoint Traffic (NVM) report in the Report Builder app
- A minimum of 30 days of storage of NVM data
- Improved processing and query performance

The following table provides performance estimates for a standard enterprise traffic profile (most customers):

| Flows per se | econd (FPS) | Number of | of Number of DS 6200s/ 31 Days | |
|--------------|-------------|-----------|--------------------------------|--|
| NetFlow | NVM | FC 4210s | Storage | |
| 300,000 | 150,000 | 1 | 3 | |

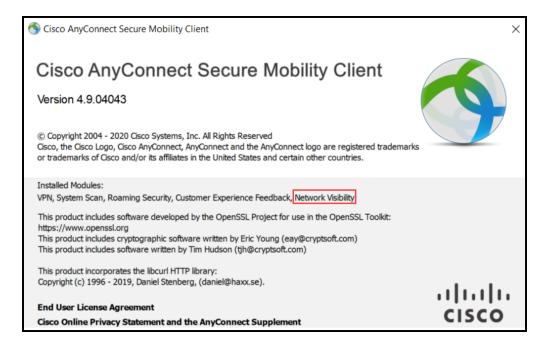
There are several factors that may affect your specific performance, such as number of hosts, average size of flows, and more. While we do our best to represent the data as fairly and accurately as possible, your environment may experience different limits.

Configuration

Configure NVM profile on AnyConnect Secure Mobility Client

The AnyConnect Profile Editor is available through Cisco Adaptive Security Device Manager (ASDM) or as a standalone offering. For more information about how to use the AnyConnect Profile Editor, refer to the <u>Cisco AnyConnect</u> <u>Administrator Guide</u>.

1. Verify you have installed the Network Visibility Module.



- 2. Open the Network Visibility Module Profile Editor.
- 3. In the **Collector Configuration** section, enter the **IP Address** and **Port** of your Flow Collector.

We recommend you use port 2030 rather than the default port, 2055. If port 2030 is already in use, you may use any non-reserved port. You will use this port in step 5 of the Configure the Flow Collector section.

Do not use ports 2055, 514, or 8514.

| File Help | | | | | |
|----------------------------------|--|--------------------------|---------|---|---|
| NVM Profile Profile: Untitled | | | Desktop | ~ | |
| Profile: Untitled | | | | | |
| Collector Configuration | | Cache Configuration | | | , |
| IP Address/FQDN | | Max Size | 50 MB | | |
| | | | | | |
| Port | | Max Duration | days | | |
| | | | | | |
| Periodic Template Report | 1440 mins | | | | |
| | Note: Valid range: 5mins - 24hrs(1440n | nins). | | | |
| Periodic Flow Report | 60 seconds | | | | |
| | Note: Valid range 60-360. To send at t | he start of the flow: 0. | | | |
| Aggregation Interval | 5 seconds | | | | |
| Throttle Rate | 500 Kbps | | | | N |
| | Note: Valid range: 12 - 2048. To disable | e: 0. | | | 5 |
| Collection Mode | All Networks | \sim | | | |
| Collection Criteria | Broadcast packets | | | | |
| | Multicast packets | | | | |
| Data Collection Policy | | Add | | | |
| | | Edit | | | |
| | | Delete | | | |
| | | | | | |
| Trusted Network Detection | Configure | | | | |
| | | | | | |
| | | | | | |
| | | 🕕 Help | | | |

- 4. Click **File > Save** to save your NVM Profile.
- 5. Close the NVM Profile Editor.
- 6. Open the VPN Profile Editor.
- 7. Click on Preferences (Part 2).
- 8. Check the Automatic VPN Policy check box.
- 9. For **Trusted Network Policy**, select **Connect** from the drop down.
- 10. For **Untrusted Network Policy**, select **DoNothing** from the drop down.
- 11. Enter your Trusted DNS Domains, Trusted Servers, and Certificate Hash.

| The Trusted Servers should be the IP addresses of the DNS servers on the | network. |
|--|--|
| | The Trusted Servers should be the IP addresses of the DNS servers on the |

| AnyConnect Profile Editor - | VPN | - 0 | \times |
|-----------------------------|---|------------------------|----------|
| File Help | | | |
| VPN | Preferences (Part 2) Profile: Untitled | | |
| Preferences (Part 2) | Automatic VPN Policy | | ^ |
| Certificate Pinning | Trusted Network Policy | Connect ~ | |
| Certificate Matching | Untrusted Network Policy | DoNothing \checkmark | |
| Server List | Trusted DNS Domains | *.cisco.com | |
| | Trusted DNS Servers | | |
| | Note: adding all DNS servers in use is recommended with Trust | ed Network Detection | |
| | Trusted Servers @ https:// <server>[:<port>]</port></server> | | |
| | https:// | Add | |
| | | Delete | |
| | | | |
| | | | |
| | | | |
| | Certificate Hash: | Set | |
| | | | |
| | Always On | (More Information) | |
| | Allow VPN Disconnect | | |
| | Connect Failure Policy | Closed 🗸 | |
| | Allow Captive Portal Remediation | | |
| | Remediation Timeout (min.) | 5 | |
| | Apply Last VPN Local Resource Rules | | |
| | Captive Portal Remediation Browser Failover | | ~ |
| | (i) Help | | |

- 12. Click **File > Save** to save your preferences.
- 13. Close the AnyConnect Profile Editor.

