Outpost24

Vulnerability Management made easy

ServiceNow Integration

Version: 1.3

2019-06-11

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About This Guide

The purpose of this document is to provide users a comprehensive overview of the Outpost24 vulnerability scanner integration into ServiceNow.

For support information, visit https://www.outpost24.com/support.

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1 Overview

1.1 Software Architecture Overview

The Outpost24 Vulnerability Integration is used to integrate ServiceNow with Outpost24 as a third-party vulnerability scanner. The scanner is created using the script include x_o24_outpost24. Outpost24Scanner provided by Outpost24 as an integration factory script. Any scan created in ServiceNow that use this scanner is sent to Outpost24 where the host is scanned. Vulnerabilities found are reported back to ServiceNow as vulnerable items.

1.2 Software Design Overview

The Outpost24Scanner script include extends VulnerabilityScannerBase and implements the functions sendData that sends a request to Outpost24 to start the scan and retrieveData that sends a request to Outpost24 to retrieve the status of the scan. The request to retrieve the status is sent every 5 minutes.

The application creates three scheduled script executions to import data from Outpost24 into ServiceNow. All scripts are implements paging to ensure that a limited set of data is sent in each request. The scripts are run on demand but can be configured to run at repeated intervals.

1.3 Compatibility Overview

- Kingston
- Jakarta
- Istanbul

1.4 Application Overview

- Import and populate Outpost24 asset data with ServiceNow DMDB data.
- Enrich ServiceNow CMDB data with additional information if found.
- Run Vulnerability scans from within ServiceNow.

***Note**: English is the only supported language.*

2 System Requirements

Outpost24 Vulnerability Integration app requires the below mentioned modules in ServiceNow.

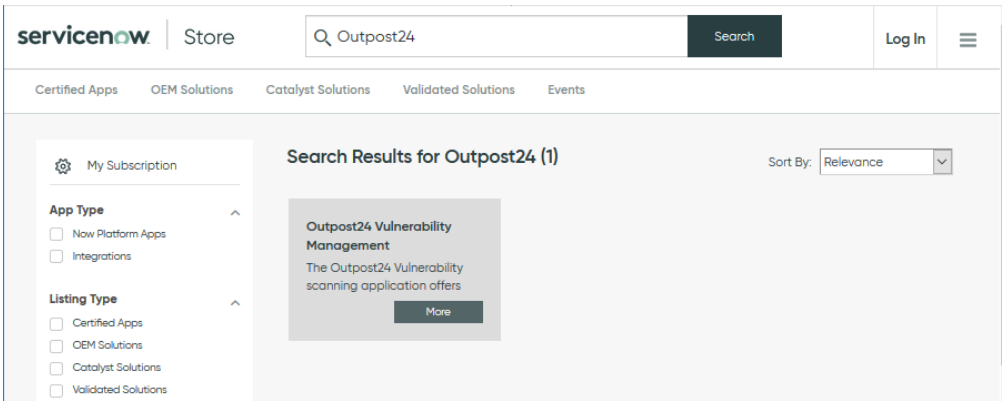
- Configuration Management Database (CMDB)
- Vulnerability Response
- System Import Sets
- Outpost24 subscription

