Tenable and Splunk Integration Guide

Last Revised: February 27, 2024

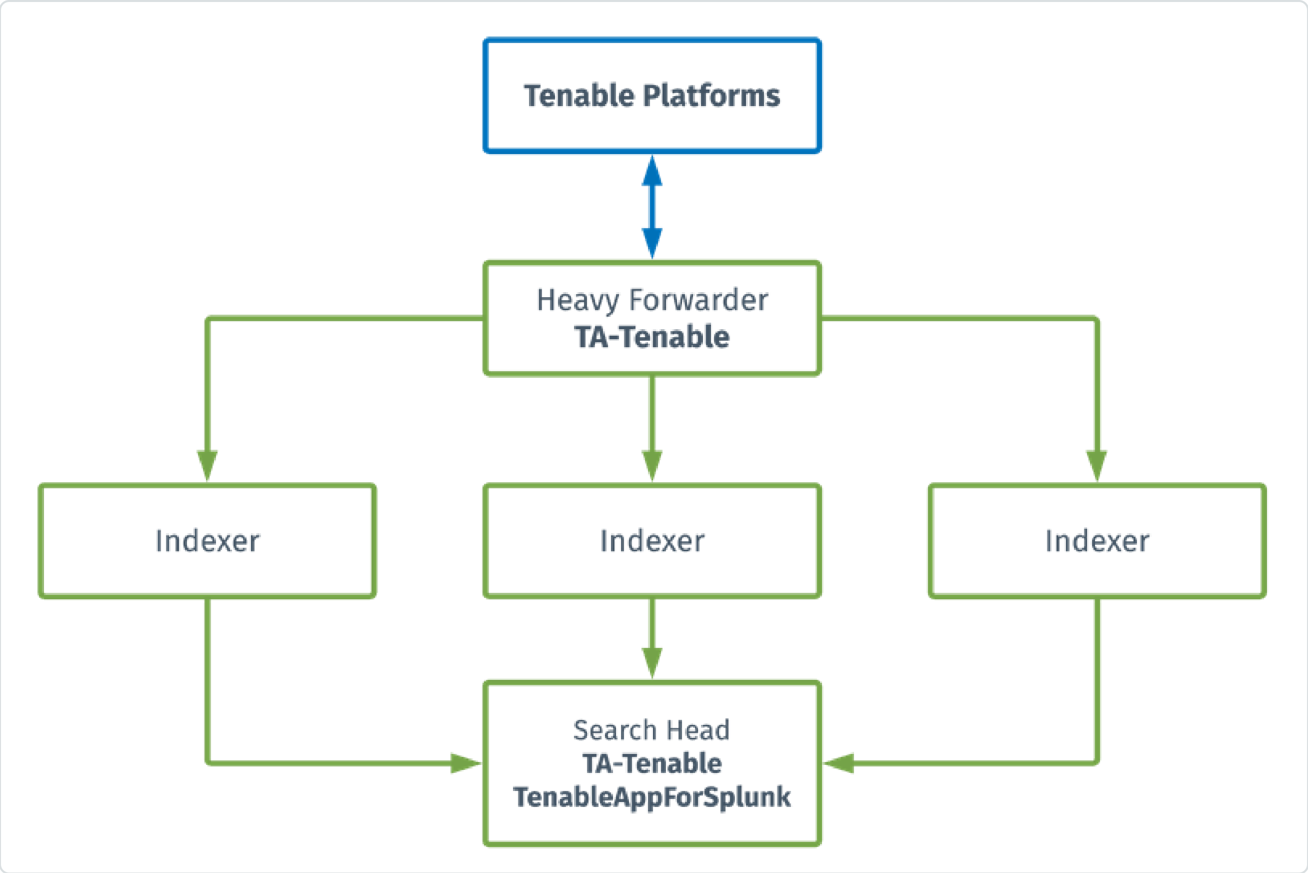
Table of Contents

Welcome to Tenable for Splunk

The Tenable for Splunk application performs data collection, normalization, and visualization. The application is divided into two parts:

- Tenable Add-On for Splunk (TA-tenable) provides all data collection and normalization functionality.
- Tenable App for Splunk provides a dashboard to view the Tenable data in Splunk.

Tenable Application Topology


Tenable Platforms
Heavy Forwarder
TA-Tenable
Indexer
Indexer
Indexer
Search Head
TA-Tenable
TenableAppForSplunk

Components

The Tenable Add-on has specific purposes for each Splunk component. The available components are in the following list:

Heavy Forwarder

The **Heavy Forwarder** collects and forwards data for all events.

> **Note:** Configure inputs to run from the heavy forwarder.

> **Note:** Enable the key value store (KV) on the heavy forwarder.

Search Head

The **Search Head** allows full functionality of the Tenable Add-on adaptive response actions.

> **Note:** Configure the **Search Head** with the same configuration details you have on the **Heavy Forwarder** for the adaptive response actions to work correctly.

> **Note:** If you install the Tenable App for Splunk on the search head, you must also install the Tenable Add-on.

Tenable Add-on (TA-tenable)

The Tenable Add-On for Splunk pulls data from Tenable platforms and normalizes it in Splunk.

The current Tenable Add-On uses the following API endpoints:

Asset Export

> **Note:** By default, assets/export endpoints fetch both licensed and unlicensed assets.

- POST /assets/export
- GET /assets/export/{export_uuid}/status
- GET /assets/export/{export_uuid}/chunks/{chunk_id}

Vulnerability Export

> **Note:** By default, vulns/export endpoints fetch only licensed vulnerabilities.

- POST /vulns/export
- GET /vulns/export/{export_uuid}/status
- GET /vulns/export/{export_uuid}/chunks/{export_uuid}

Plugins

- GET /plugins/plugin

Source and Source Types

The Tenable Add-on for Splunk stores data with the following sources and source types.

Tenable Security Center

Source	Source type	Description
<username>|<address>	tenable:sc:vuln	Collects cumulative vulnerability and compliance data from active and agent scans.
<username>|<address>	tenable:sc:assets	Collects all assets data.
<username>|<address>	tenable:sc:plugin	Collects all plugin detail data.

Tenable Vulnerability Management

Source	Source type	Description
tenable_io://<data input name>	tenable:io:vuln	Collects cumulative vulnerability data from active, agent and frictionless assessment scans from licensed assets.
tenable_io://<data input name>	tenable:io:assets	Collects all assets data.
tenable_io://<data input name>	tenable:io:plugin	Collects all plugin detail data.

Tenable OT Security

Source	Source type	Description
tenable_ot://<data input name>	tenable:ot:vuln	Collects cumulative vulnerability data from active, agent and frictionless assessment scans from licensed assets.
tenable_ot://<data input	tenable:ot:assets	Collects all assets data.

name>		
tenable_ot://<data input name>	tenable:ot:plugin	Collects all plugin detail data.

Splunk Common Information Model Mapping

This chart displays mapping for Tenable vulnerability findings to Splunk Common Information Model (CIM).

Field Name from Tenable Vulnerability Management API	Field Name from Tenable Security Center API	CIM Field Name	CIM Data Model
asset_fqdn	dnsName	dns_name	vulnerability
ipv4	ip	dest_ip	vulnerability
plugin.bid	bid	bugtraq	vulnerability
plugin.family	family.name	category	vulnerability
plugin.synopsis	synopsis	signature	vulnerability
Tenable	Tenable	vendor	vulnerability
Tenable.io	Tenable.sc	product	vulnerability

Installation Workflow

Use the following workflow to complete the installation and configuration of the Tenable applications for Splunk.

> **Note**: The Tenable Splunk integration app versions 6.0.3 and later do not support web application findings, host audits, or cloud findings. Refer to one of Tenable's other integration applications with Splunk (e.g., Tenable Web App Scanning Add-on for Splunk). For a list of available Splunk applications, see Splunk's Discover Apps page.

Before you begin:

- Complete the Upgrade from Splunk V1 to Splunk V2.

To install and configure Tenable applications for Splunk:

1. Install the Tenable application.
2. Configure the required Tenable application for Splunk: Tenable Vulnerability Management, Tenable Security Center Credentials, Tenable Security Center Certificates, Tenable Nessus Network Monitor, Tenable Identity Exposure, or OT Security.

   > **Note**: You need unique credentials for each Splunk environment.

3. Create an input for the configured Tenable application for Splunk.
4. Configure your Tenable App for Splunk dashboard.
5. Configure adaptive response actions.

Splunk Environments

The installation process for Splunk varies based on your Splunk environment.

Deployment Types

Single-server, distributed deployment, and cloud instance options are available.

Single-Server Deployment

In a single-server deployment, a single instance of Splunk Enterprise works as a data collection node, indexer, and search head. Use this instance to install the Tenable Add-on and Tenable App on this node. Complete the setup to start data collection.

Distributed Deployment

In a distributed deployment, install Splunk on at least two instances. One node works as a search head, while the other node works as an indexer for data collection.

The following table displays Tenable Add-On and Tenable App installation information in the distributed environment.

Component	Forwarder	Indexer	Search Head
Tenable Add-on for Splunk (TA-Tenable)	Yes • configure accounts • configure data input	No	Yes • configure accounts
Tenable-SC App for Splunk (Tenable App)	No	No	Yes

Cloud Instance

In Splunk Cloud, the data indexing takes place in a cloud instance.

> **Note:** The data collection can take place in an on-premises Splunk instance that works as a heavy forwarder.

You can install the application via a command line or from the Splunk user interface.

Installation

For Tenable Vulnerability Management:

Minimum Required User Role: Basic User

Note: The Tenable integration with Splunk works with a **Basic User** if that user is assigned **Can View** permissions on the assets they are to export, along with **Can Use** permissions on tags the assets are assigned. Without the **Can Use** tag permissions, the assets return undefined or the integration fails to export vulnerabilities if a tag filter is used. For more information on Tenable Vulnerability Management permissions and user roles, refer to Permissions in the *Tenable Developer Portal*.

For Tenable Security Center:

Minumum Required User Role: Vulnerability Analyst

Before you begin:

- You must have Splunk downloaded on your system with a Splunk basic login.

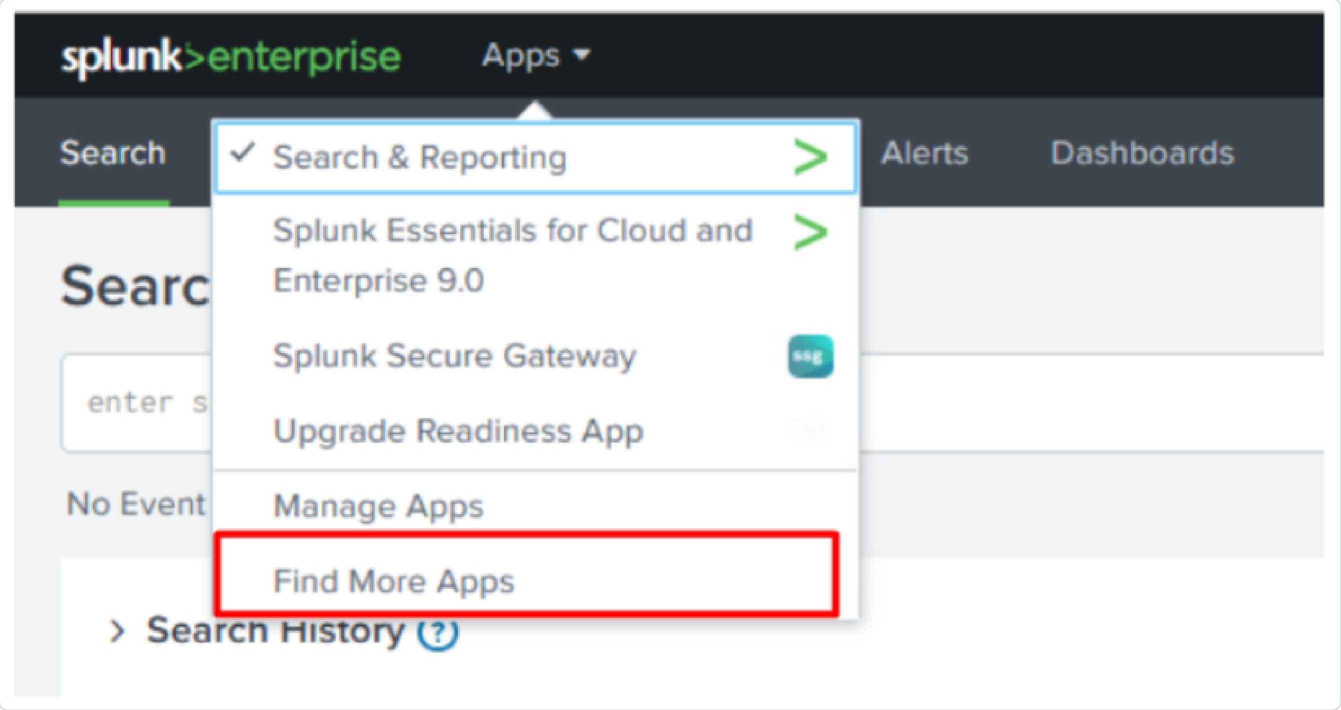
Note: See the Splunk Environments section for additional information about the different types of Splunk deployments and their requirements.

Note: If you install the Tenable App for Splunk on the search head, you must also install the Tenable Add-on.

To install Tenable Add-on for Splunk and Tenable App for Splunk for the first time:

1. Log in to Splunk.
2. Go to **Apps** at the top of the screen.

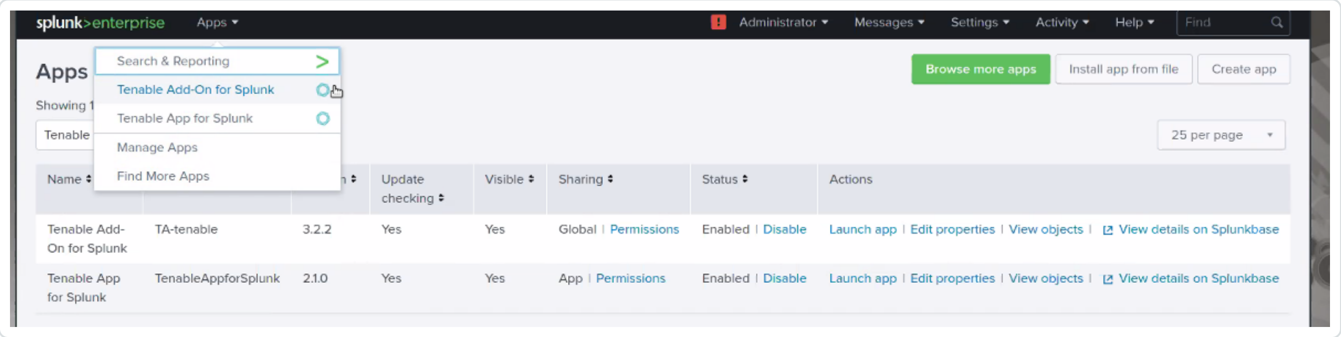
   A drop-down menu appears:



3. Click **Find More Apps**.

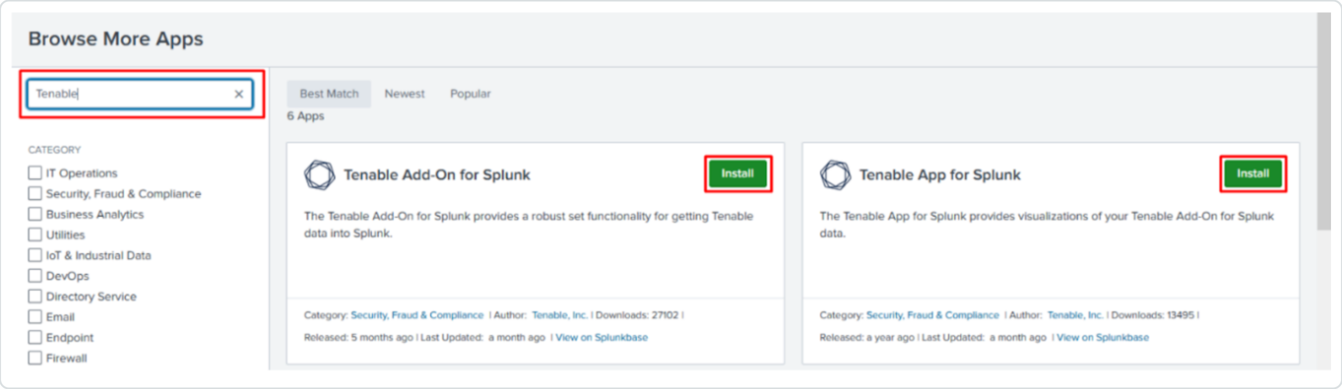
4. On the **Browse More Apps** page, type Tenable in the search bar.

   Tenable-related options appear:



Name ⇕		n ⇕	Update checking ⇕	Visible ⇕	Sharing ⇕	Status ⇕	Actions
Tenable Add-On for Splunk	TA-tenable	3.2.2	Yes	Yes	Global | Permissions	Enabled | Disable	Launch app | Edit properties | View objects | View details on Splunkbase
Tenable App for Splunk	TenableAppforSplunk	2.1.0	Yes	Yes	App | Permissions	Enabled | Disable	Launch app | Edit properties | View objects | View details on Splunkbase

5. Click the **Install** button next to **Tenable Add-on for Splunk**.



The Tenable Add-On for Splunk provides a robust set functionality for getting Tenable data into Splunk.

Category: Security, Fraud & Compliance | Author: Tenable, Inc. | Downloads: 27102 |
Released: 5 months ago | Last Updated: a month ago | View on Splunkbase

The Tenable App for Splunk provides visualizations of your Tenable Add-On for Splunk data.

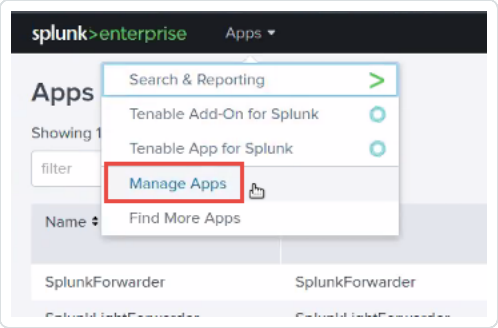
Category: Security, Fraud & Compliance | Author: Tenable, Inc. | Downloads: 13495 |
Released: a year ago | Last Updated: a month ago | View on Splunkbase

6. Restart Splunk if a **Restart Required** prompt displays.

To upgrade Tenable Add-on for Splunk and Tenable App for Splunk:

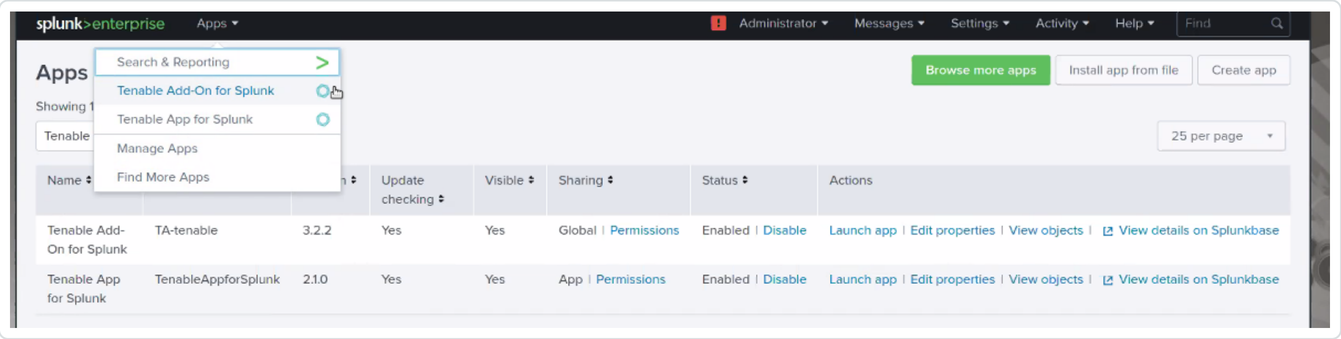
1. Log in to Splunk.
2. Go to **Apps** at the top of the screen.