Configure the Flow Collector

- 1. Log in to your Manager.
- From the navigation menu, click the ^C (Global Settings) icon and select Central Management.
- 3. Click the *** (Ellipsis) icon for your Flow Collector, then click View Appliance Statistics. The Flow Collector Admin interface opens.
- 4. Click Support > Advanced Settings.
- In the nvm_netflow_port field, set the value to the port specified in step 2 of the <u>Configure NVM profile on AnyConnect Secure Mobility Client</u> section. For example, port 2030.

If a field is not shown, scroll to the bottom of the page. Click the **Add New Option** field. For more information about editing advanced settings on the Flow Collector, refer to the *Advanced Settings* Help topic.

| max_service_bandwidth_pool | 166 | |
|-----------------------------|--------|--|
| max_templates_pool | 4 | |
| max_threshold_pool | 172 | |
| max_valid_ping_len | 90 | |
| min_asymmetric_flows | 50 | |
| min_emails_per_period | 30 | |
| min_threat_confidence_level | 10 | |
| nvm_age_limit_days | 0 | |
| nvm_netflow_port | 2030 | |
| process_old_nvm_flows | 0 | |
| quiet_long_flow_duration | 32400 | |
| quiet_long_flow_max | 300000 | |
| restart_hour | 4 | |
| | | |

- 6. Click Apply.
- 7. When the confirmation message is shown, click **OK**.
- 8. To configure the Flow Collector for Offline Data Collection, continue to the next section. Do not close the Flow Collector.

Configure the Flow Collector for Off-Network Cached Flows (optional)

Use the following instructions to configure cache flow processing for collecting offnetwork NVM data.

Collecting off-network NVM data impacts system performance. Do not enable this configuration if you do not need to collect or analyze this data.

If you enable the configuration and your system performance is impacted, adjust the throttle rate (refer to the <u>AnyConnect Administator Guide</u>) and/or decrease the nvm_age_limit_days (refer to the instructions in this section).

- Before you start this procedure, make sure you finish the previous procedures. You
 will continue this configuration in the Flow Collector engine Support > Advanced
 Settings. If the Flow Collector is closed, log in to it directly, or:
 - Log in to your Manager.
 - From the navigation menu, click the 🌣 (Global Settings) icon and select Central Management.
 - Click the *** (Ellipsis) icon for your Flow Collector, then click View Appliance Statistics. The Flow Collector Admin interface opens.
 - Click Support > Advanced Settings.
- 2. Update the following fields:
 - process_old_nvm_flows: Enter 1 to enable cached flows.
 - nvm_age_limit_days: Enter the maximum number of days to collect cached flows.

For example, if you enter 7, it collects the last 7 days. If you enter 0 (zero), there is no limit. For best performance, set a limited number of days.

If a field is not shown, scroll to the bottom of the page. Click the Add New
 Option field. For more information about editing advanced settings on the Flow Collector, refer to the Advanced Settings Help topic.

- 3. Click Apply.
- 4. When the confirmation message is shown, click **OK**.

Verification

Flow Search

- 1. Log in to your Manager.
- 2. Click Analyze > Flow Search.
- 3. Run a Flow Search.
- 4. On the Flow Search Results, filter the table by the **Subject Process Name** to verify you are getting NVM flows.

Opening Report Builder (Data Store only)

The Endpoint Traffic (NVM) report is only available in Secure Network Analytics with a Data Store.

- 1. Log in to your Manager.
- 2. Select the **Dashboards** menu.
- 3. Select Report Builder.
- 4. Click Create New Report and select Endpoint Traffic (NVM).
- 5. Click Run.
- 6. Verify the report is showing NVM fields.

To access the Help for Report Builder, click the **(Help**) icon. The Help includes instructions and details about the Endpoint Traffic (NVM) report.

Contacting Support

If you need technical support, please do one of the following:

- Contact your local Cisco Partner
- Contact Cisco Support
- To open a case by web: http://www.cisco.com/c/en/us/support/index.html
- To open a case by email: tac@cisco.com
- For phone support: 1-800-553-2447 (U.S.)
- For worldwide support numbers: https://www.cisco.com/c/en/us/support/web/tsd-cisco-worldwide-contacts.html

Copyright Information

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <u>https://www.cisco.com/go/trademarks</u>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)