3 Setup and Configuration

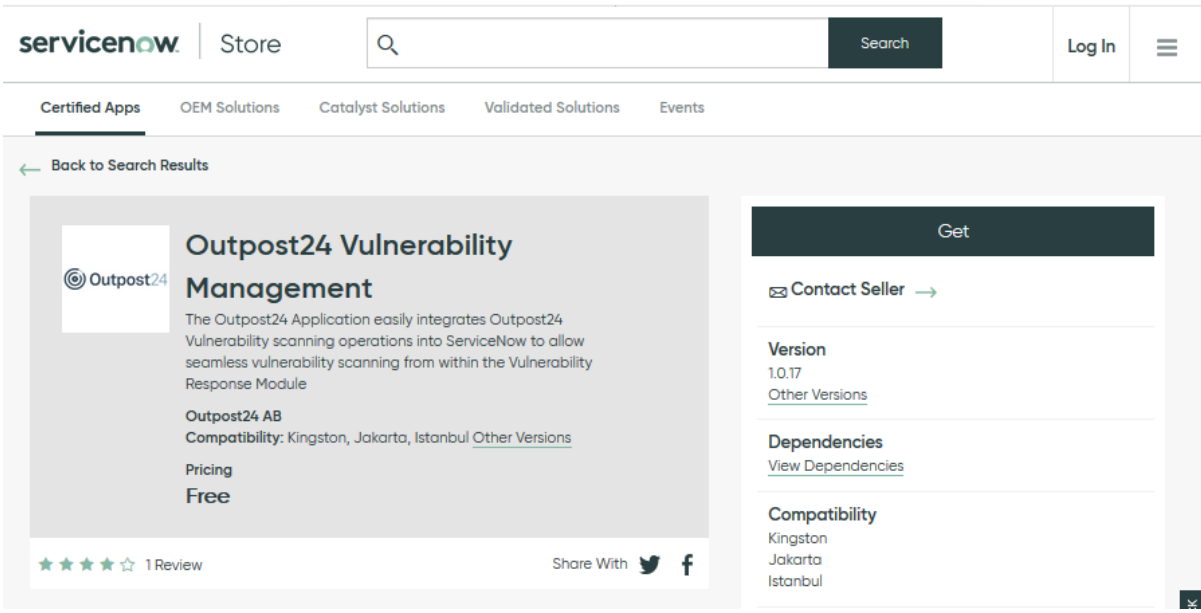
3.1 Preparation for Installation

Before starting the setup:

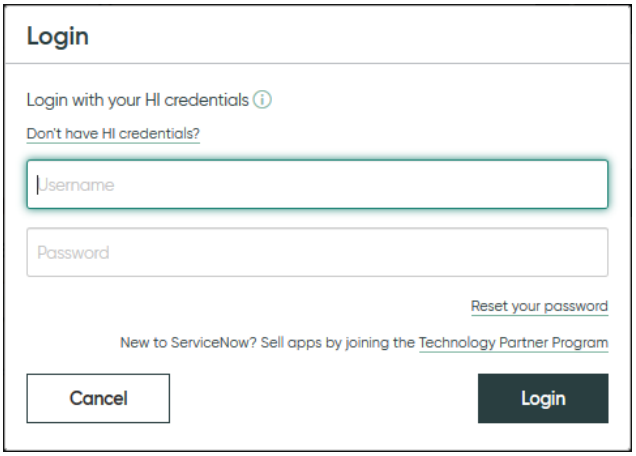
1. Go to https://store.servicenow.com
2. Search for Outpost24 Vulnerability Management.



3. Hover over the result and click **More**.



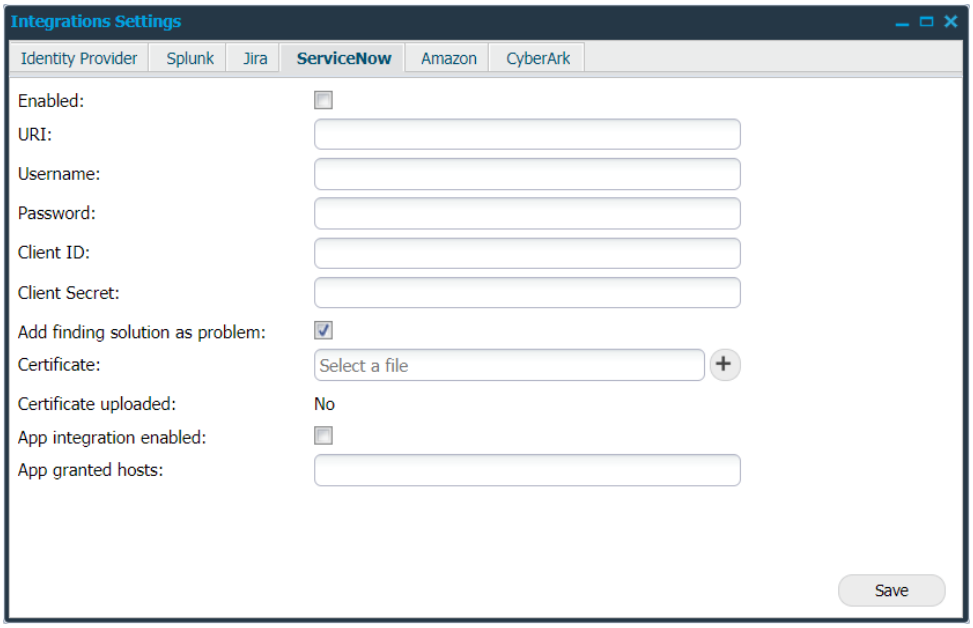
4. Click **Get** and log in with your HI credentials to download and install **Outpost24 Vulnerability Integration** app.