   A drop-down menu appears:



3. Click **Manage Apps**.
4. In the search bar, type Tenable.

   Tenable-related options appear:



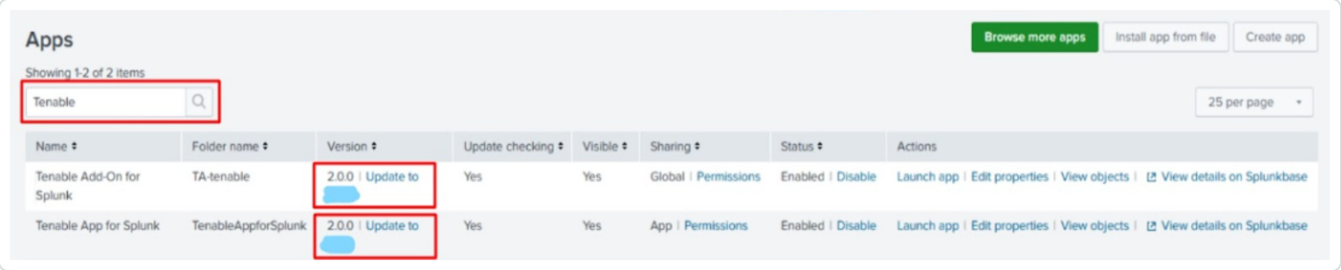
Apps

Showing 1

Tenable

Name ⇕		n ⇕	Update checking ⇕	Visible ⇕	Sharing ⇕	Status ⇕	Actions
Tenable Add-On for Splunk	TA-tenable	3.2.2	Yes	Yes	Global | Permissions	Enabled | Disable	Launch app | Edit properties | View objects | View details on Splunkbase
Tenable App for Splunk	TenableAppforSplunk	2.1.0	Yes	Yes	App | Permissions	Enabled | Disable	Launch app | Edit properties | View objects | View details on Splunkbase

5. In the **Version** column, click **Update to** x.y.z version link for Tenable Add-On for Splunk:



Apps

Showing 1-2 of 2 items

Tenable

Name ⇕	Folder name ⇕	Version ⇕	Update checking ⇕	Visible ⇕	Sharing ⇕	Status ⇕	Actions
Tenable Add-On for Splunk	TA-tenable	2.0.0 | Update to	Yes	Yes	Global | Permissions	Enabled | Disable	Launch app | Edit properties | View objects | View details on Splunkbase
Tenable App for Splunk	TenableAppforSplunk	2.0.0 | Update to	Yes	Yes	App | Permissions	Enabled | Disable	Launch app | Edit properties | View objects | View details on Splunkbase

6. Restart Splunk if a **Restart Required** prompt appears.

Note: You can set `use_milliseconds_for_sc_vulns = True` in the configuration under `TA-Tenable/default/ta_tenable_settings.conf` to enable millisecond based time fields in Tenable Security Center vulnerability data. Add the following lines under `local/ta_tenable_settings.conf` if you do not want the change to be reset after a plugin update: `[sc_configuration]` and `use_milliseconds_for_sc_vulns = True`

Note: You can optionally update the default chunk size for Tenable Vulnerability Management export host vulnerabilities and export host assets sync calls. To update the default setting, open the `$SPLUNK_HOME/etc/apps/TA-tenable/default/inputs.conf` file, and update the value of `vuln_num_assets` (number of assets used to chunk the vulnerabilities) and `assets_chunk_size` (number of assets per exported chunk) in `tenable_io` stanza as per requirement. Save the file changes and restart Splunk.

Note: You may need to update the Tenable Macro, **get_tenable_index**, for data to begin populating the application dashboards.

Note: If SSL Verification is not needed for a particular product, you can set it to 'False' by navigating to `$SPLUNK_HOME/etc/apps/TA-tenable/bin/tenable_consts.py` and disable it for that particular product. The list of product flags:

- `verify_ssl_for_ot = True`
- `verify_ssl_for_sc_cert = True`
- `verify_ssl_for_sc_api_key = True`
- `verify_ssl_for_sc_creds = True`

Next, configure the Tenable application.

Configuration

Tenable provides multiple application configuration options for the Tenable Add-On for Splunk.

View the corresponding pages for steps to configure your application:

- Tenable Identity Exposure
- Tenable Vulnerability Management
- Tenable Tenable Nessus Network Monitor
- Tenable.ot
- Tenable Security Center Credentials
- Tenable Security Center Certificates

> **Note**: Splunk versions 6.0.3 and later do not support web application findings, host audits, or cloud findings.

Create a Tenable OT Security Account

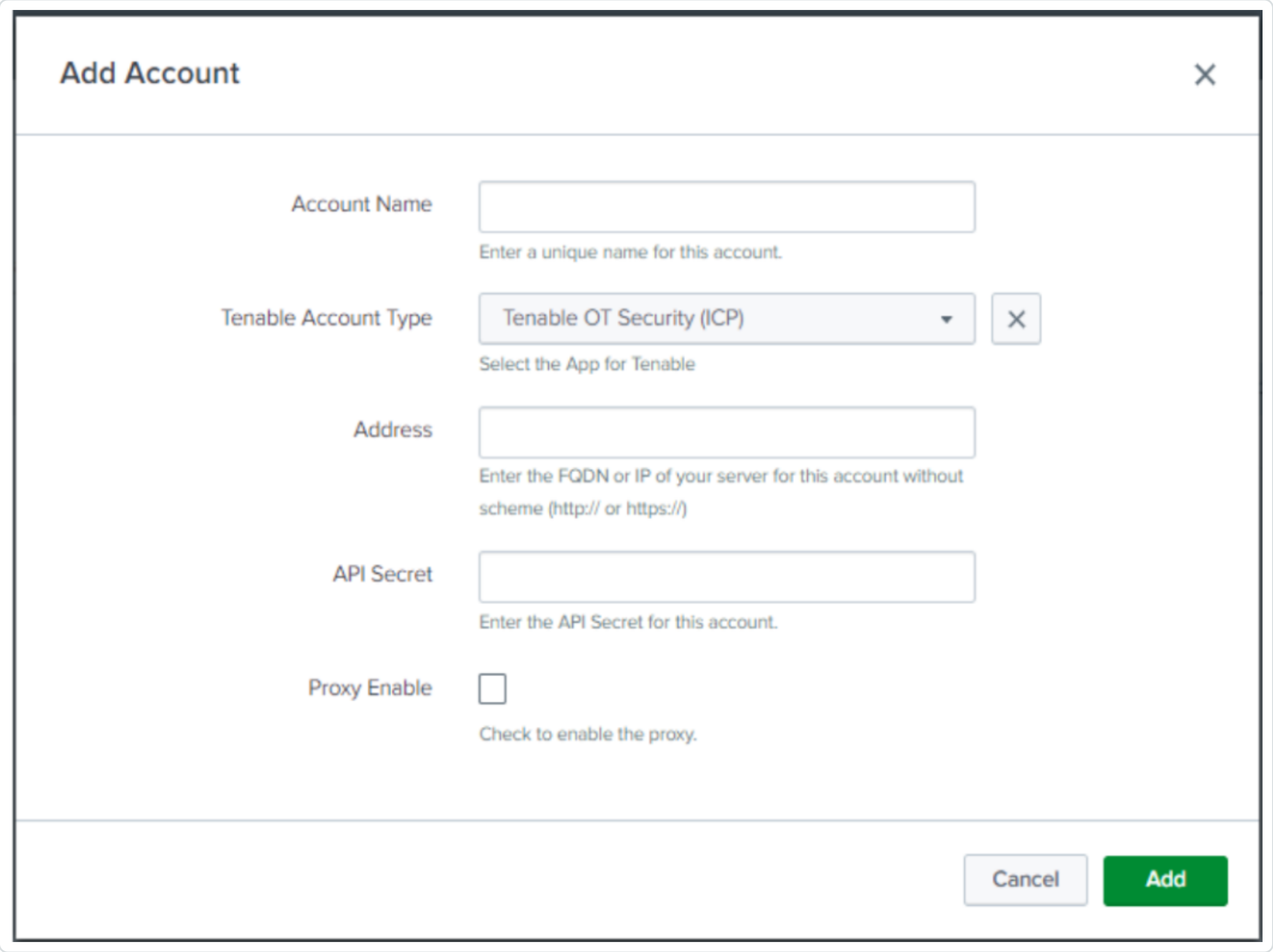
Connect to OT Security by creating the account configuration.

Note: The OT Security integration is available for Splunk add-on version 6.3.0 and later.

Account Creation

Complete the following steps to configure your account:

1. Navigate to the **Tenable Add-on for Splunk** > **Configuration**.
2. Under the **Account** tab click **Add**.
3. Select **Tenable OT Security (ICP)** in the **Tenable Account Type** drop-down.



Add Account

Account Name
Enter a unique name for this account.

Tenable Account Type: Tenable OT Security (ICP)
Select the App for Tenable

Address
Enter the FQDN or IP of your server for this account without scheme (http:// or https://)

API Secret
Enter the API Secret for this account.

Proxy Enable □
Check to enable the proxy.

4. Enter a name in the **Account Name** field.
5. Enter the FQDN or IP of your server for this account without scheme (http:// or https://) in the **Address** field.
6. Enter your API secret in the **API Secret** field.

> **Note**: For more information on API keys, see Generate an API Key.

7. (Optional If you are using a proxy, click the **Proxy Enable** checkbox and complete the proxy fields.
8. Click **Add** to save the configuration.

Create the Tenable OT Security Input

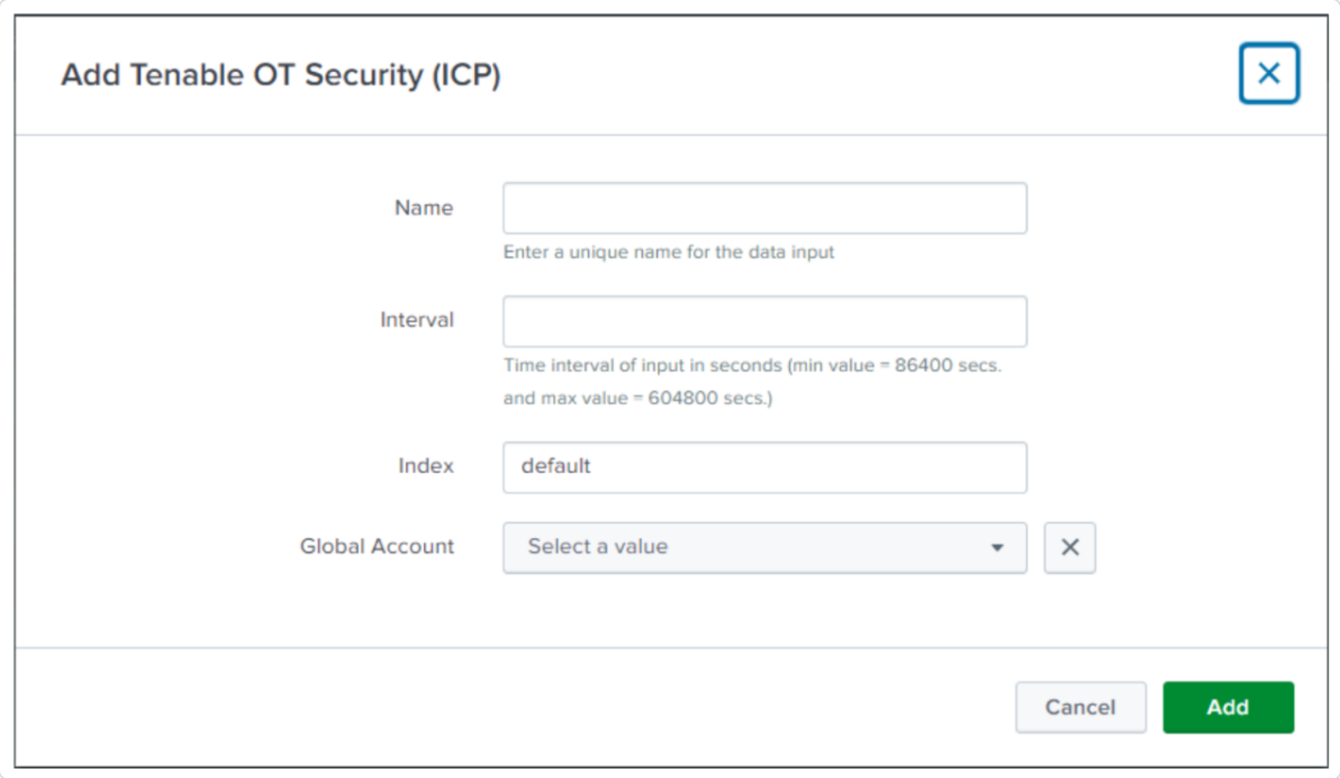
You can connect to OT Security by setting up the input configuration.

> **Note:** The OT Security integration is available for Splunk add-on version 6.3.0 and later.

Input Configuration

Complete the following steps to configure the input:

1. Navigate to the **Tenable Add-on for Splunk** > **Inputs**.
2. Click **Create New Input** > **Tenable OT Security (ICP)**.



Add Tenable OT Security (ICP)

Name

Enter a unique name for the data input

Interval

Time interval of input in seconds (min value = 86400 secs. and max value = 604800 secs.)

Index: default

Global Account: Select a value

3. Enter a unique name for the data input in the **Name** field
4. Enter the time interval of input. (Measured in seconds, after which data gets collected again. min value = 86400 secs. max value = 604800 secs)
5. Select the index in which you want to collect the data.
6. Select your configured account in the **Global Account** field.

7. Select the lowest level of vulnerability in the **Lowest Severity to Store** field that you want to collect.

8. Click **Add** to save the input.

Tenable OT Security Data Collection

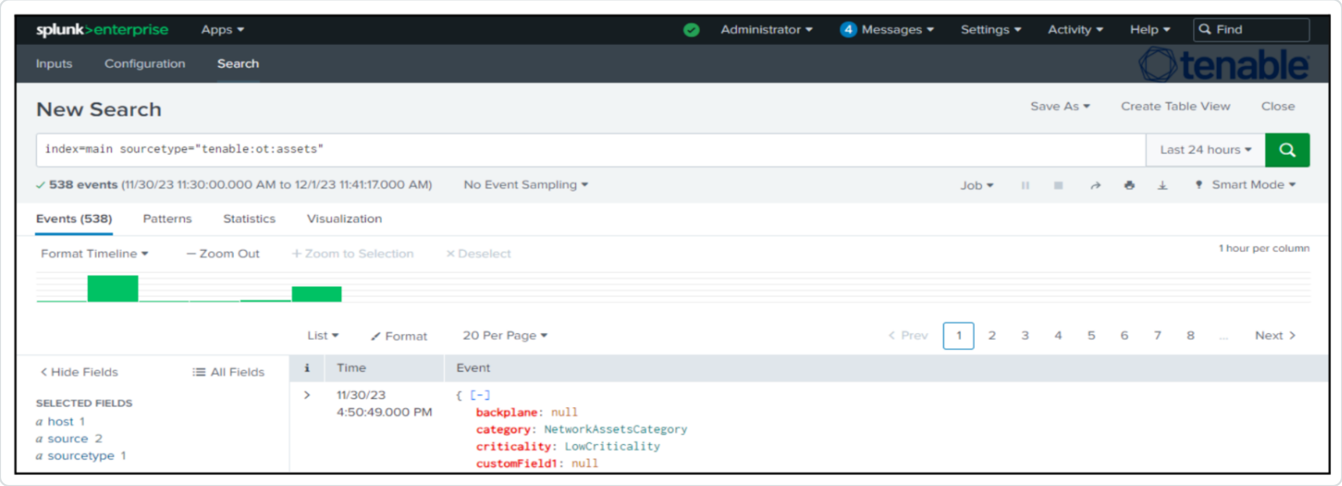
You can connect to OT Security data collection.

Note: The OT Security integration is available for Splunk add-on version 6.3.0 and later.

Data Collection

Three types of data are collected for OT Security:

- Assets data. Stored in the **tenable:ot:assets** sourcetype:



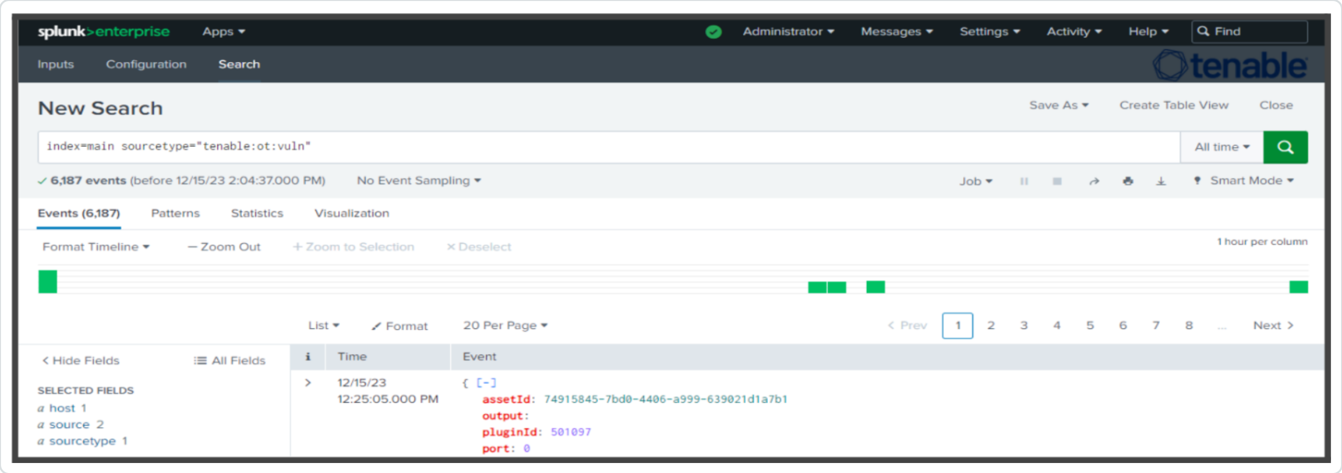
```
index=main sourcetype="tenable:ot:assets"
```

✓ 538 events (11/30/23 11:30:00.000 AM to 12/1/23 11:41:17.000 AM)

11/30/23 4:50:49.000 PM

```
{ [-]
   backplane: null
   category: NetworkAssetsCategory
   criticality: LowCriticality
   customField1: null
```

- Vulnerability data. Stored in the **tenable:ot:vuln** sourcetype:



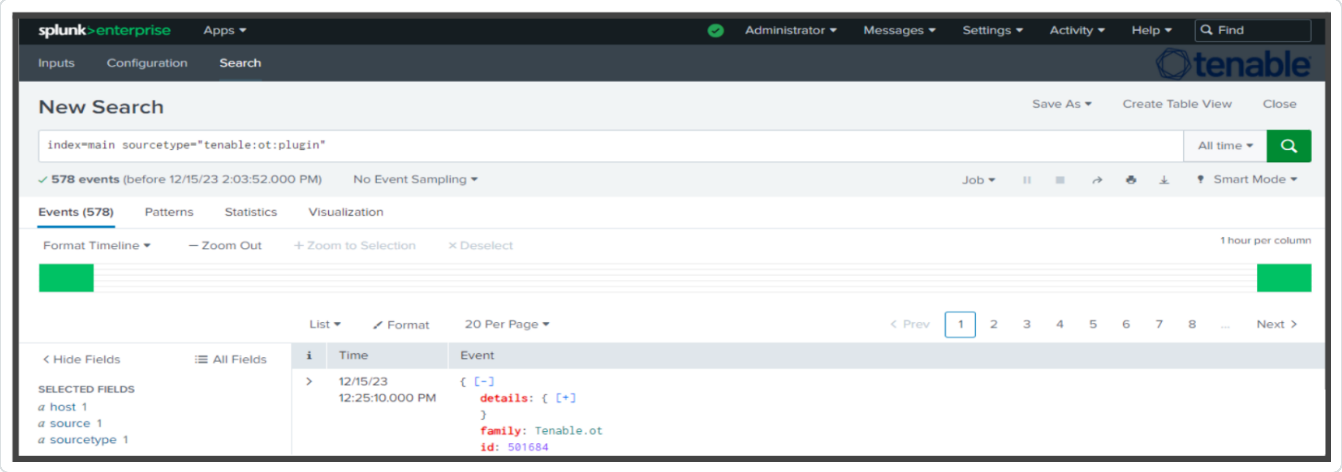
```
index=main sourcetype="tenable:ot:vuln"
```