3.2 Setup

To enable ServiceNow app on OUTSCAN:

1. Go to **Main Menu > Settings > Integrations > ServiceNow**.
2. It opens the below window.

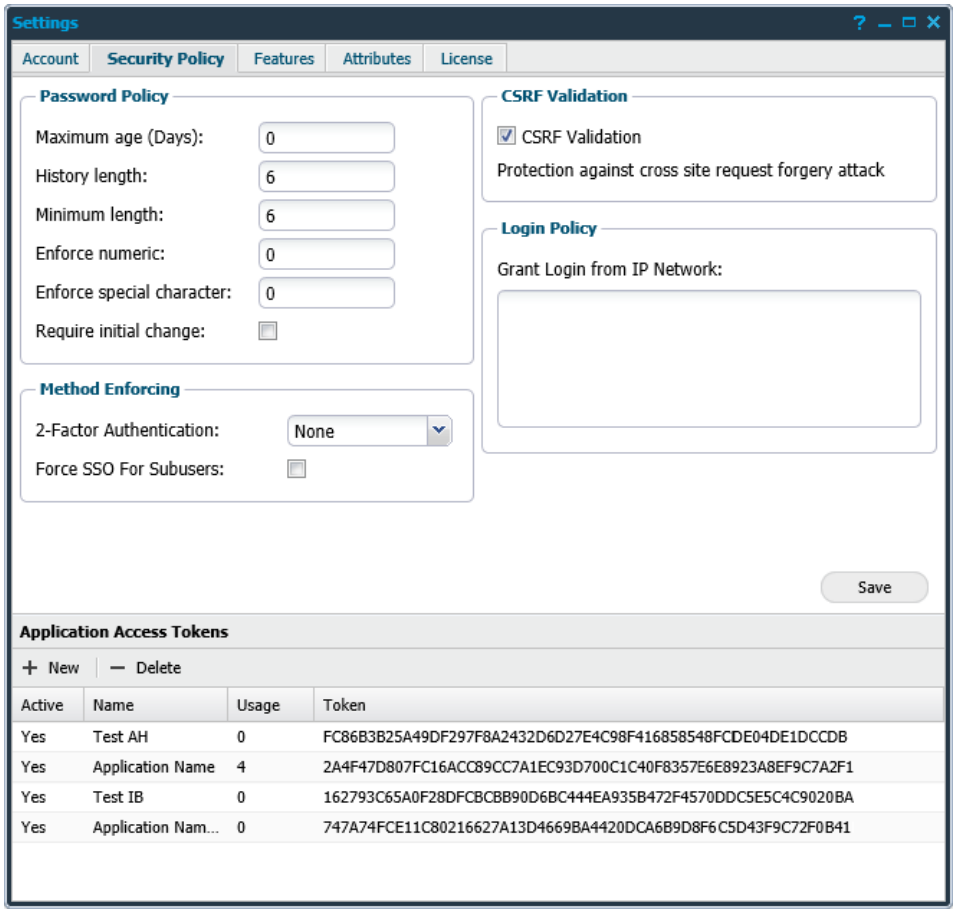


3. Click on **App integration enabled** checkbox to allow the ServiceNow app integration.
4. Add an IP range to the **App granted hosts** field to restrict the access.
5. Click **Save**.

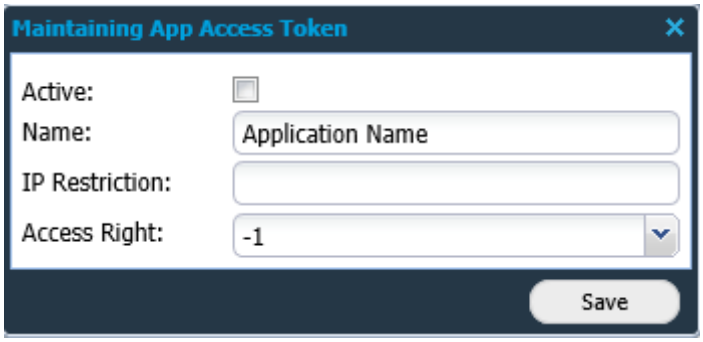
To setup and configure ServiceNow:

1. Go to Outpost24 **Vulnerability Management →Administration → Settings**.

2. Add the **API Server URL**; either OUTSCAN or HIAB to indicate which platform to use for scanning.
3. Add **API Access Token**; follow the below steps to generate an API Access Token from your OUTSCAN.
   To create a token:
   a. Navigate to **Main Menu > Settings > Account**.