✓ 6,187 events (before 12/15/23 2:04:37.000 PM)

12/15/23 12:25:05.000 PM

```
{ [-]
   assetId: 74915845-7bd0-4406-a999-639021d1a7b1
   output:
   pluginId: 501097
   port: 0
```

- Plugins data. Stored in **tenable:ot:plugin** sourcetype:



```
index=main sourcetype="tenable:ot:plugin"
```

✓ 578 events (before 12/15/23 2:03:52.000 PM)

```
> 12/15/23          { [-]
  12:25:10.000 PM     details: { [+]
                      }
                      family: Tenable.ot
                      id: 501684
```

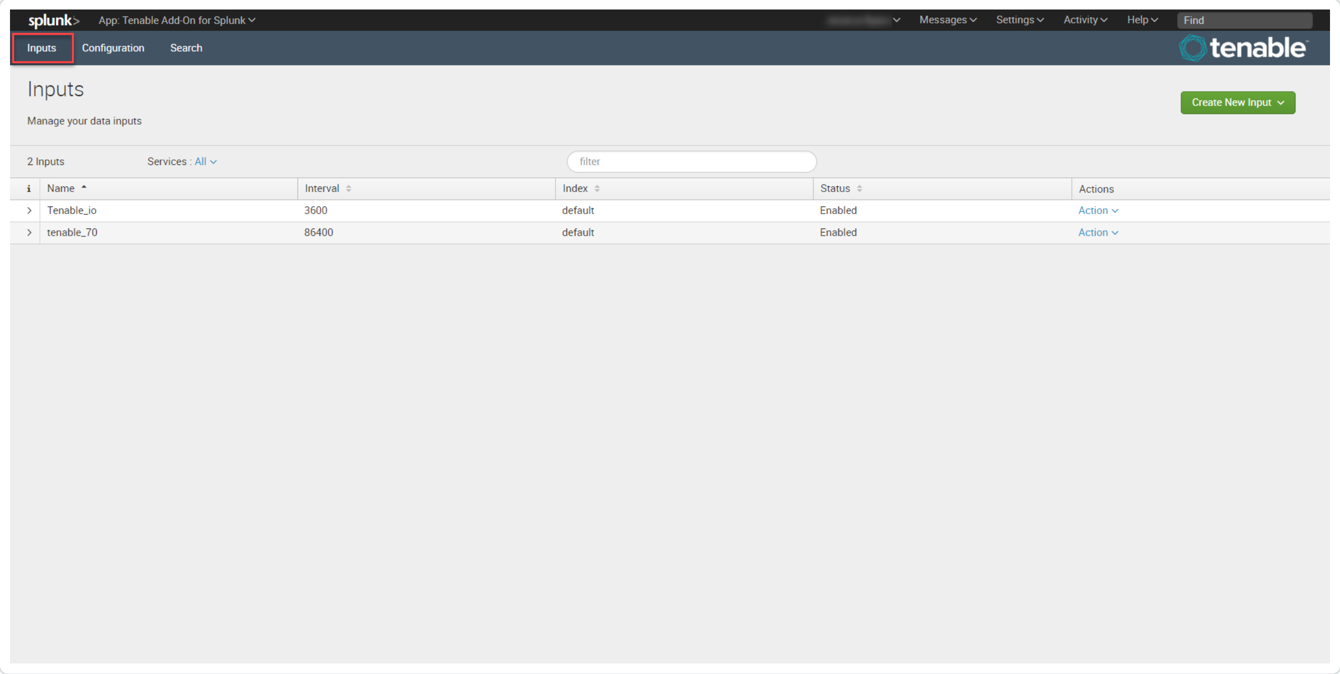
For more information, see Source and Source Types.

Create an Input

After you complete the configuration for your Tenable Add-On for Splunk, you must create the input. The following process outlines input creation if you have a deployment with Tenable Add-On for Splunk orTenable App for Splunk,.

To create an input:

1. In the left navigation bar, click **Tenable Add-On for Splunk**, **Tenable App for Splunk**,.
2. Click the **Inputs** tab.



Inputs

Manage your data inputs

2 Inputs   Services : All

i	Name	Interval	Index	Status	Actions
>	Tenable_io	3600	default	Enabled	Action
>	tenable_70	86400	default	Enabled	Action

3. Click **Create New Input**.

   A new configuration window appears.

4. Provide the following information.

> **Note:** If you don't use the default index, you must update the Tenable Macro.

Tenable Vulnerability Management

Input Parameters	Description	Required

Name		The unique name for each Tenable data input.	Yes
Interval		The interval parameter specifies when the input restarts to perform the task again. This supports seconds (between 3600 and 86400) or a cron schedule.	Yes
Index		The index in which to store Tenable Vulnerability Management data.	Yes
Global Account		Splunk pulls data from this Tenable account.	Yes
Sync Plugin Details		If selected, the related tags in Tenable assets include plugin details.	Yes
Host Vulnerability	Start Time	The date and time to start collecting host data. If you leave this field blank, the integration collects all historical data. (Enter in this format - YYYY-MM-DD hh:mm:ss.)	No
	Lowest Severity Score	The lowest level of severity stored.	No

	Historical Fixed Vulnerability	Allows the import of host vulnerabilities fixed before the current day.	No
	Tags	Limits host vulnerabilities pulled to host assets that have tags selected.	No

Tenable Security Center Vulnerability

Input Parameters	Description	Required
Name	The unique name for each Tenable data input.	Yes
Interval	The interval parameter specifies when the input restarts to perform the task again. The parameter supports seconds (between 300 and 86400) or a cron schedule. **Note:** Restricting the input to collect data during inactive scan periods with a cron schedule is recommended, especially for large Security Center deployments. For smaller deployments, a minimum interval of one hour (3600) can be used.	Yes
Index	The index in which to store Tenable Security Center data.	Yes
Global Account	Splunk pulls data from this Tenable account.	Yes
Start Time	The date and time to start collecting data. If you leave this field blank, the integration collects all historical data.	No

	Note: Uses the *YYYY-MM-DD hh:mm:ss* format.	
Sync Plugin Details	If selected, the related tags in Tenable assets include plugin details.	Yes
Historical Fixed Vulnerability	Allows the import of vulnerabilities fixed before the current day.	No
Query Name	A name for Tenable Security Center vulnerability filter. **Note:** The interval must be query type **Vulnerability Detail List**.	No
Max Event Size	Maximum allowed size for an event.	No
Page Size	Number of events to be fetched in one page.	No

Tenable Security Center Mobile

Input Parameters	Description	Required
Name	The unique name for each Tenable data input.	Yes
Interval	The interval parameter specifies when the input restarts to perform the task again (in seconds).	Yes
Index	The index in which to store Tenable Security Center data.	Yes
Global Account	Splunk pulls data from this Tenable account.	Yes
Query Name	A name for Tenable Security Center vulnerability filter.	No

	Note: The interval must be query type - **Vulnerability Detail List**.	

5. Click **Add** to create the input.

6. Run the **All Time** saved search.

7. Schedule an **All Time** saved search.

Note: Tenable recommends running the saved search every 24 hours. However, you can adjust as needed.

Note: Asset and vulnerabilities in Splunk might differ from individual scan results since the Splunk integration synchronizes cumulative vulnerability and asset data from the Tenable API endpoints.

Configure Tenable Identity Exposure

You can connect to Tenable Identity Exposure using a syslog input. Configure a default UDP/TCP data input of Splunk with the following steps.

Source Type	Description
tenable:ad:alerts	This option configures Splunk to accept Tenable Identity Exposure alerts.

To configure Tenable Identity Exposure with Splunk:

Complete the following steps in Splunk

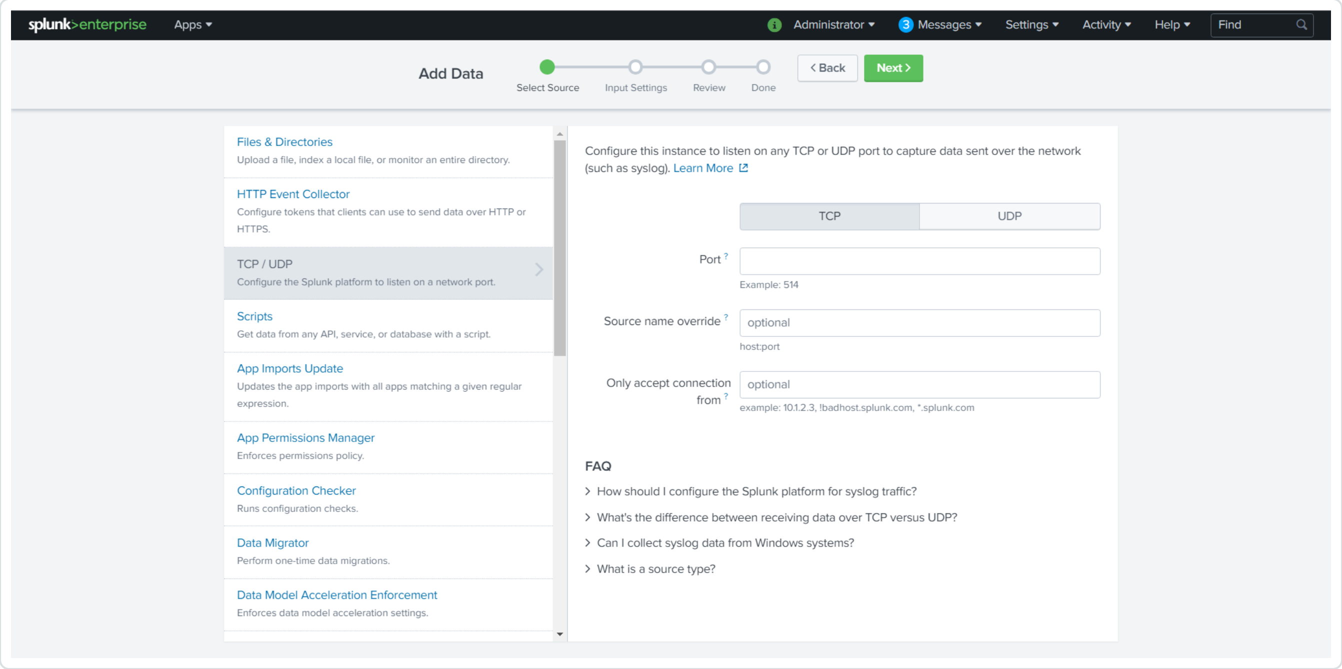
1. In the top navigation bar, click **Settings** > **Data Inputs**.

   The **Data Inputs** page appears.

2. In the **Local Inputs** section, scroll to **TCP** or **UDP**.

3. Click the **+ Add New** option in the **TCP** or **UDP** row.

   The **Add Data** page appears with the **TCP/UDP** option selected.



Files & Directories
Upload a file, index a local file, or monitor an entire directory.

HTTP Event Collector
Configure tokens that clients can use to send data over HTTP or HTTPS.

TCP / UDP
Configure the Splunk platform to listen on a network port.

Scripts
Get data from any API, service, or database with a script.

App Imports Update
Updates the app imports with all apps matching a given regular expression.

App Permissions Manager
Enforces permissions policy.

Configuration Checker
Runs configuration checks.

Data Migrator
Perform one-time data migrations.

Data Model Acceleration Enforcement
Enforces data model acceleration settings.

Configure this instance to listen on any TCP or UDP port to capture data sent over the network (such as syslog). Learn More

Port ?
Example: 514

Source name override ? optional
host:port

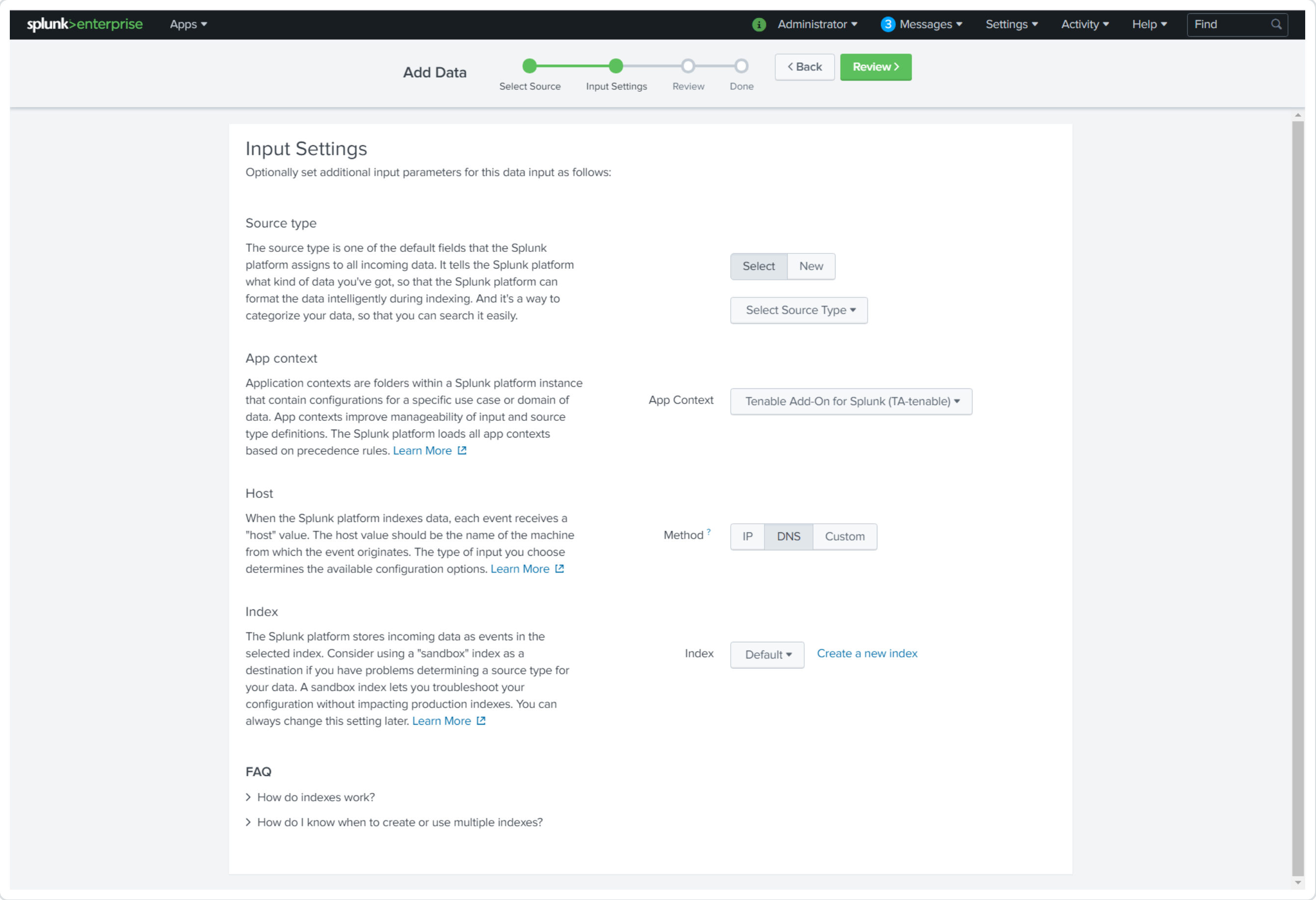
Only accept connection from ? optional
example: 10.1.2.3, !badhost.splunk.com, *.splunk.com

- How should I configure the Splunk platform for syslog traffic?
- What's the difference between receiving data over TCP versus UDP?
- Can I collect syslog data from Windows systems?
- What is a source type?

4. Enter the port configuration information.

5. At the top of the page, click **Next**.

   The **Input Settings** page appears:



Input Settings

Optionally set additional input parameters for this data input as follows:

Source type

The source type is one of the default fields that the Splunk platform assigns to all incoming data. It tells the Splunk platform what kind of data you've got, so that the Splunk platform can format the data intelligently during indexing. And it's a way to categorize your data, so that you can search it easily.

Select | New

Select Source Type ▾

App context

Application contexts are folders within a Splunk platform instance that contain configurations for a specific use case or domain of data. App contexts improve manageability of input and source type definitions. The Splunk platform loads all app contexts based on precedence rules. Learn More

App Context: Tenable Add-On for Splunk (TA-tenable) ▾

Host

When the Splunk platform indexes data, each event receives a "host" value. The host value should be the name of the machine from which the event originates. The type of input you choose determines the available configuration options. Learn More

Method ?: IP | DNS | Custom

Index

The Splunk platform stores incoming data as events in the selected index. Consider using a "sandbox" index as a destination if you have problems determining a source type for your data. A sandbox index lets you troubleshoot your configuration without impacting production indexes. You can always change this setting later. Learn More

Index: Default ▾ Create a new index

FAQ

> How do indexes work?

> How do I know when to create or use multiple indexes?

6. For the **Source Type** option, click **New**.

   More options appear.

7. In the **Source Type** box, enter *tenable:ad:alerts*.

8. In the **Source Type Category** drop-down, select **Tenable**.

9. (Optional) Enter a description in the **Source Type Description** field.

10. Scroll down to the **Index** option.

11. Click on the **Index** drop-down menu.

12. Select an **Index**.

13. At the top of the page, click **Review**.

14. Review your configuration settings.

> **Note:** If your configuration needs edits, click **Back** to update your settings.

15. At the top of the page, click **Done**.

Complete the following steps in Tenable Identity Exposure

1. In the Tenable Identity Exposure console, under **Local Settings**, go to the **Servers > Syslog Servers** screen.

2. Click **+ Add Syslog Server**.

   The **Syslog Server** configuration window appears.

3. In the **Server Name** field, enter a name for your Splunk system.

4. In the **Hostname\IP** field, enter the IP address of your Splunk system.

5. In the **Port** field, enter the port number on the Splunk system to which the events will be sent.

6. In the **Transport** field, select from the drop-down list the transport protocol in use. (Options are **TCP** or **UDP***)*.

7. Click **Send Test Message** to send a test message to verify that the configuration was successful, and check if the message has arrived. If the message did not arrive, then troubleshoot to discover the cause of the problem and correct it.

8. Click **Save**.

Configure Tenable Nessus Network Monitor

You can connect to Tenable Nessus Network Monitor using a syslog input. Configure a default UDP/TCP data input of Splunk with the following steps.

Source Type	Description
tenable:nnm:vuln	This contains all vulnerability data.