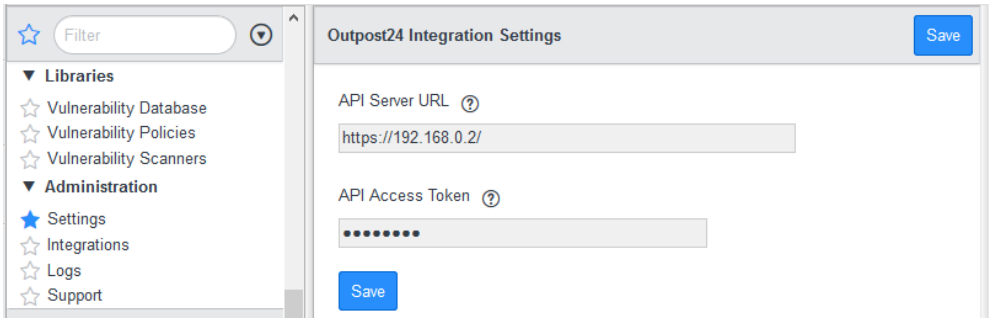
   b. Select the **Security Policy** tab.
   c. In the *Application Access Tokens* area click **+New** to open the *Maintaining App Access Token* window.



   d. Fill in the required fields and click **Save**.

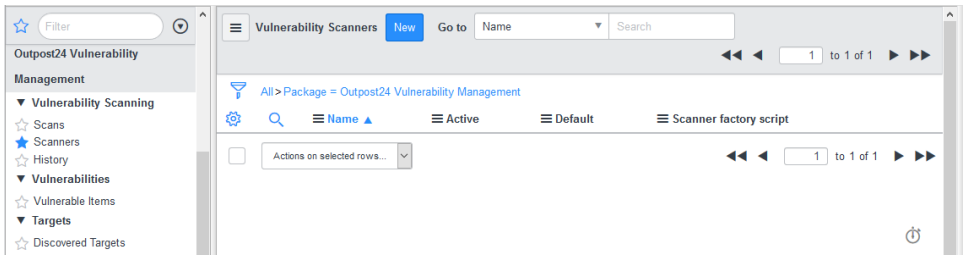
The new token is found in the list in the *Application Access Token* area.

The generated API Access token should be used in the respective application (**ServiceNow**).