To configure Tenable NNM with Splunk:

Complete the following steps in Splunk

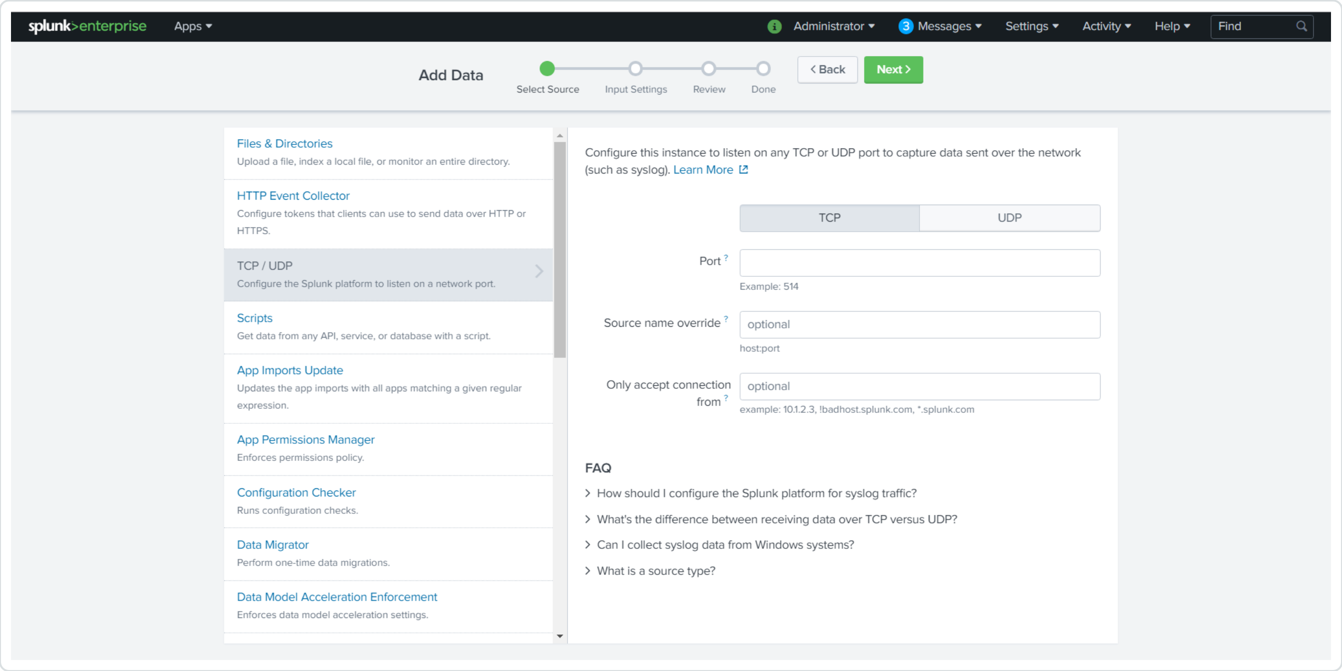
1. In the top navigation bar, click **Settings** > **Data Inputs**.

   The **Data Inputs** page appears.

2. In the **Local Inputs** section, scroll to **TCP** or **UDP**.

3. Click the **+ Add New** option in the **TCP** or **UDP** row.

   The **Add Data** page appears with the **TCP/UDP** option selected.



Files & Directories: Upload a file, index a local file, or monitor an entire directory.

HTTP Event Collector: Configure tokens that clients can use to send data over HTTP or HTTPS.

TCP / UDP: Configure the Splunk platform to listen on a network port.

Scripts: Get data from any API, service, or database with a script.

App Imports Update: Updates the app imports with all apps matching a given regular expression.

App Permissions Manager: Enforces permissions policy.

Configuration Checker: Runs configuration checks.

Data Migrator: Perform one-time data migrations.

Data Model Acceleration Enforcement: Enforces data model acceleration settings.

Configure this instance to listen on any TCP or UDP port to capture data sent over the network (such as syslog). Learn More

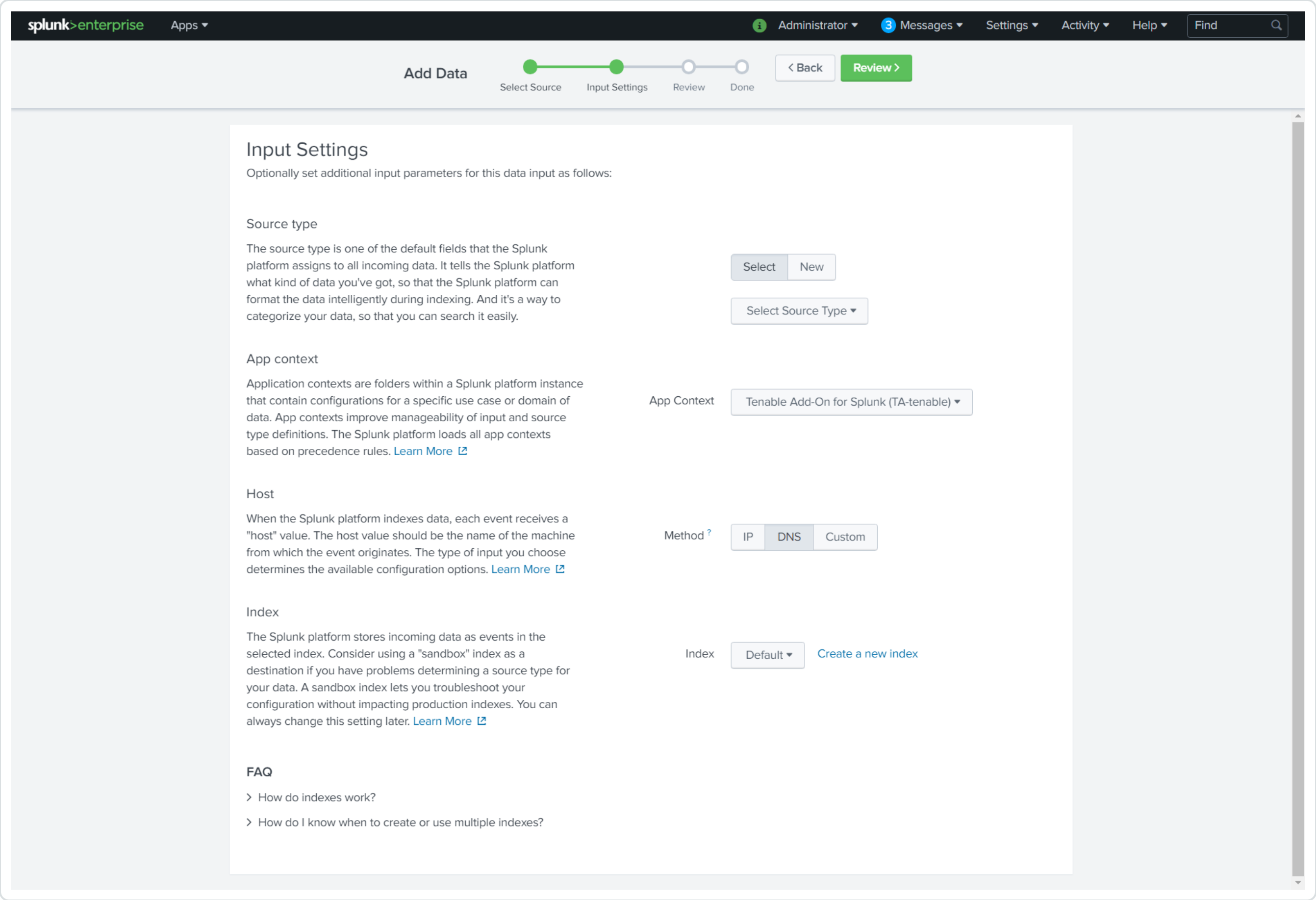
FAQ

- How should I configure the Splunk platform for syslog traffic?
- What's the difference between receiving data over TCP versus UDP?
- Can I collect syslog data from Windows systems?
- What is a source type?

4. Enter the port configuration information.

5. At the top of the page, click **Next**.

   The **Input Settings** page appears:



Input Settings

Optionally set additional input parameters for this data input as follows:

Source type

The source type is one of the default fields that the Splunk platform assigns to all incoming data. It tells the Splunk platform what kind of data you've got, so that the Splunk platform can format the data intelligently during indexing. And it's a way to categorize your data, so that you can search it easily.

Select | New

Select Source Type ▾

App context

Application contexts are folders within a Splunk platform instance that contain configurations for a specific use case or domain of data. App contexts improve manageability of input and source type definitions. The Splunk platform loads all app contexts based on precedence rules. Learn More

App Context: Tenable Add-On for Splunk (TA-tenable) ▾

Host

When the Splunk platform indexes data, each event receives a "host" value. The host value should be the name of the machine from which the event originates. The type of input you choose determines the available configuration options. Learn More

Method: IP | DNS | Custom

Index

The Splunk platform stores incoming data as events in the selected index. Consider using a "sandbox" index as a destination if you have problems determining a source type for your data. A sandbox index lets you troubleshoot your configuration without impacting production indexes. You can always change this setting later. Learn More

Index: Default ▾ Create a new index

FAQ

› How do indexes work?

› How do I know when to create or use multiple indexes?

6. For the **Source Type** option, click **New**.

   More options appear.

7. In the **Source Type** field, enter *tenable:nnm:vuln*.

8. In the **Source Type Category** drop-down, select **Tenable**.

9. (Optional) Enter a description in the **Source Type Description** field.

10. Scroll down to the **Index** option.

11. Click on the **Index** drop-down menu.

12. Select an **Index**.

13. At the top of the page, click **Review**.
14. Review your configuration settings.

    > **Note:** If your configuration needs edits, click **Back** to update your settings.

15. At the top of the page, click **Done**.

Complete the following steps in NNM

1. Log in to NNM.
2. Go to ⚙ > **Configuration**.

   The **Configuration** page appears.

3. In the **Setting Type** drop-down, click **Syslog**.

   The **Syslog** options appear.

4. Next to **Realtime Syslog Server List**, click **Add**.

   The **+Add Syslog Item** window appears.

5. In the **IP** field, enter the IP address of the Splunk server you configured to accept syslog.
6. In the **Port** field, enter the port number you have Splunk set to listen to when syslog is on.
7. For **Format Type**, select **Standard**.
8. For **Protocol**, select the protocol you have set up to accept the syslog for Splunk.

Configure Tenable Security Center Credentials

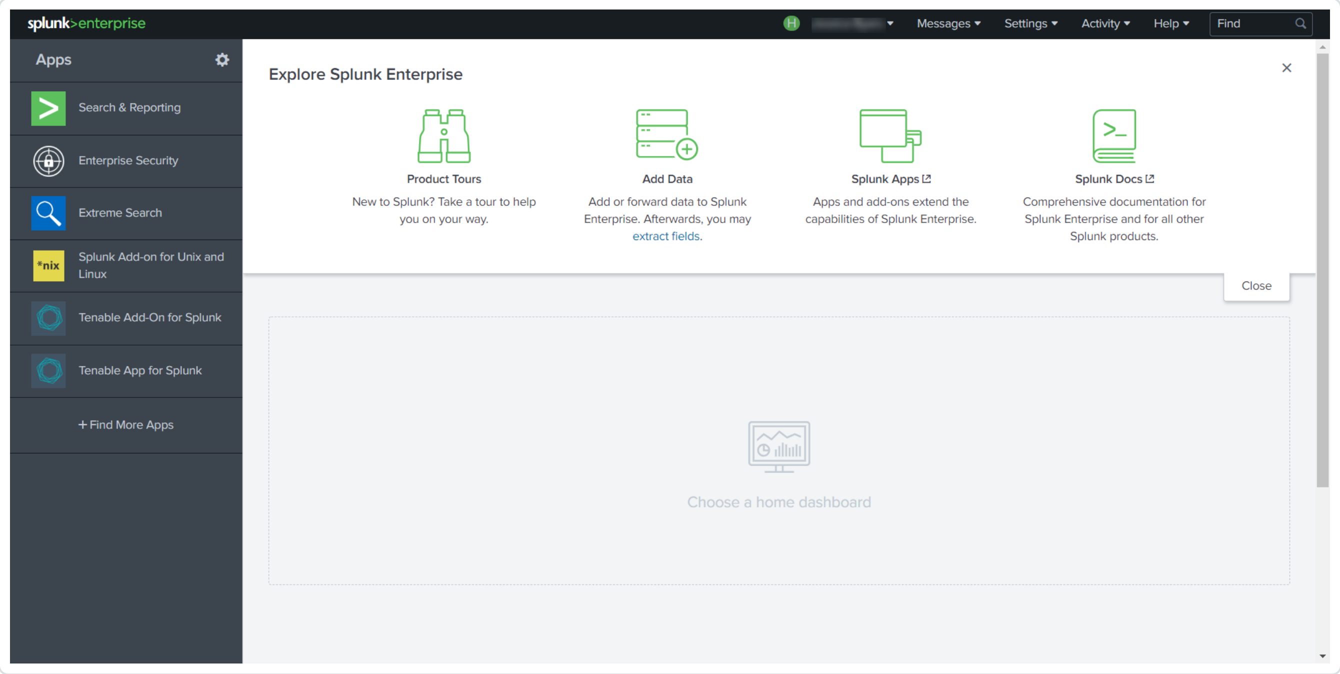
To complete the installation process, you must complete the setup for the Tenable Add-on for Splunk.

For Tenable Security Center:

Required User Role: Security Analyst

To set up the Tenable Add-on for Splunk:

1. Log in to your data collection node.
2. In the left navigation bar, click **Tenable Add-on for Splunk**.



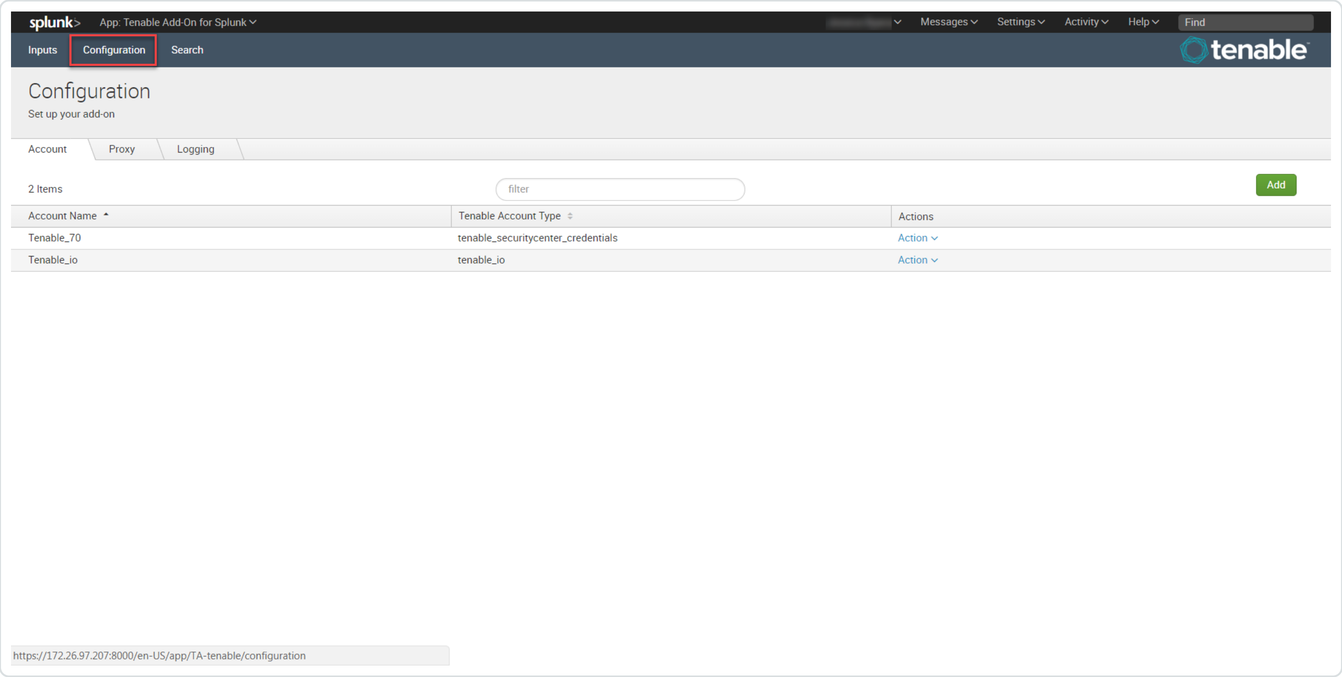
New to Splunk? Take a tour to help you on your way.

Add or forward data to Splunk Enterprise. Afterwards, you may extract fields.

Apps and add-ons extend the capabilities of Splunk Enterprise.

Comprehensive documentation for Splunk Enterprise and for all other Splunk products.

3. Click the **Configuration** tab.



Configuration

Set up your add-on

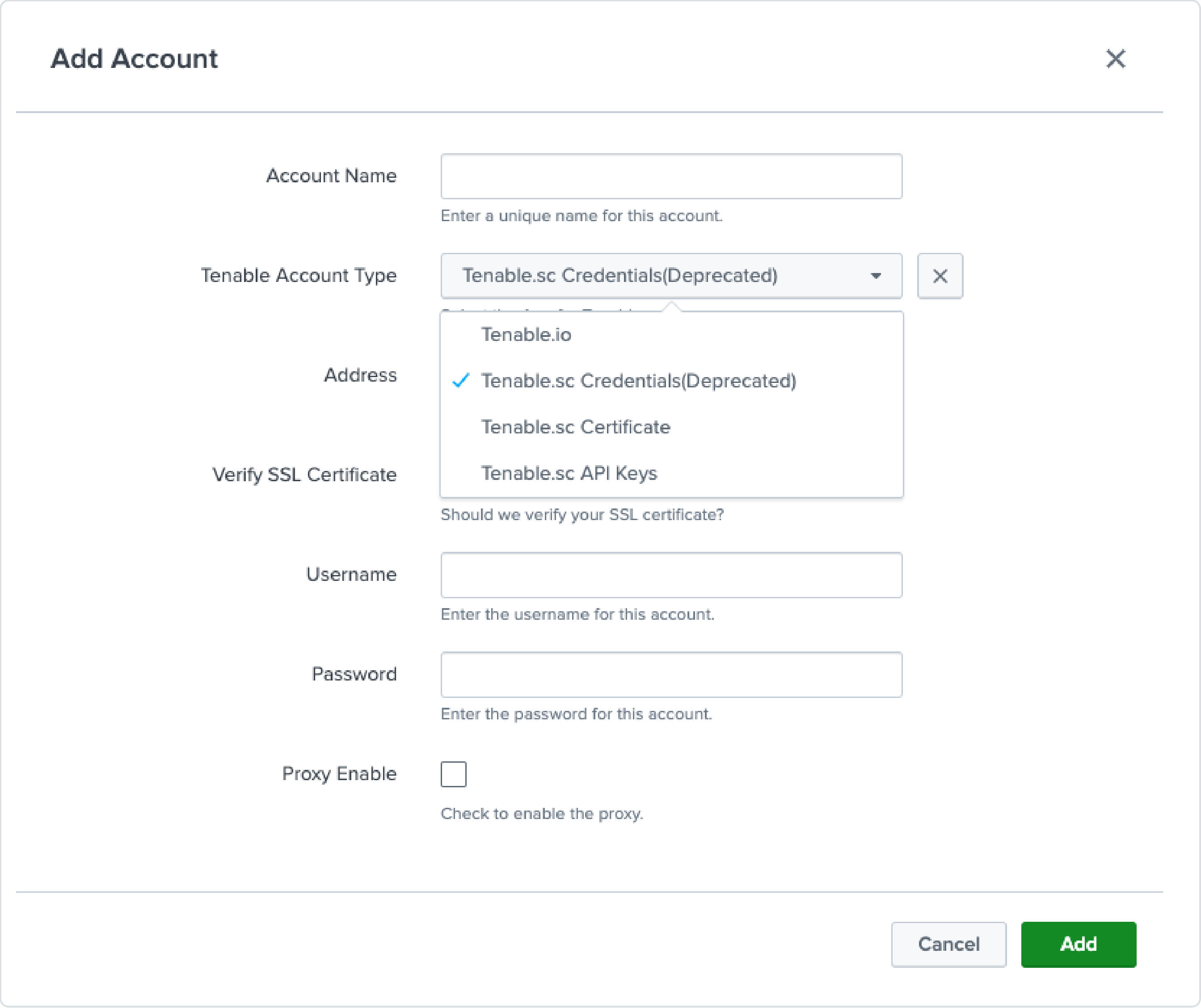
2 Items

Account Name	Tenable Account Type	Actions
Tenable_70	tenable_securitycenter_credentials	Action
Tenable_io	tenable_io	Action

https://172.26.97.207:8000/en-US/app/TA-tenable/configuration

4. Click the **Add** button.

   An **Add Account** window appears:



Add Account

Account Name

Enter a unique name for this account.

Tenable Account Type: Tenable.sc Credentials(Deprecated)

Address

Verify SSL Certificate

Should we verify your SSL certificate?

Username

Enter the username for this account.

Password

Enter the password for this account.

Proxy Enable □

Check to enable the proxy.

Note: Tenable Security Center standard credential use is deprecated. Use Tenable Security Center API keys for account authentication. For more information on Tenable Security Center API keys, see Generate API Keys.

5. In the **Tenable Access Type** drop-down box, select **Tenable Security Center Credentials**.

6. Enter the necessary information for each field. The following table describes the available options.

Input Parameters	Description
Account Name	(Required) The unique name for each Tenable data input.
Tenable Account Type	(Required) The type of Tenable account - Tenable Vulnerability Management, Tenable Security Center API Keys, or Tenable Security Center Certificate.
Address	(Required) The hostname or IP address for Tenable Security Center.
Verify SSL Certificate	If enabled, Splunk verifies the certificate in Tenable Security Center.
Username	(Required) The username in Tenable Security Center.
Password	The password in Tenable Security Center.
Proxy Enable	Enables the plugin to collect Tenable Security Center data via a proxy server. If you select this option, the plug- in prompts you to enter the following: • **Proxy Type** - the type of proxy used. • **Proxy Host** - the hostname or IP address of the proxy server. • **Proxy Port** - the port number of the proxy server. • **Proxy Username** - the username for an account that has permissions to access and

	use the proxy server. • **Proxy Password** - the password associated with the username you provided.

7. Click **Add** to complete the configuration.

Next steps

- Create an Input for the Tenable Add-On for Splunk.

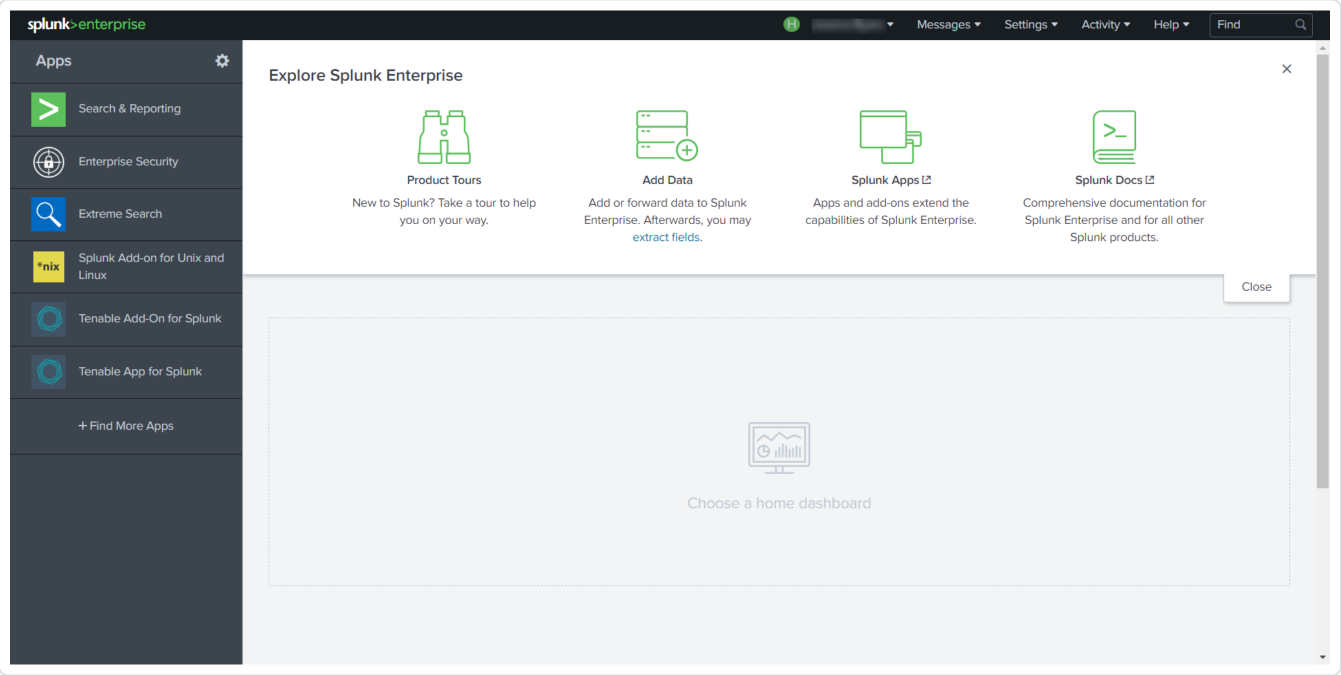
Configure Tenable Security Center Certificates

To complete the installation process, you must complete the setup for the Tenable Add-on for Splunk. For additional information on Tenable Security Center Certificates, see SSL Client Certificate Authentication.

To set up the Tenable Add-on for Splunk:

1. Log in to your data collection node.

2. In the left navigation bar, click **Tenable Add-on for Splunk**.



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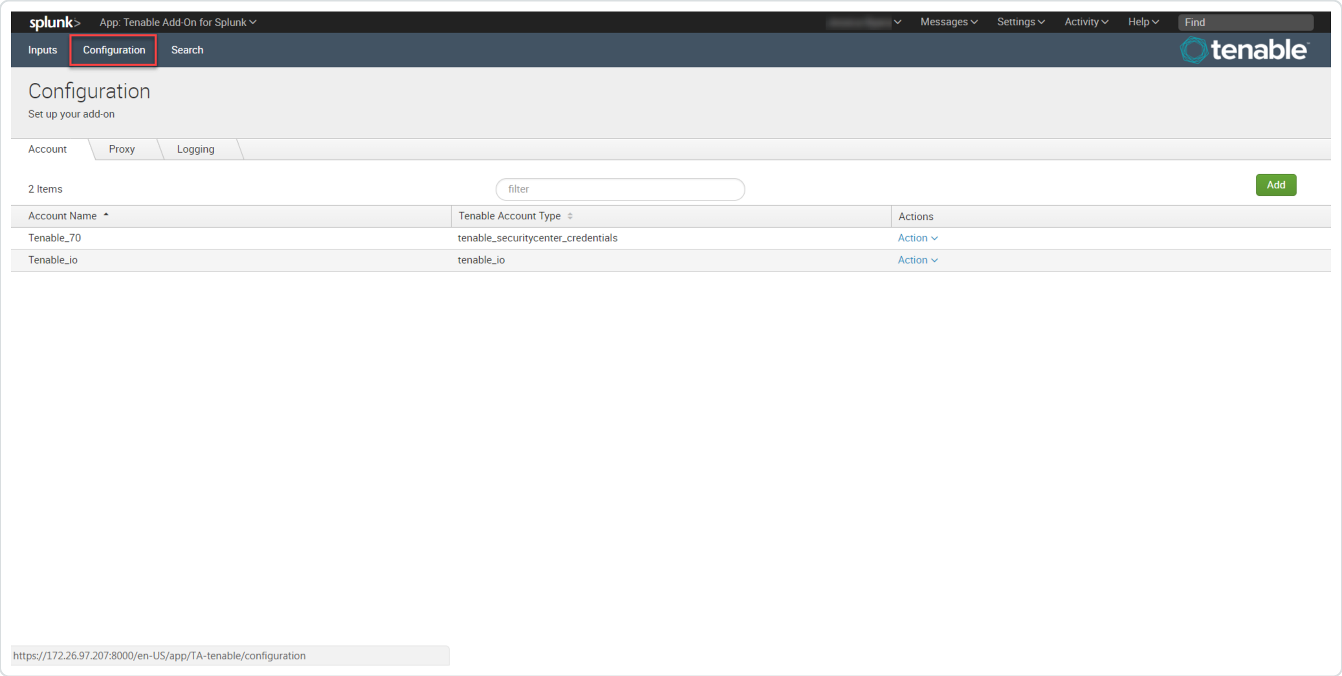


Configuration

Set up your add-on

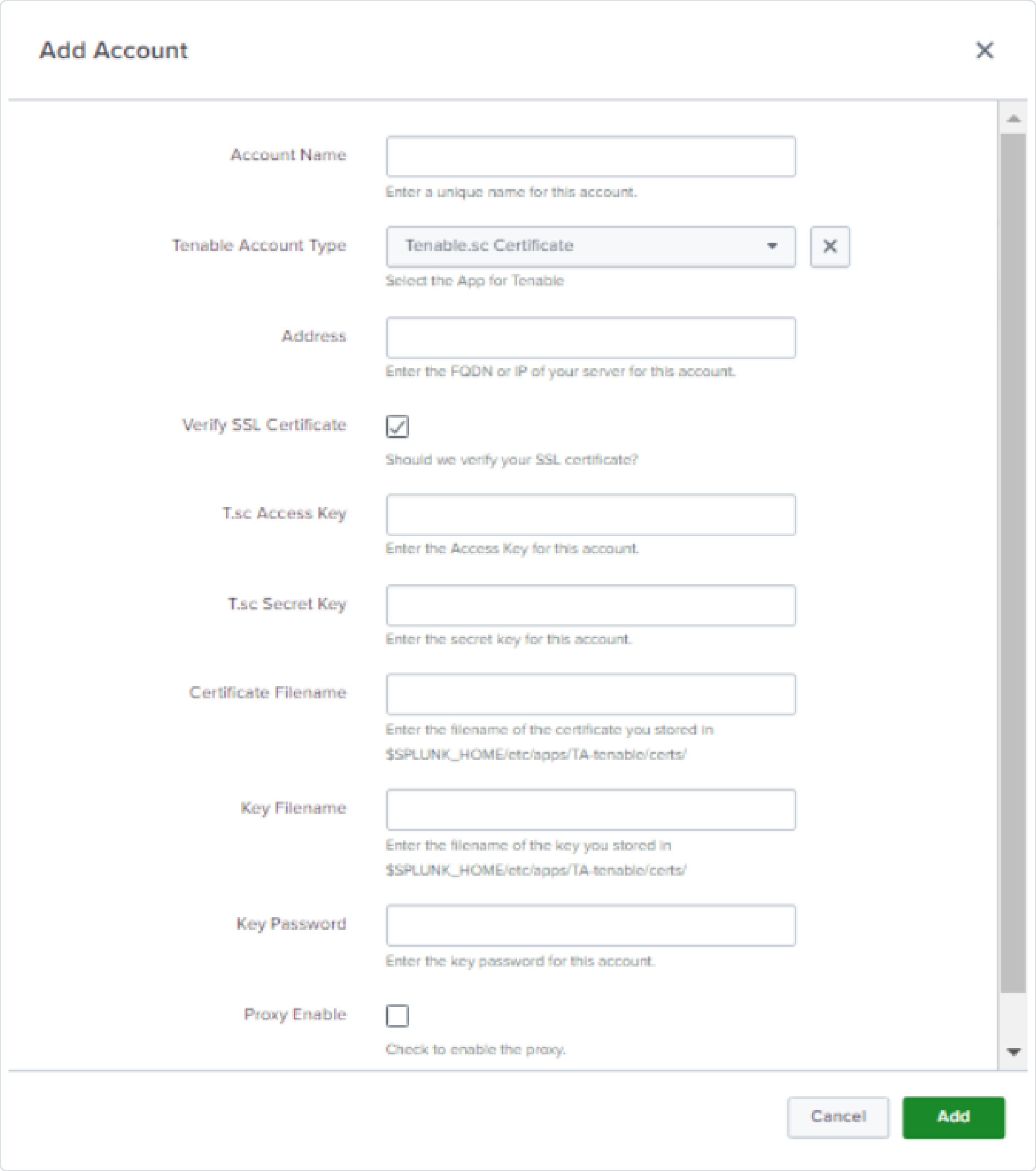
2 Items

Account Name	Tenable Account Type	Actions
Tenable_70	tenable_securitycenter_credentials	Action
Tenable_io	tenable_io	Action

https://172.26.97.207:8000/en-US/app/TA-tenable/configuration

4. Click the **Add** button.

   The **Add Account** window appears:



Add Account

Account Name

Enter a unique name for this account.

Tenable Account Type: Tenable.sc Certificate

Select the App for Tenable

Address

Enter the FQDN or IP of your server for this account.

Verify SSL Certificate ☑

Should we verify your SSL certificate?

T.sc Access Key

Enter the Access Key for this account.

T.sc Secret Key

Enter the secret key for this account.

Certificate Filename

Enter the filename of the certificate you stored in $SPLUNK_HOME/etc/apps/TA-tenable/certs/

Key Filename

Enter the filename of the key you stored in $SPLUNK_HOME/etc/apps/TA-tenable/certs/

Key Password

Enter the key password for this account.

Proxy Enable ☐

Check to enable the proxy.

5. In the **Tenable Account Type** box, select **Tenable Security Center Certificates**.

6. Enter the necessary information for each field. The following table describes the available options.

   > **Note:** The certificates you upload and configure must be associated with a specific user in Tenable Security Center.

Input Parameters	Description
Account Name	(Required) The unique name for each Tenable Security Center data input.
Tenable Account Type	(Required) The type of Tenable account - Tenable Vulnerability Management, Tenable Security Center API Keys, or Tenable Security Center Certificate.
Address	(Required) The hostname or IP address for Tenable Security Center.
Verify SSL Certificate	If enabled, Splunk verifies the SSL Certificate in Tenable Security Center.
T.sc Access Key	(Required) Tenable Security Center API access key.
T.sc Secret Key	(Required) Your Tenable Security Center API secret key.
Certificate Filename	The name of the certificate that you uploaded to `$SPLUNK_HOME/etc/apps/TA-tenable/certs/`.
Key Filename	The name of the key that you uploaded to `$SPLUNK_HOME/etc/apps/TA-tenable/certs/`.
Key Password	The password for the key file you uploaded.
Proxy Enable	Enables the plugin to collect Tenable Security Center data via a proxy server. If you select this

	option, the plug- in prompts you to enter the following: • **Proxy Type** - the type of proxy used. • **Proxy Host** - the hostname or IP address of the proxy server. • **Proxy Port** - the port number of the proxy server. • **Proxy Username** - the username for an account that has permissions to access and use the proxy server. • **Proxy Password** - the password associated with the username you provided.

7. Click **Add** to complete the configuration.

Install certificate authority:

1. Run the following command to make a backup of the cacert.pem file.

   ```
   # cp $SPLUNK_HOME/etc/apps/TA-tenable/bin/ta_tenable/certifi/cacert.pem /tmp/cacert.pem
   ```

2. Run the following command to append the PEM-encoded root certificate authority that signed the Tenable Security Center SSL certificate to the cacert.pem.

   ```
   # cat <path_to_root_ca.pem> >> $SPLUNK_HOME/etc/apps/TA-tenable/bin/ta_tenable/certifi/cacert.pem
   ```

3. Run the following command to restart Splunk.

   ```
   # /opt/splunk/bin/splunk restart
   ```

Splunk installs the self-signed certificate to trust in your configuration.

Next steps

- Create an Input for the Tenable Add-On for Splunk.

Configure Tenable Vulnerability Management

To complete the installation process, you must complete the setup for the Tenable Add-on for Splunk.

Required User Role: Administrator

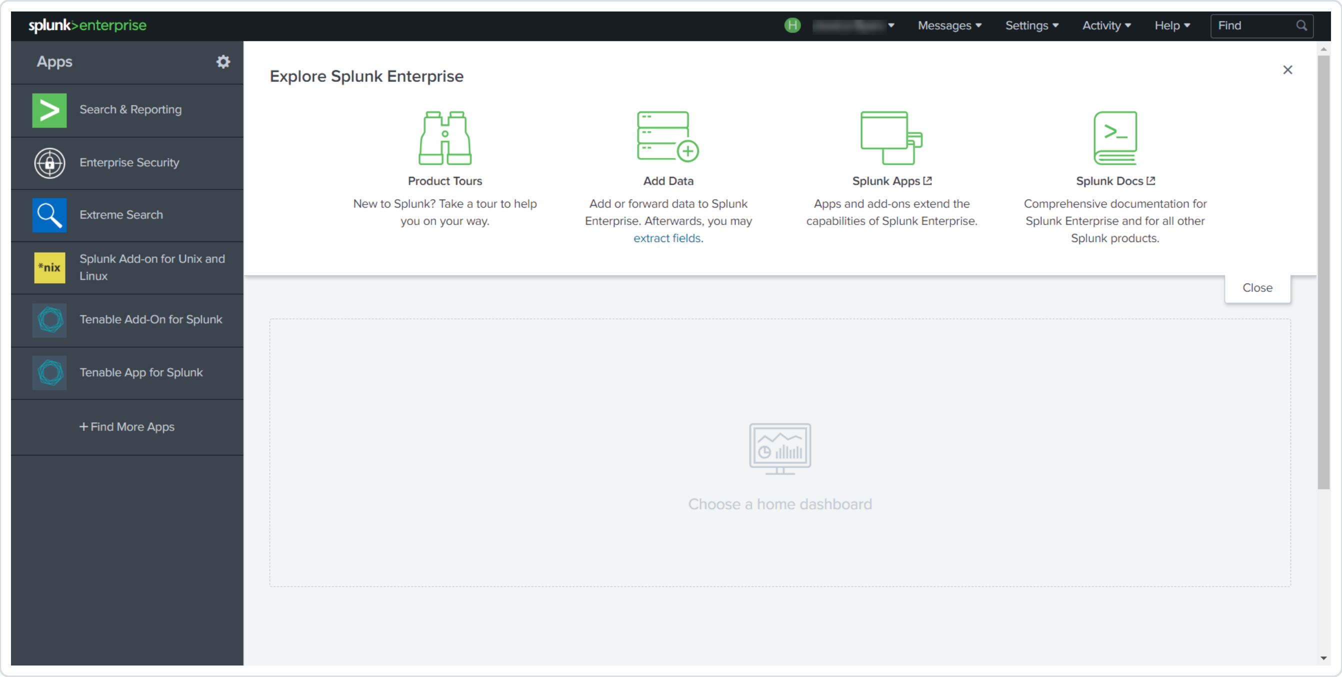
Before you begin:

- Generate an API key in Tenable Vulnerability Management to complete the configuration. See the Tenable Vulnerability Management user guide for instructions on how to generate an API key. Do not use this API key for any other third-party or custom-built application or integration. It must be unique for each installed instance of the integration.

Note: Asset and vulnerabilities in Splunk might differ from individual scan results since the Splunk integration synchronizes cumulative vulnerability and asset data from the Tenable API endpoints.

To set up the Tenable Add-on for Splunk:

1. Log in to the heavy forwarder where you installed the Tenable Add-on for Splunk.
2. In the left navigation bar, click **Tenable Add-on for Splunk**.



Explore Splunk Enterprise

Product Tours New to Splunk? Take a tour to help you on your way.