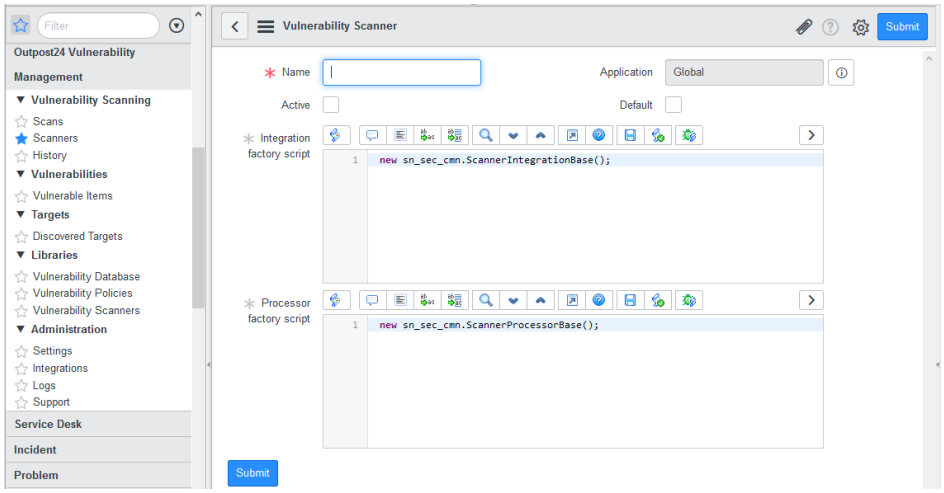


4. Click **Save**.
5. Add **scanners** to OUTSCAN to use multiple scanners or internal scanners.

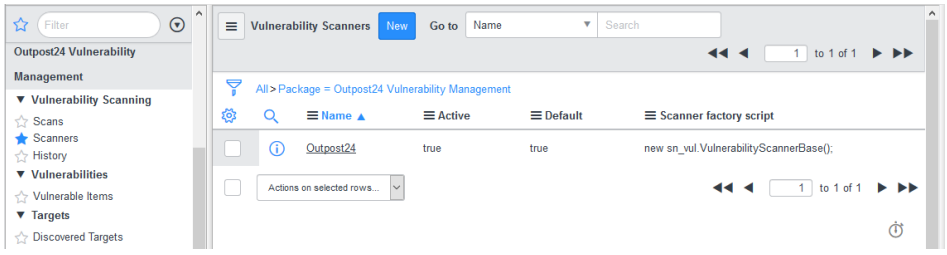
6. Go to **Outpost24 Vulnerability Management > Vulnerability Scanning > Scanners**.
   a. Click **New** to add the Outpost24 vulnerability Scanner.



   b. Integration factory script must be new `x_o24_outpost24.Outpost24Scanner();` from the application **Outpost24 Vulnerability Integration**. This is automatically added while installing Outpost24 Vulnerability Integration app.



   c. After adding the required fields, click **Submit**.
   d. The added scanner shows up in the list of vulnerability scanners.



7. Add scan policies in OUTSCAN.

Once set up, vulnerability database is synced to ServiceNow.
***Example**: A scan policy can set which credentials to use, vulnerabilities to look for and ports to scan.*

3.3 Operation

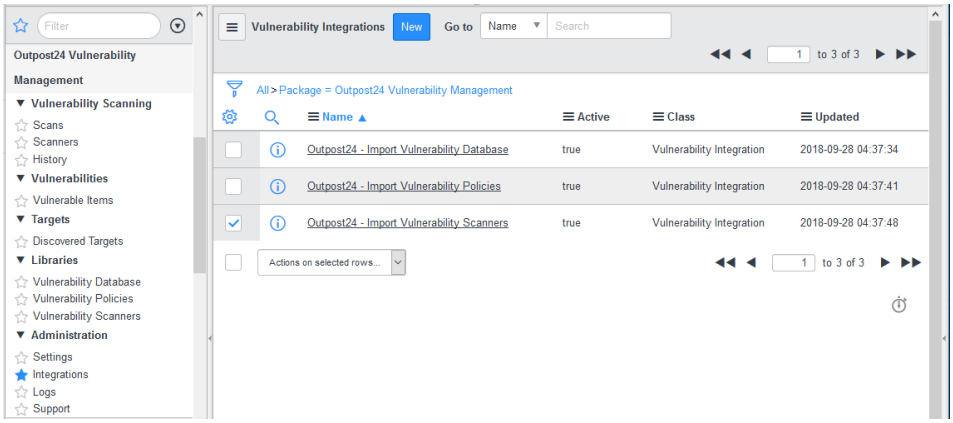
The app enables ServiceNow to be a scanner using Outscan so that you can run scans from ServiceNow.

ServiceNow	Outpost24	Comments
Scans	**Main Menu > Netsec > Scan Scheduling > Scan Schedules**	Set up all scans
History	**Main Menu > Netsec > Scan Scheduling > Scan History**	Shows scans that has been performed by the system.
Vulnerable Items	**Main Menu > Netsec >Reporting Tools > Findings tab**	The Findings tab lists all the findings that were found based on your selection in the Select targets for reporting area.
Vulnerability Database	**Main Menu > Vulnerability Database**	Shows the vulnerability checks, their descriptions, and the suggested solutions.
Vulnerability Policies	**Main Menu > Netsec > Scan Scheduling > Scan Policy**	Defines the rules and settings for the scan to use when it is executed.
Vulnerability Scanners	**Main Menu > Settings > Distribution**	Shows what scanner that are available to use.