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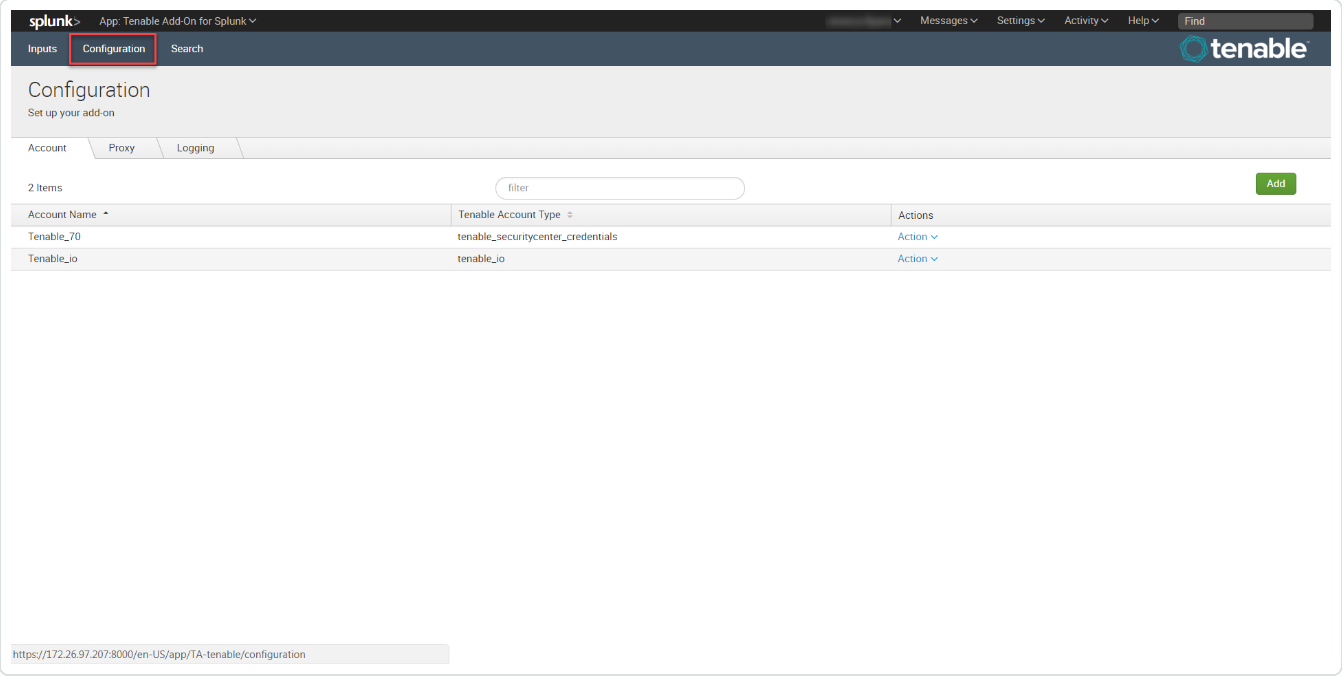
Splunk Docs Comprehensive documentation for Splunk Enterprise and for all other Splunk products.

3. Click the **Configuration** tab.



Configuration

Set up your add-on

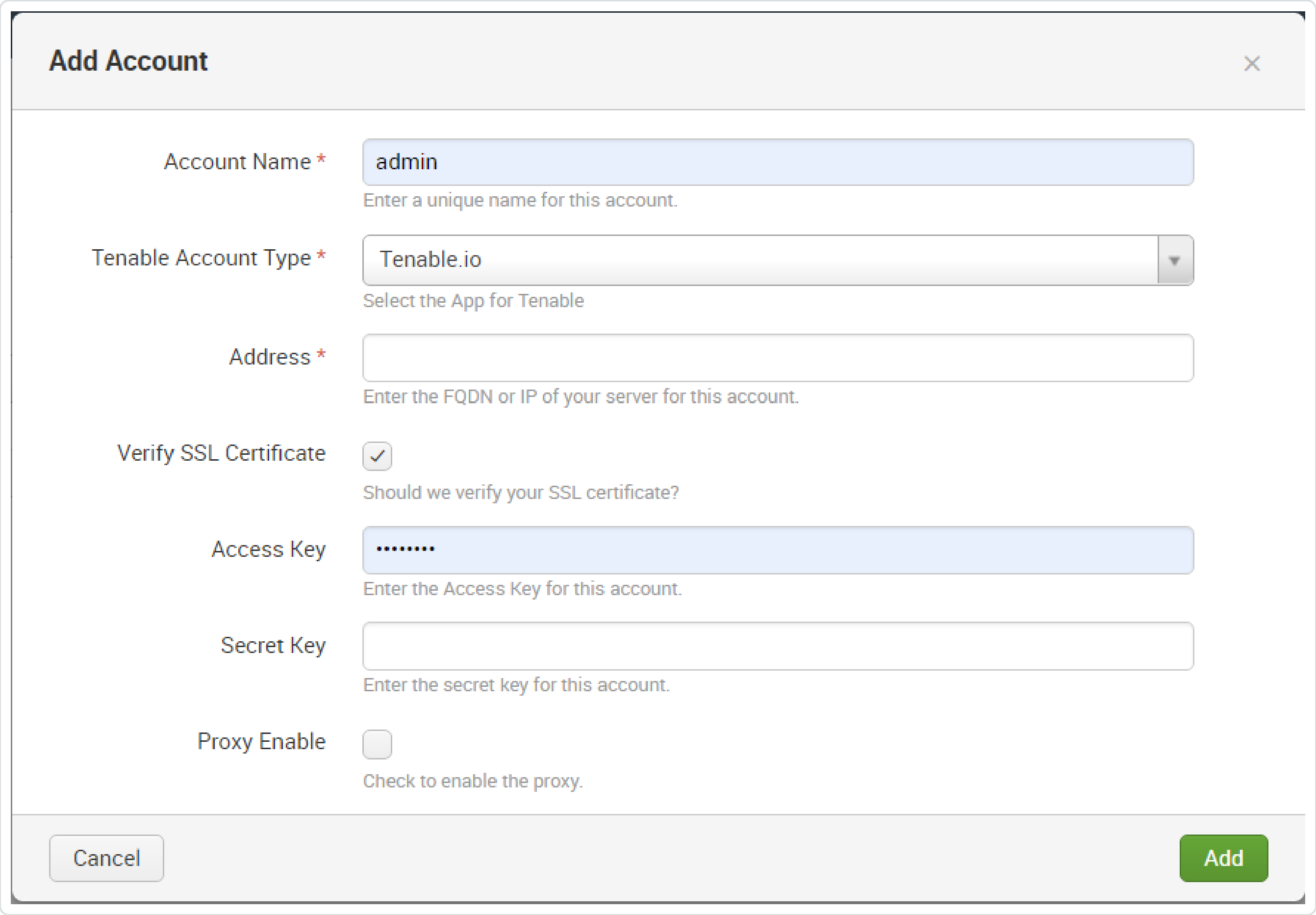
2 Items

Account Name	Tenable Account Type	Actions
Tenable_70	tenable_securitycenter_credentials	Action
Tenable_io	tenable_io	Action

https://172.26.97.207:8000/en-US/app/TA-tenable/configuration

4. Click the **Add** button.

A new window appears:



Add Account

Account Name * admin

Enter a unique name for this account.

Tenable Account Type * Tenable.io

Select the App for Tenable

Address *

Enter the FQDN or IP of your server for this account.

Verify SSL Certificate ☑

Should we verify your SSL certificate?

Access Key ••••••••

Enter the Access Key for this account.

Secret Key

Enter the secret key for this account.

Proxy Enable ☐

Check to enable the proxy.

5. Enter the necessary information for each field. The following table describes the available options.

Input Parameters	Description
Account Name	(Required) The unique name for each Tenable data input.
Tenable Account Type	(Required) The type of Tenable account - Tenable Vulnerability Management, Tenable Security Center API Keys, or Tenable Security Center Certificate
Address	(Required) The hostname or IP address for Tenable Vulnerability Management.
Verify SSL Certificate	If enabled, Splunk verifies the SSL certificate in Tenable Vulnerability Management.
Access Key	(Required) Tenable Vulnerability Management API access key.
Secret Key	(Required) Your Tenable Vulnerability Management API secret key.
Proxy Enable	Enables the plugin to collect Tenable Vulnerability Management data via a proxy server. If you select this option, the plug- in prompts you to enter the following: • **Proxy Type** - the type of proxy used. • **Proxy Host** - the hostname or IP address of the proxy server. • **Proxy Port** - the port number of the proxy server. • **Proxy Username** - the username for an

	account that has permissions to access and use the proxy server. • **Proxy Password** - the password associated with the username you provided.

6. To complete the configuration, click **Add**.

Next steps

- Create an Input for the Tenable Add-On for Splunk.

Tenable Data in Splunk Dashboard

The Tenable App for Splunk provides a single dashboard that displays all of your Tenable data.

To set up the Tenable App for Splunk:

Set up the macro definition

1. In Splunk, go to **Settings > Advance search > Search Macros**.
2. In the **App** section, select **Tenable App for Splunk**.
3. Click the search icon.

   Results appear.
4. Click **get_tenable_index**.

   The **get_tenable_index** macro page appears.
5. In the **Definition** field, update the definition to *index=INDEX_NAME*.

   The INDEX_NAME should be the same name entered when you created the data input.
6. Click **Save**.

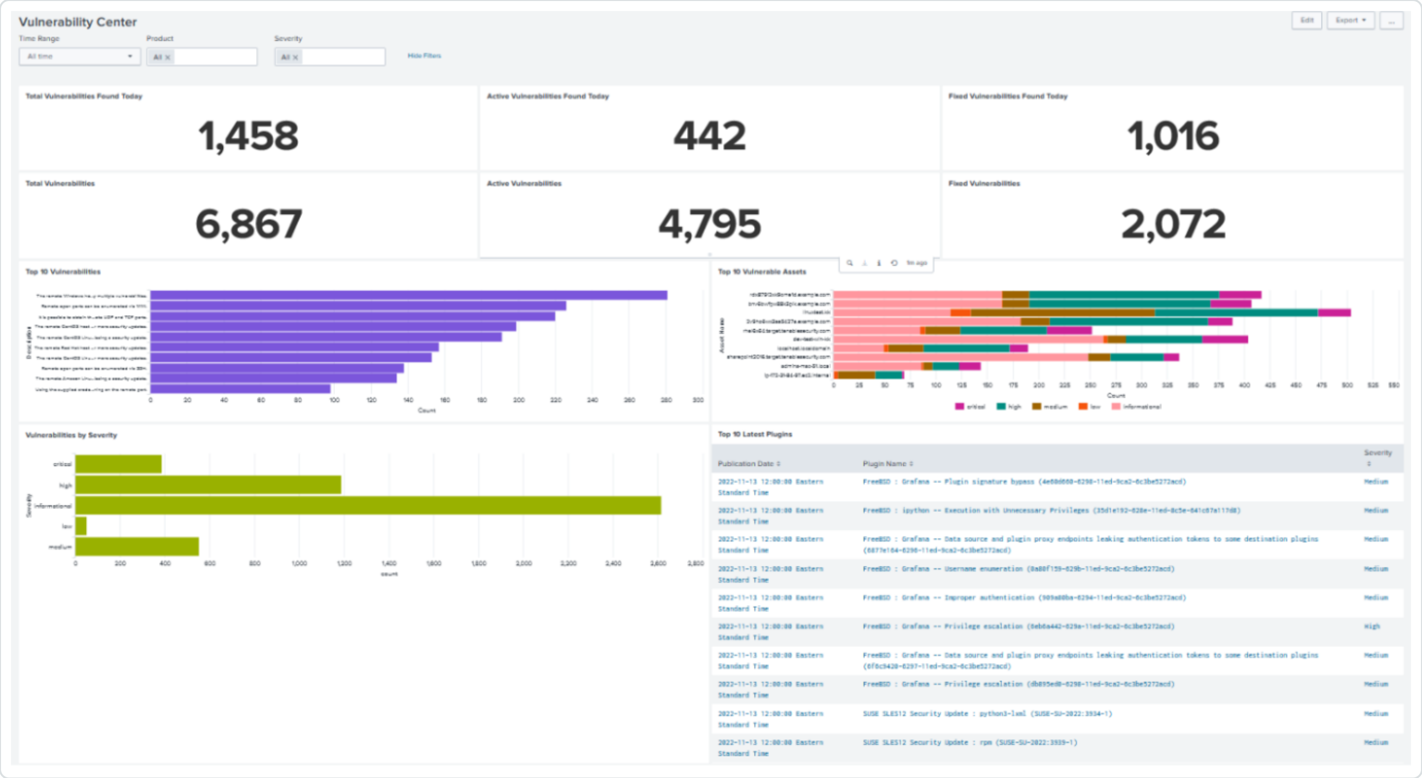
Run the **All Time** saved search

After installation, you must run the **All Time** saved search specific to your Tenable platform. This is a one-time operation to populate indices that the Tenable App for Splunk depends on.

1. Navigate to the **Tenable App for Splunk**.
2. Click **Saved Searches**.
3. Select **Tenable IO Plugin Data - All Time**.
   Splunk completes the query.
4. Repeat steps 2 and 3 for other **All Time** saved searches:
   a. **Tenable IO Vuln Data - All Time**
   b. **Tenable SC Vuln Data - All Time**

Displayed Components

- Total Vulnerabilities Found Today
- Active Vulnerabilities Found Today
- Fixed Vulnerabilities Found Today
- Total Vulnerabilities
- Active Vulnerabilities
- Fixed Vulnerabilities
- Top 10 Vulnerabilities
- Top 10 Vulnerable Assets
- Vulnerabilities by Severity
- Top 10 Latest Plugins



Vulnerability Center

Time Range: All time
Product: All ×
Severity: All ×

Total Vulnerabilities Found Today: 1,458

Active Vulnerabilities Found Today: 442

Fixed Vulnerabilities Found Today: 1,016

Total Vulnerabilities: 6,867

Active Vulnerabilities: 4,795

Fixed Vulnerabilities: 2,072

Top 10 Latest Plugins

Publication Date ⇕	Plugin Name ⇕	Severity ⇕
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : Grafana -- Plugin signature bypass (4e60d660-6298-11ed-9ca2-6c3be5272acd)	Medium
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : ipython -- Execution with Unnecessary Privileges (35d1e192-628e-11ed-8c5e-641c67a117d8)	Medium
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : Grafana -- Data source and plugin proxy endpoints leaking authentication tokens to some destination plugins (6877e164-6296-11ed-9ca2-6c3be5272acd)	Medium
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : Grafana -- Username enumeration (6a80f159-629b-11ed-9ca2-6c3be5272acd)	Medium
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : Grafana -- Improper authentication (909a88ba-6294-11ed-9ca2-6c3be5272acd)	Medium
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : Grafana -- Privilege escalation (6eb6a442-629a-11ed-9ca2-6c3be5272acd)	High
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : Grafana -- Data source and plugin proxy endpoints leaking authentication tokens to some destination plugins (6f6c9420-6297-11ed-9ca2-6c3be5272acd)	Medium
2022-11-13 12:00:00 Eastern Standard Time	FreeBSD : Grafana -- Privilege escalation (db895ed8-6298-11ed-9ca2-6c3be5272acd)	Medium
2022-11-13 12:00:00 Eastern Standard Time	SUSE SLES12 Security Update : python3-lxml (SUSE-SU-2022:3934-1)	Medium
2022-11-13 12:00:00 Eastern Standard Time	SUSE SLES12 Security Update : rpm (SUSE-SU-2022:3939-1)	Medium

Tenable Nessus Network Monitor Data in Splunk Dashboard

The Tenable App for Splunk provides a single dashboard showing all of your Tenable Nessus Network Monitor data. Set the following components:

Displayed Components

Dashboard

- Total Real-time events
- Unique Real-time events
- Top 10 Events
- Top Event Trends
- Top Source IP
- Top Event Name

Traffic Overview

- Top Destination Port
- Top Source Port
- Top Destination IP
- Top Source IP

Traffic Map

- Source IP Map
- Destination IP Map

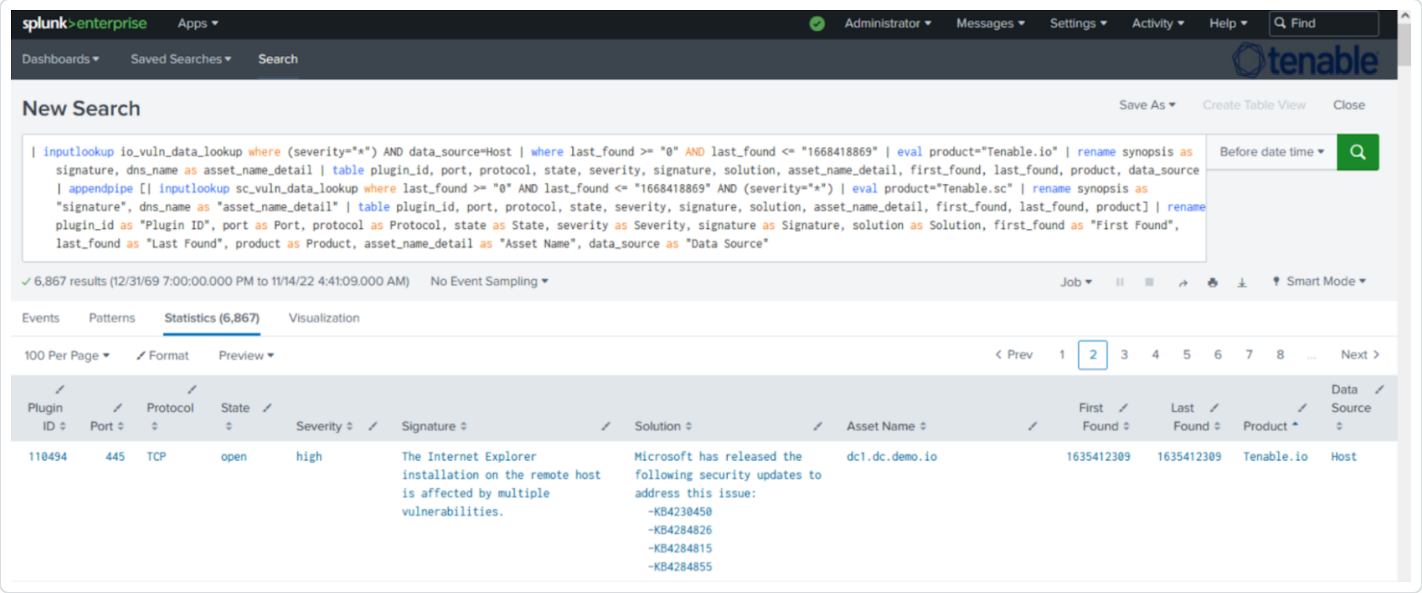
Events

- Top Events
- Events

Vulnerability Center Dashboard

Clicking the value in any panel of the Vulnerability Center dashboard results in a drill-down table.

Drill-down tables



```
| inputlookup io_vuln_data_lookup where (severity="*") AND data_source=Host | where last_found >= "0" AND last_found <= "1668418869" | eval product="Tenable.io" | rename synopsis as
    signature, dns_name as asset_name_detail | table plugin_id, port, protocol, state, severity, signature, solution, asset_name_detail, first_found, last_found, product, data_source
    | appendpipe [| inputlookup sc_vuln_data_lookup where last_found >= "0" AND last_found <= "1668418869" AND (severity="*") | eval product="Tenable.sc" | rename synopsis as
    "signature", dns_name as "asset_name_detail" | table plugin_id, port, protocol, state, severity, signature, solution, asset_name_detail, first_found, last_found, product] | rename
    plugin_id as "Plugin ID", port as Port, protocol as Protocol, state as State, severity as Severity, signature as Signature, solution as Solution, first_found as "First Found",
    last_found as "Last Found", product as Product, asset_name_detail as "Asset Name", data_source as "Data Source"
```

✓ 6,867 results (12/31/69 7:00:00.000 PM to 11/14/22 4:41:09.000 AM) No Event Sampling

Plugin ID	Port	Protocol	State	Severity	Signature	Solution	Asset Name	First Found	Last Found	Product	Data Source
110494	445	TCP	open	high	The Internet Explorer installation on the remote host is affected by multiple vulnerabilities.	Microsoft has released the following security updates to address this issue: -KB4230450 -KB4284826 -KB4284815 -KB4284855	dc1.dc.demo.io	1635412309	1635412309	Tenable.io	Host

Splunk application lookup and drill-down fields for Tenable Vulnerability Management and Tenable Security Center.