3.3.1 Add/Update Libraries

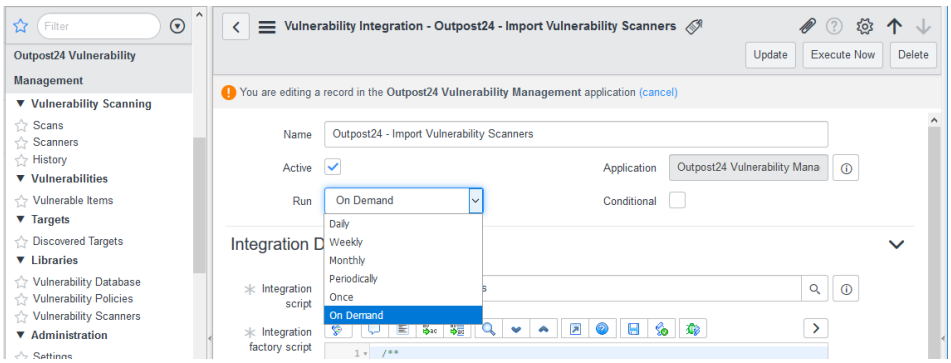
To add or update libraries:

1. Go to **Outpost24 Vulnerability Management > Administration > Integrations**.
   a. Select *Outpost24 – Import Vulnerability Scanners*.

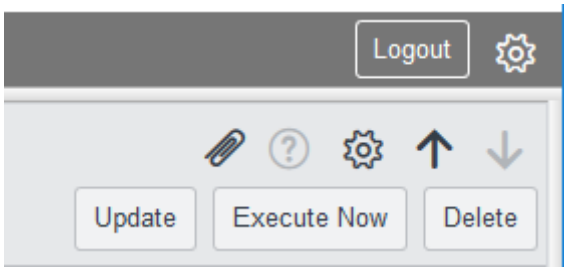


   b. All integrations are set to run **On Demand** as default. Change the frequency of

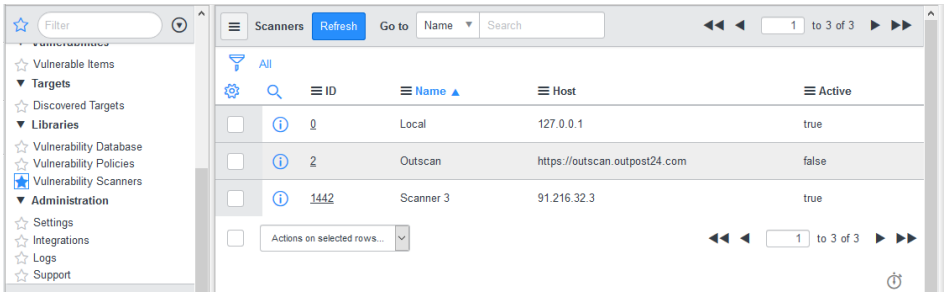
update by selecting one of the options in the drop-down menu of **Run**.



c. Click on **Execute Now** to run the script immediately.



d. Click on **Update to save** the changes.
e. To update the Scanners immediately, go to **Libraries→Vulnerability Scanners.**

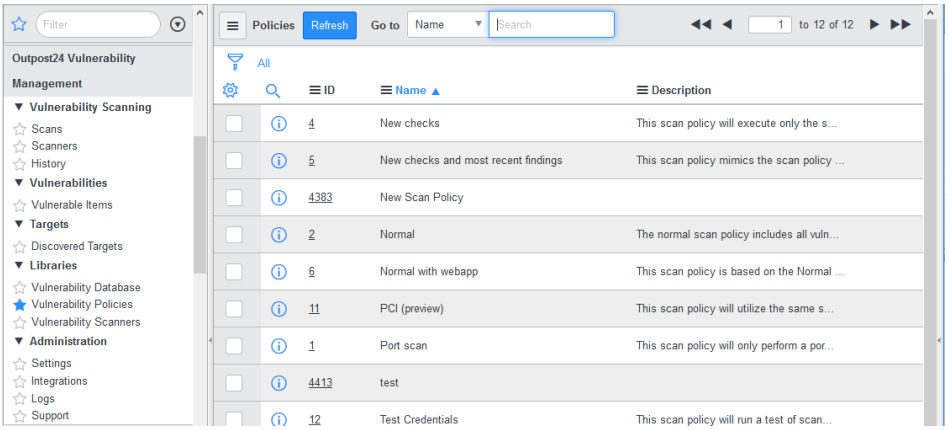


f. **C**lick on **Refresh**.