Tenable Security Center drill-down field	Tenable Security Center lookup field	Tenable Vulnerability Management-Host drill-down field	Tenable Vulnerability Management-Host lookup field
-	SC_address	-	asset_uuid
DNS Name	dns_name	Data Source	data_source
First Found	first_found	Asset Name	dns_name
-	ip	First Found	first_found
-	last_fixed	-	last_fixed
Last Found	last_found	Last Found	last_found

Plugin ID	plugin_id	Plugin ID	plugin_id
Port	port	Port	port
Protocol	protocol	Protocol	protocol
-	repository_id	Severity	severity
Severity	severity	Solution	solution
Solution	solution	State	state
State	state	Signature	synopsis
Signature	synopsis	-	vpr_score
-	vpr_score	-	-

Tenable Vulnerability Management-Plugin drill-down field	Tenable Vulnerability Management-plugin lookup field	Tenable Security Center-Plugin drill-down field	Tenable Security Center-plugin lookup field
Plugin ID	plugin_id	Plugin ID	plugin_id
Plugin Name	plugin_name	Plugin Name	plugin_name
-	plugin_version	-	plugin_family_id
Severity	risk_factor	-	plugin_family
Solution	plugin_solution	-	plugin_version
Signature	plugin_synopsis	Severity	risk_factor
Publication Date	plugin_publication_date	Signature	plugin_synopsis
-	plugin_modification_date	Solution	plugin_solution
-	vpr_score	Publication Date	plugin_publication_date
-	-	-	plugin_

			modification_ date
-	-	-	vpr_score

Saved Searches

The **Saved Search** option creates lookup tables. The lookup tables contain filtered data that automatically removes duplicate information providing accurate, readable results.

Tenable Saved Search Types

Tenable Vulnerability Management vulnerability data: Type the following command to view the KV store collection for Tenable Vulnerability Management host vulnerability data.

```
io_vuln_data_lookup
```

Tenable Vulnerability Management asset data: Type the following command to view the KV store collection for Tenable Vulnerability Management host asset data.

```
io_asset_data_lookup
```

Tenable Vulnerability Management plugin data: Type the following command to view the KV store collection for Tenable Vulnerability Management plugin data.

```
io_plugin_data_lookup
```

Tenable Security Center Saved Searches

Tenable Security Center vulnerability data: Type the following command to view the KV store collection for Tenable Security Center vulnerability data.

```
sc_vuln_data_lookup
```

Tenable Security Center asset data: Type the following command to view the KV store collection for Tenable Security Center asset data.

```
sc_asset_data_lookup
```

Tenable Security Center plugin data: Type the following command to view the KV store collection for Tenable Security Center plugin data.

```
sc_plugin_data_lookup
```

Tenable Nessus Network Monitor Saved Search Types

Tenable Nessus Network Monitor vulnerability data: Type the following command to view the KV store collection for Tenable Nessus Network Monitor vulnerability data.

```
nnm_vuln_data_lookup
```

NNM events over time, NNM Top 10 Events, NNM Top Destination by Country, NNM Top Source by Country, Top Destination IP, Top Destination Port, Top NNM Plugin ID, Top Source IP, and Top Source Port: Type the following command to view Tenable Nessus Network Monitor events.

```
tenable:nnm:vuln
```

Adaptive Response

You can create a correlation search and bind it to the adaptive response action when you save it. This allows you to call actions automatically when you run a search.

Before you begin:

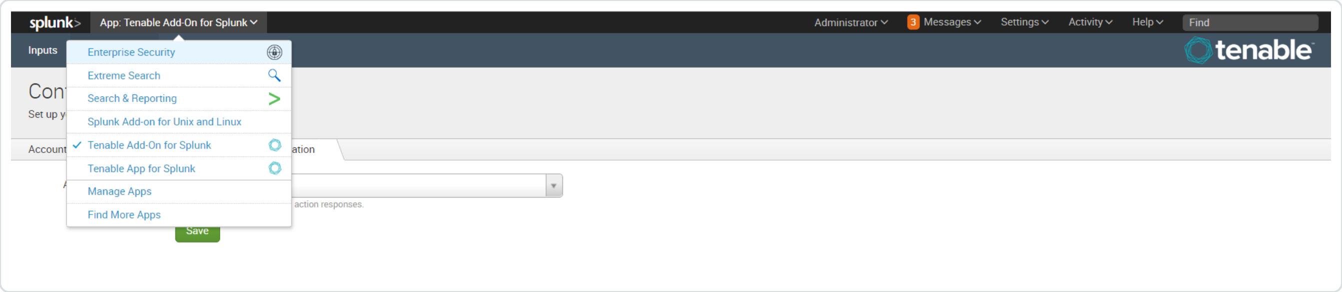
Select an index on the Alert Actions Configuration tab in the Tenable Configuration section to retrieve data.

To configure saved actions:

Configure adaptive response actions when you create a correlation search.

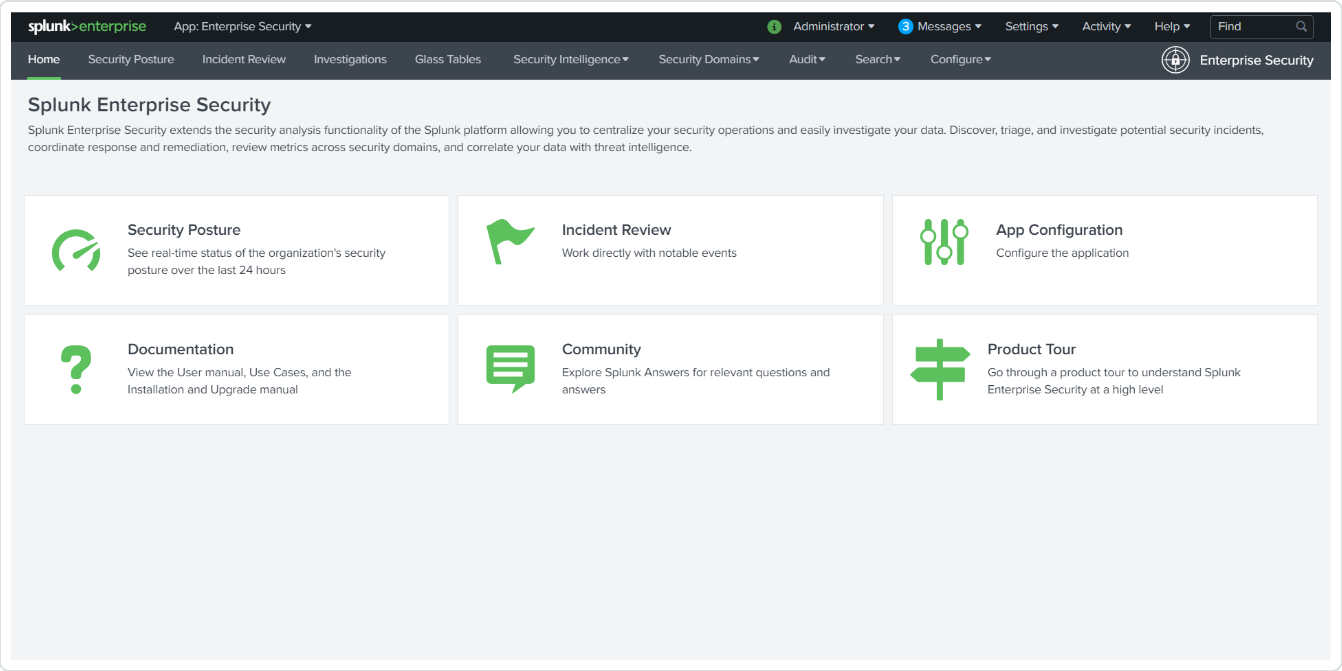
> **Note:** When you run the search, the actions are retrieved automatically

1. In the Splunk navigation bar, click the **Apps** drop-down menu.

2. Select **Enterprise Security**.

   The **Enterprise Security** page appears:



Splunk Enterprise Security

Splunk Enterprise Security extends the security analysis functionality of the Splunk platform allowing you to centralize your security operations and easily investigate your data. Discover, triage, and investigate potential security incidents, coordinate response and remediation, review metrics across security domains, and correlate your data with threat intelligence.

Security Posture
See real-time status of the organization's security posture over the last 24 hours

Incident Review
Work directly with notable events

App Configuration
Configure the application

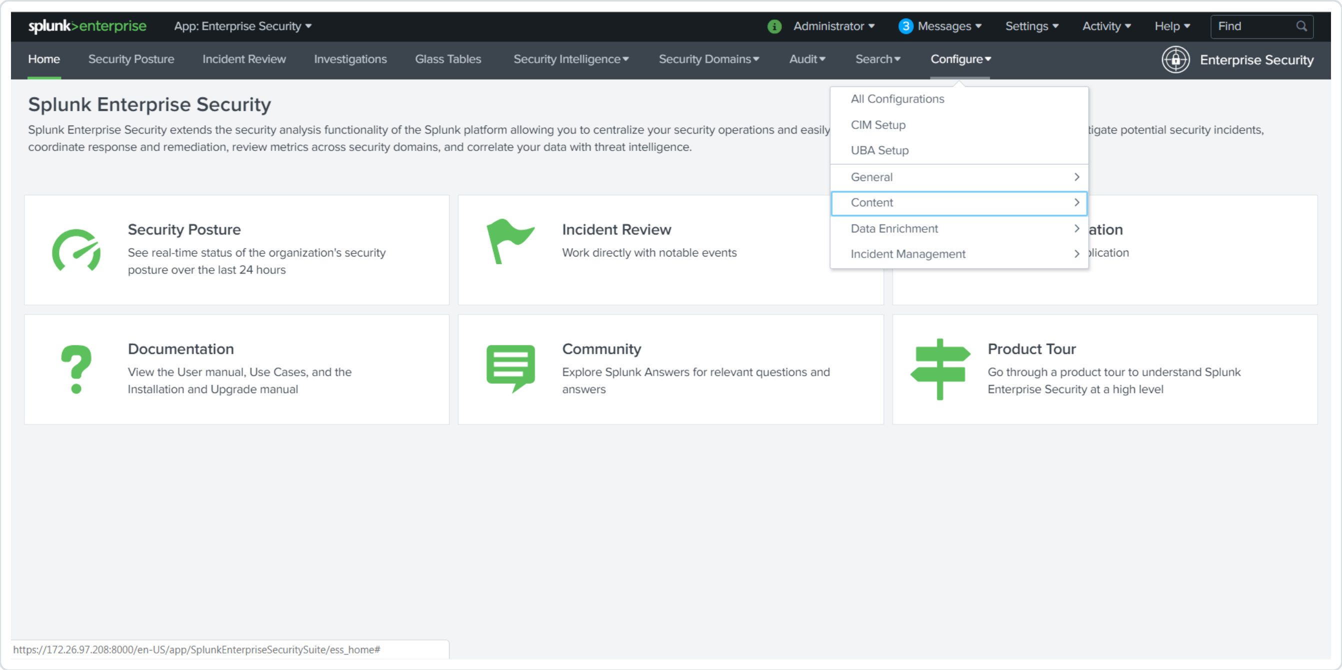
Documentation
View the User manual, Use Cases, and the Installation and Upgrade manual

Community
Explore Splunk Answers for relevant questions and answers

Product Tour
Go through a product tour to understand Splunk Enterprise Security at a high level

3. In the **Enterprise Security** top navigation bar, click **Configure**.

   A drop-down menu appears:



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https://172.26.97.208:8000/en-US/app/SplunkEnterpriseSecuritySuite/ess_home#

4. Click **Content**.

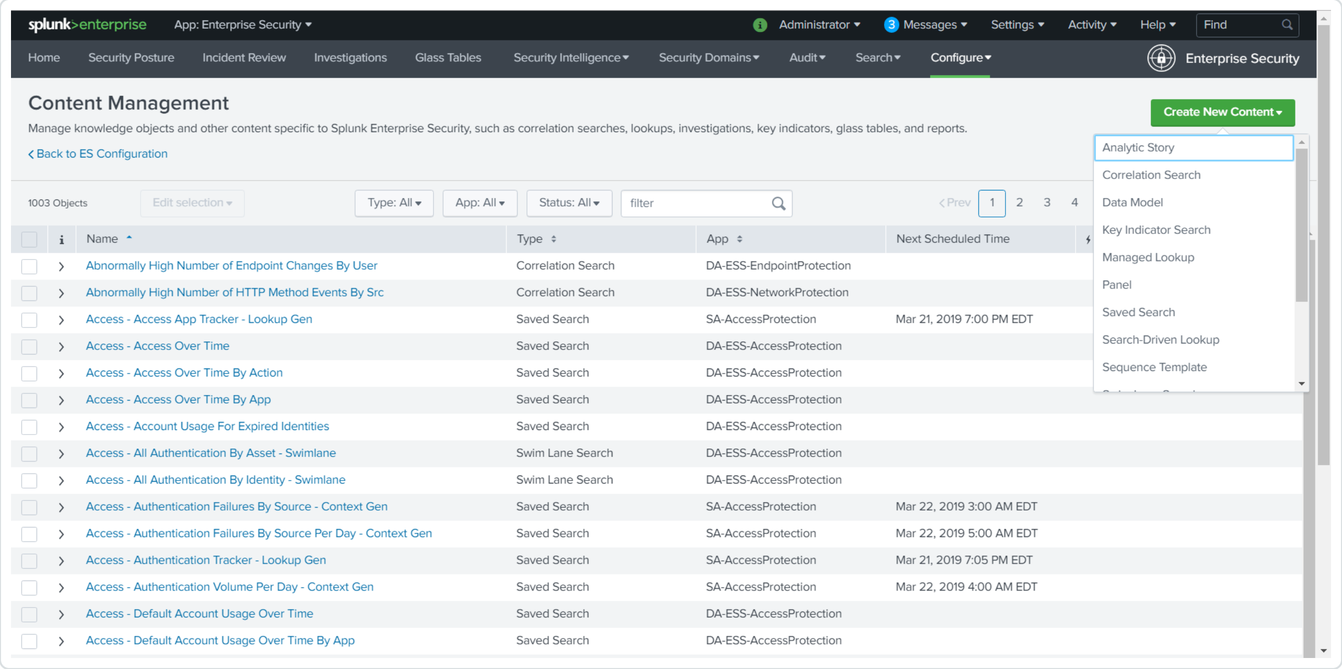
   More options appear.

5. Click **Content Management**.

   The **Content Management** page appears.

6. In the top-right corner, click the **Create New Content** button.

   A drop-down menu appears:



Content Management

Manage knowledge objects and other content specific to Splunk Enterprise Security, such as correlation searches, lookups, investigations, key indicators, glass tables, and reports.

< Back to ES Configuration

1003 Objects

	i	Name	Type	App	Next Scheduled Time
□	›	Abnormally High Number of Endpoint Changes By User	Correlation Search	DA-ESS-EndpointProtection	
□	›	Abnormally High Number of HTTP Method Events By Src	Correlation Search	DA-ESS-NetworkProtection	
□	›	Access - Access App Tracker - Lookup Gen	Saved Search	SA-AccessProtection	Mar 21, 2019 7:00 PM EDT
□	›	Access - Access Over Time	Saved Search	DA-ESS-AccessProtection	
□	›	Access - Access Over Time By Action	Saved Search	DA-ESS-AccessProtection	
□	›	Access - Access Over Time By App	Saved Search	DA-ESS-AccessProtection	
□	›	Access - Account Usage For Expired Identities	Saved Search	DA-ESS-AccessProtection	
□	›	Access - All Authentication By Asset - Swimlane	Swim Lane Search	DA-ESS-AccessProtection	
□	›	Access - All Authentication By Identity - Swimlane	Swim Lane Search	DA-ESS-AccessProtection	
□	›	Access - Authentication Failures By Source - Context Gen	Saved Search	SA-AccessProtection	Mar 22, 2019 3:00 AM EDT
□	›	Access - Authentication Failures By Source Per Day - Context Gen	Saved Search	SA-AccessProtection	Mar 22, 2019 5:00 AM EDT
□	›	Access - Authentication Tracker - Lookup Gen	Saved Search	SA-AccessProtection	Mar 21, 2019 7:05 PM EDT
□	›	Access - Authentication Volume Per Day - Context Gen	Saved Search	SA-AccessProtection	Mar 22, 2019 4:00 AM EDT
□	›	Access - Default Account Usage Over Time	Saved Search	DA-ESS-AccessProtection	
□	›	Access - Default Account Usage Over Time By App	Saved Search	DA-ESS-AccessProtection	

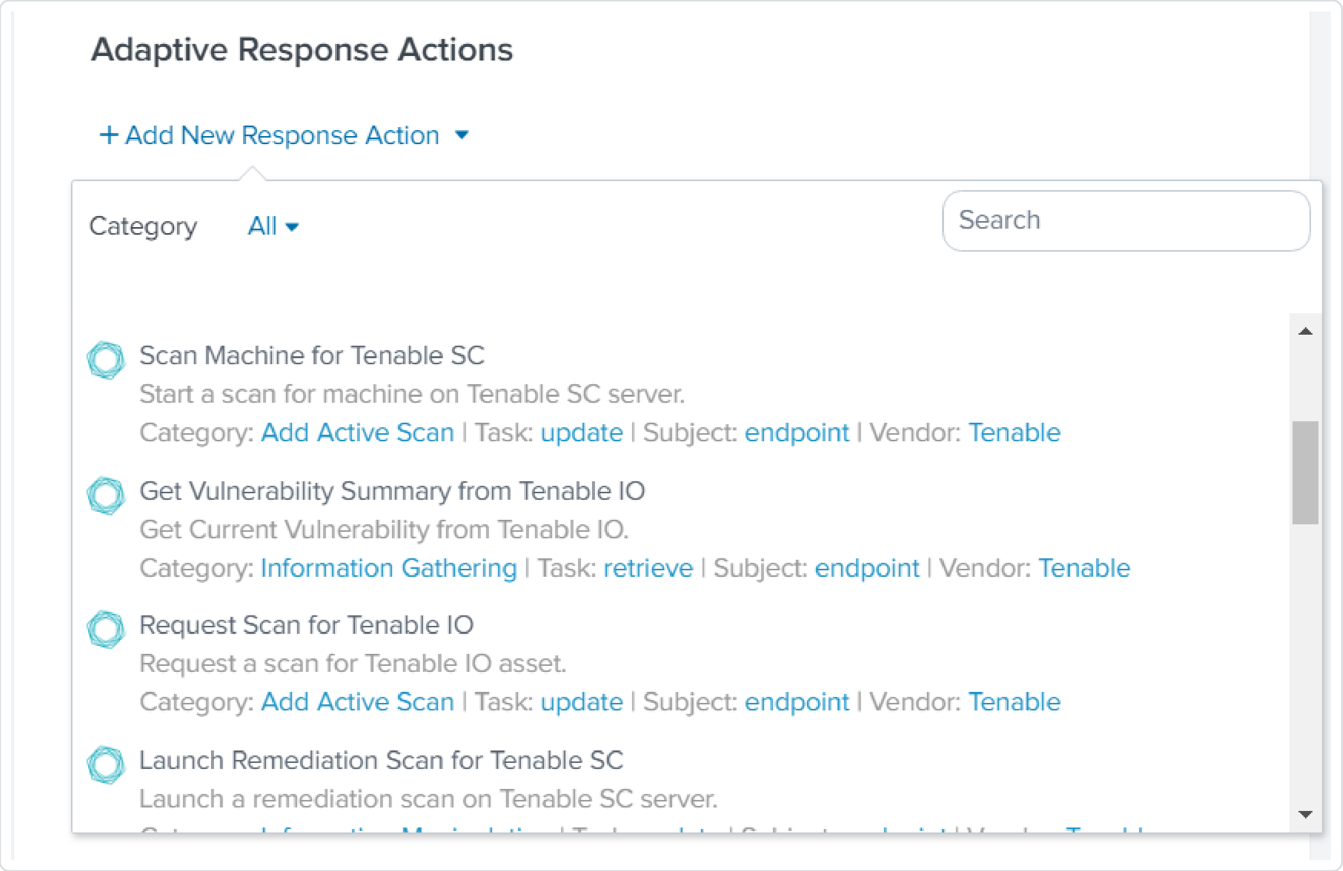
7. Select **Correlation Search**.

8. Enter information for the correlation search. Refer to the Correlation Search section in the Splunk user guide for additional information.

9. Scroll to the **Adaptive Response Actions** section.

10. Click the **Add New Response Action** link.

    A list of options appears:



Adaptive Response Actions

Scan Machine for Tenable SC
Start a scan for machine on Tenable SC server.
Category: Add Active Scan | Task: update | Subject: endpoint | Vendor: Tenable

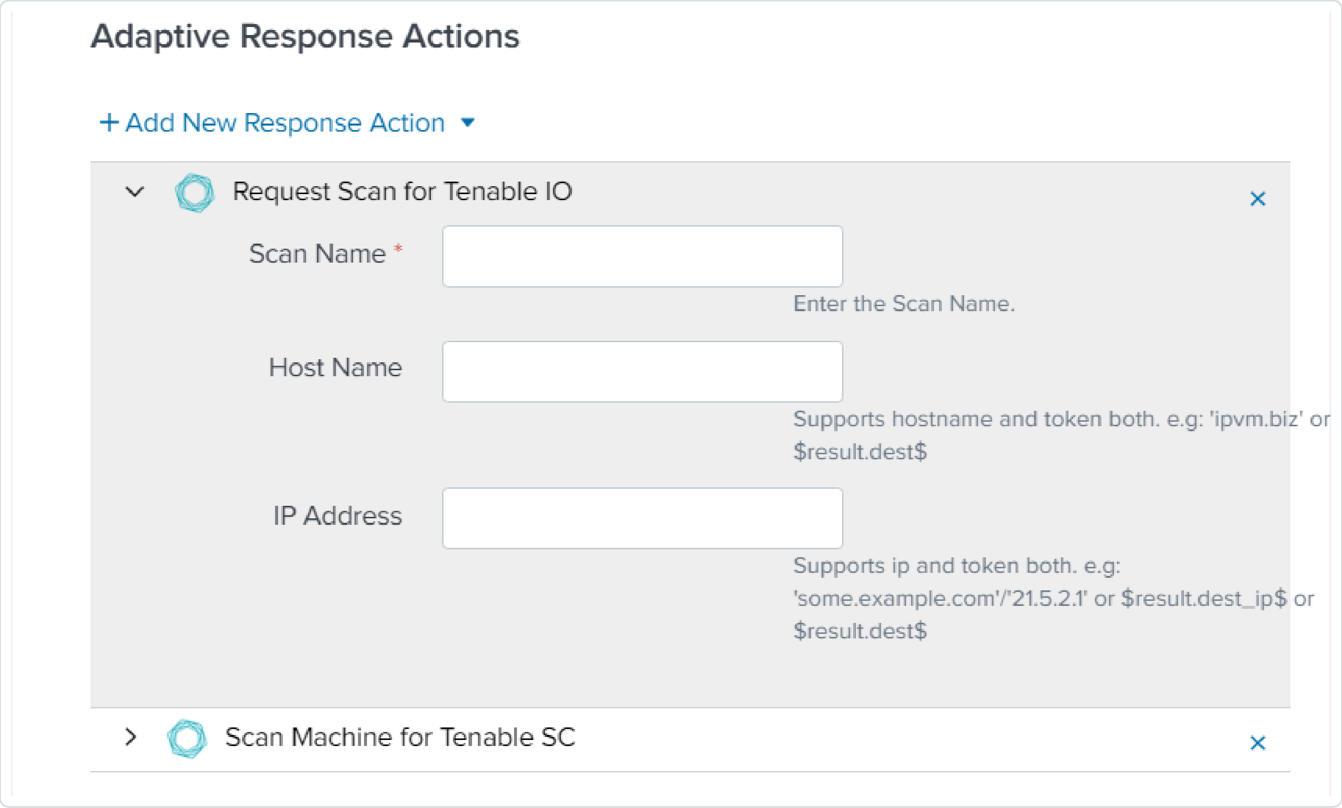
Get Vulnerability Summary from Tenable IO
Get Current Vulnerability from Tenable IO.
Category: Information Gathering | Task: retrieve | Subject: endpoint | Vendor: Tenable

Request Scan for Tenable IO
Request a scan for Tenable IO asset.
Category: Add Active Scan | Task: update | Subject: endpoint | Vendor: Tenable

Launch Remediation Scan for Tenable SC
Launch a remediation scan on Tenable SC server.

11. Select the appropriate action for your search.

12. The field options for the selected option appear:



Adaptive Response Actions

+ Add New Response Action ▾

Request Scan for Tenable IO ×

Scan Name *

Enter the Scan Name.

Host Name

Supports hostname and token both. e.g: 'ipvm.biz' or $result.dest$

IP Address

Supports ip and token both. e.g: 'some.example.com'/'21.5.2.1' or $result.dest_ip$ or $result.dest$

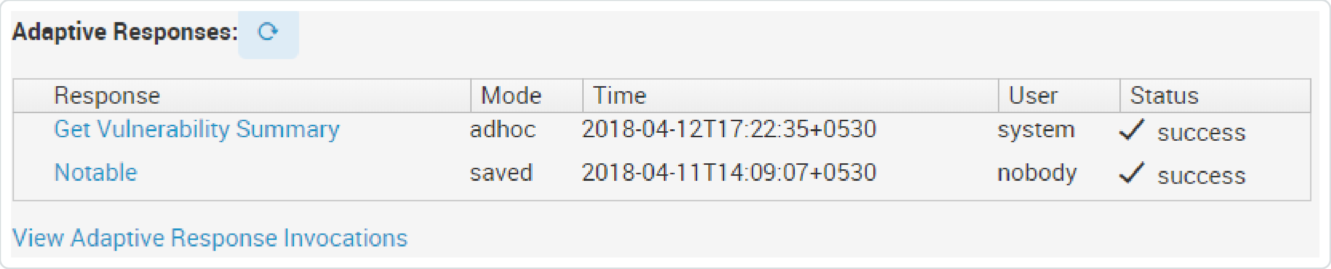
Scan Machine for Tenable SC ×

13. Enter the required information in the fields of your added response action.

14. Click **Save**.

    A confirmation message appears.

15. Run a search.



Adaptive Responses:

Response	Mode	Time	User	Status
Get Vulnerability Summary	adhoc	2018-04-12T17:22:35+0530	system	✓ success
Notable	saved	2018-04-11T14:09:07+0530	nobody	✓ success

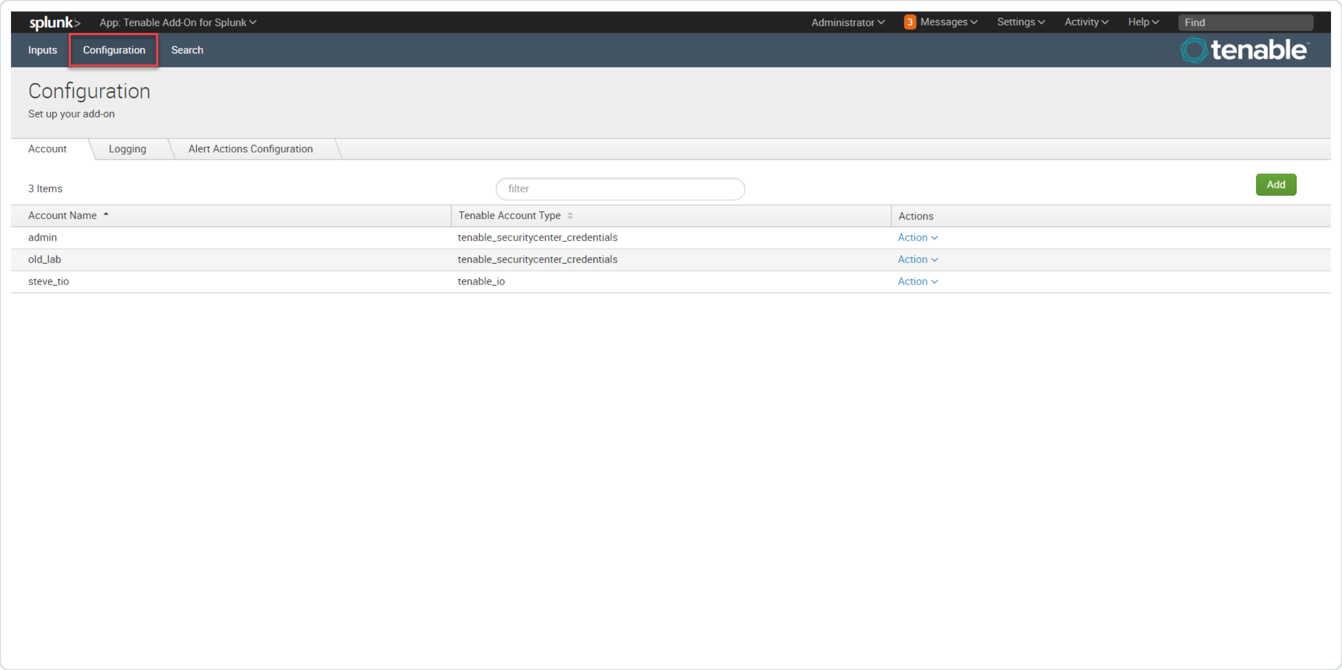
View Adaptive Response Invocations

Alert Action Configuration

To configure alert actions:

1. In the Tenable navigation bar, click **Configuration**.

   The **Configuration** page appears:



Configuration

Set up your add-on

3 Items

Account Name	Tenable Account Type	Actions
admin	tenable_securitycenter_credentials	Action
old_lab	tenable_securitycenter_credentials	Action
steve_tio	tenable_io	Action

2. Click the **Adaptive Actions Configuration** tab.

   The Alert Actions Configuration options appear.

3. Select an index from the **Alert Actions Index** drop-down menu.

4. Click **Save**.

Additional Information

See the following pages for additional information:

- Customized Actions
- Update Macro Definition
- Troubleshooting

Best Practices

The Splunk 6.1.1 Tenable Add-on fix can cause a small amount of duplicate data to be synced to the Splunk index. To address this, Tenable recommends using deduplication in queries when searching for Tenable Vulnerability Management data in Splunk. Tenable dashboard in Splunk takes care of showing only the unique vulnerabilities.

Customized Actions

The Tenable Add-on for Splunk provides an option that allows you to call a customized action manually. You can call an action to make a REST API call for a specific action.

To call a customized action:

1. Open the Incident Review and search for events.

   The list of events appears.

2. Do one of the following:

   - Expand the event to view the details.
   - Click drop-down list in the top-right corner of the item.

3. Select **Run Adaptive Response Action**.

   A list of the configured adaptive response actions appears.

Next steps

- You can view the **Alert Action** status in the **Adaptive Responses** section to verify they were executed successfully.

Tenable Macros

To modify the macro definition:

Tenable Index Macro

1. Go to **Settings > Advance search > Search Macros**.
2. In the **App** section, select **Tenable App for Splunk**.
3. Click the search icon.

   Results appear.
4. Click **get_tenable_index**.

   The **get_tenable_index** macro page appears.
5. In the **Definition** entry field, update the definition to *index=INDEX_NAME*. The INDEX_NAME should be the same name entered when you created the data input.
6. Click **Save**.

Tenable Source Types

1. Go to **Settings > Advance search > Search Macros**.
2. Click **get_tenable_sourcetype**.

   > **Note:** The default macro definition is `sourcetype=(tenable:sc:vuln OR tenable:io:vuln)`.

Troubleshooting

1. **I am getting a Splunk error.**

   - Check the *$SPLUNK_HOME/var/log/splunk/splunkd.log* for Splunk related errors. If you see errors, contact your Splunk administrator.

   - Set your *SPLUNK_HOME* environment.

2. **I don't see data after setting up mod input.**

   - For Tenable Vulnerability Management mod-input, check the *$SPLUNK_HOME/var/log/splunk/ta_tenable_tenable_io.log* file.

   - For Tenable Security Center mod-input, check the *$SPLUNK_HOME/var/log/splunk/ta_tenable_tenable_securitycenter.log*.

   - For Tenable Security Center mobile mod-input, check the *$SPLUNK_HOME/var/log/splunk/ta_tenable_tenable_securitycenter_mobile.log* file.

   - For Tenable OT Security mod-input, check the *$SPLUNK_HOME/var/log/splunk/ta_tenable_tenable_ot_security_icp.log* file.

3. **Data is not populating the Tenable App dashboards.**

   - Run an **All Time** saved search for Tenable Vulnerability Management or Tenable Security Center. After running the **All Time** saved search, turn on and schedule a saved search.

   - Try expanding the time range from the last 24 hours.

   - Check the Tenable macro (**get_tenable_index**) and set the Tenable index correctly.

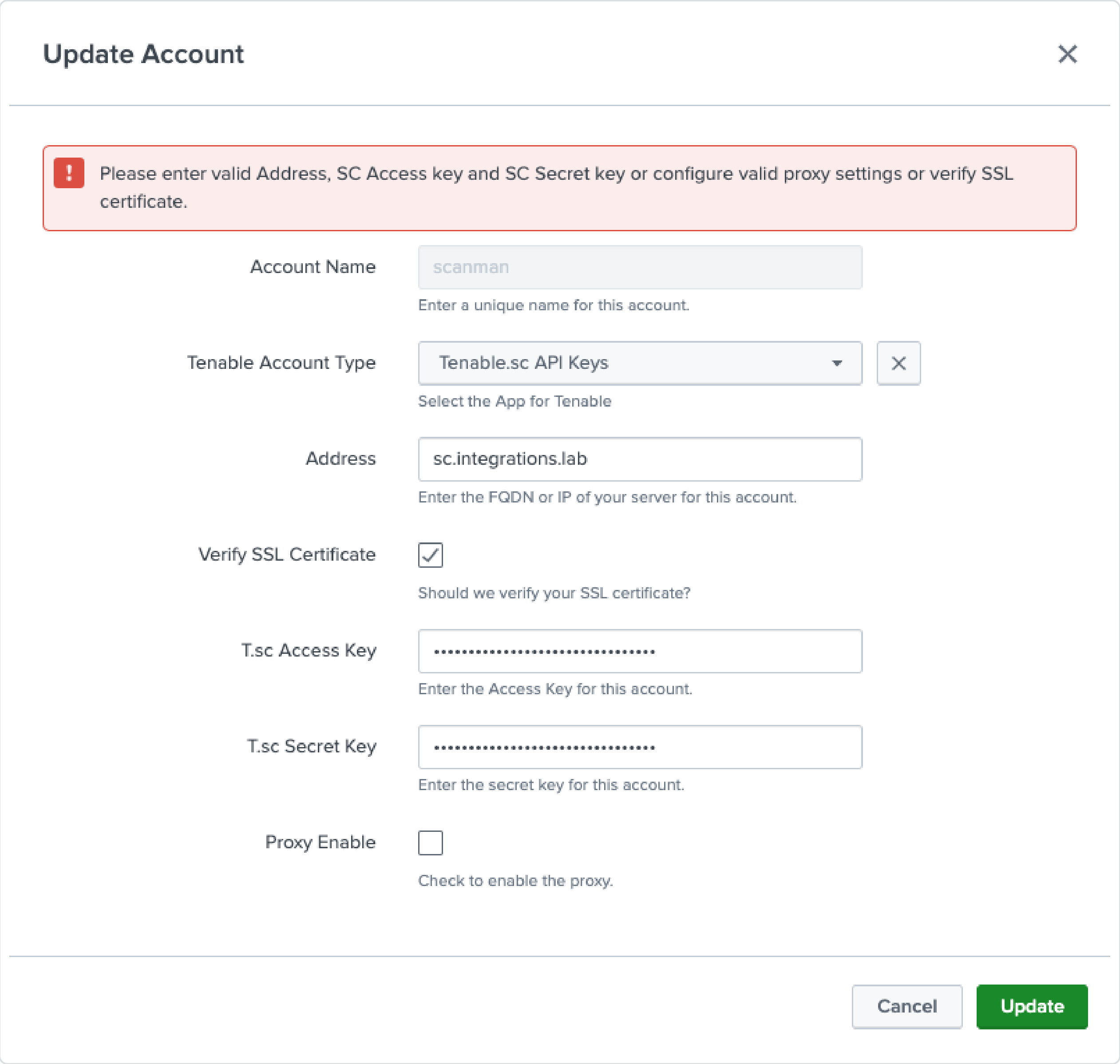
   - The dashboard can take some time to populate when data collection starts. To ensure you are receiving all available data, take the following steps:

     - search `` `get_tenable_index` | stats count by source type ``

     - You should see the following source types: *tenable:io:vuln, tenable:io:assets, tenable:io:plugin, tenable:sc:vuln, tenable:sc:plugin, tenable:sc:assets, tenable:sc:mobile:vuln, tenable:sc:mobile:assets, tenable:nnm:vuln*.

    - Check the log file for any errors - *$SPLUNK_HOME/var/log/splunk/splunkd.log*
    - The app only imports new information from Tenable Security Center. So if you have not scanned recently, there may not be any updates.

4. **While running Tenable Vulnerability Management, I get the following error:** `ERROR pid=106020 tid=MainThread file=io_connect.py:__checkResponse:83 | Tenable Error: response: Duplicate export not allowed. Please modify request or wait until existing export is complete.`
    - Create a new, unique user and API login to use in Splunk.
5. **I can't set up a default Instance.**
    - If you are unable to find the **Tenable Vulnerability Center** dashboard under the **Managed Dashboards** section in the **Dashboards** drop-down, make sure there are no trailing white spaces for the connection ID fetched from **Admin Settings**. Refer to Tenable Plugin for Splunk documentation.
6. **I am getting an error when applying internal self-signed SSL certificates to Tenable Security Center.**
    - You may get the following error if your Tenable Security Center self-signed certificate is not installed to Splunk and the optional **Verify SSL Certificate** setting is enabled. Completing this installation allows Splunk to trust the designated SSL client certificate you installed.


Update Account

Please enter valid Address, SC Access key and SC Secret key or configure valid proxy settings or verify SSL certificate.

Account Name: scanman
Enter a unique name for this account.

Tenable Account Type: Tenable.sc API Keys
Select the App for Tenable

Address: sc.integrations.lab
Enter the FQDN or IP of your server for this account.

Verify SSL Certificate: ☑
Should we verify your SSL certificate?

T.sc Access Key: ••••••••••••••••••••••••••••••••
Enter the Access Key for this account.

T.sc Secret Key: ••••••••••••••••••••••••••••••••
Enter the secret key for this account.

Proxy Enable: □
Check to enable the proxy.

- You need to install the CA for the Splunk integration to trust. For more information, see Configure Tenable Certificates.

7. **Connection aborted due to "Remote end closed connection without response" error in Splunk logs.**

   - If the “Remote end closed connection without response” error shows in either the **ta_tenable_tenable_io.log**, **ta_tenable_tenable_securitycenter.log**, or **ta_tenable_tenable_securitycenter_mobile.log** files at location `$SPLUNK_HOME/var/log/splunk`, make sure that there is no ongoing data collection process in Splunk while stopping the

Splunk service or upgrading the Tenable Application for Splunk or Splunk Add-on. Whenever this type of error occurs, Splunk tries again to process the failed request by using the same checkpoint values after coming back online.

8. **Fields are not getting displayed on the "Inputs > Add Tenable.io" / "Inputs > Update Tenable.io" page.**

    - If you are not able to see a few fields on the **Inputs** > **Add Tenable.io** and **Inputs** > **Update Tenable.io** pages after upgrading the Tenable Application for Splunk, reload cached content in the browser.

9. **Input is created successfully but data is not getting collected for OT Security.**

    - Check the data by expanding the time range in Splunk search.

    - Make sure that you are entering the correct search query. For example, if you want to search OT Security assets data, the search query should be **index = your_index sourcetype = tenable:ot:assets**.

    - Check the log messages for any errors:

        - For logs related to OT Security data collection: You can view the logs in the **`ta_tenable_tenable_ot_security_icp.log`** log file by navigating to `$SPLUNK_HOME/var/log/splunk/`.

        - For logs related to OT Security account creation: You can view the logs in the **`ta_tenable_account_validation.log`** log file by navigating to `$SPLUNK_HOME/var/log/splunk/`.

        - Error log messages regarding OT Security data collection and account creation can also be seen from Splunk search in the **_internal** index.

            - Data collection: `index = _internal source = *ta_tenable_tenable_ot_security_icp* ERROR`

            - Account creation: `index = _internal source = *ta_tenable_account_validation* ERROR`

Note: `$SPLUNK_HOME` is the path where Splunk is installed.