2. Go to **Outpost24 Vulnerability Management > Administration > Integrations**.
   a. Select *Outpost24 – Import Vulnerability Database*.
   b. To download Vulnerability Database, click on **Execute Now**.
   c. To keep the database up-to-date, change the update frequency to **Daily**.
   Note: *It is recommended to always update the database before running a scan.*

3. Go to **Outpost24 Vulnerability Management > Administration > Integrations**.
   a. Select *Outpost24 – Import Vulnerability Policies*.
   b. To download Vulnerability policies, click on **Execute Now**.
   c. To keep the database up to date, change the update frequency to **Daily**.

d. To update the **Policies** immediately, go to **Libraries > Vulnerability Policies.**

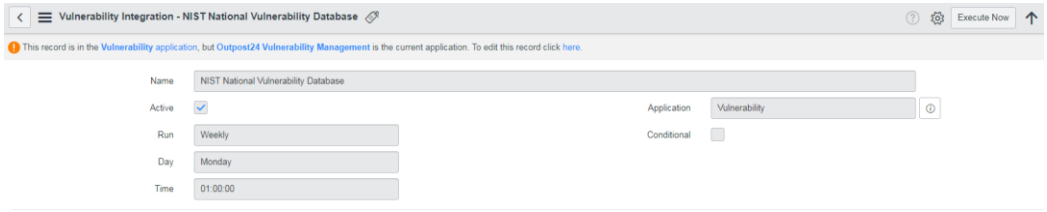


e. Click on **Refresh**.

3.3.2 Update Vulnerability Database

To update the Vulnerability database,

1. Go to **Vulnerability > Administration > Integrations**.
2. Click on **NIST National Vulnerability Database** and click on **Execute Now**. This action updates all lists under **Vulnerability > Administration > NVD -Auto Update**.

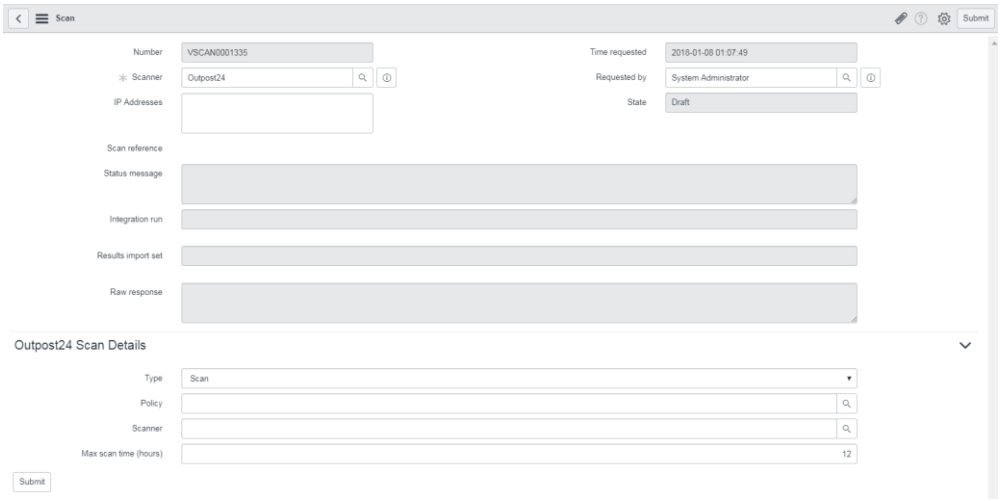


***Note**: The default update frequency is set to Weekly on Monday. Click on here shown in the pop up to change it to daily to update the database every day.*

3.3.3 Run a scan

To run a scan:

1. Go to **Outpost24 Vulnerability Management > Vulnerability Scanning > Scans**.
2. Click on **New** to add a scan schedule.



3. Add IP address(es) that are to be scanned.

3.3.3.1 Outpost24 Scan Details

1. **Type**: Select the scan type from the drop-down menu of **Type**.
   The available options are:
   - **Scan**
     - Select a **Policy** from the available options. Not mandatory.
     - Select a **Scanner**. Not mandatory.
     - Mention the **Max. scan time (hours)**.
   - **Discovery**
     - Select a **Scanner**. Not mandatory.
     - Mention the **Max. scan time (hours)**.
   - **SLS**
     - Select a **Scanner**. Not mandatory.
     - Mention the **Max. scan time (hours)**.
   - **Web**
     - Provide **URL(s)** that are to be scanned.
     - Select a **Scanner**. Not mandatory.
     - Mention the **Max. scan time (hours)**.
2. Click **Submit**. This will save the scan as a draft.
3. Go back to **Scans** window, click on the **Draft** scan to add a **configuration item** (if any).
   Note: *If IP address is delivered, the scan information is reported back to IP address. If* `sys_id` *is given,* OUTSCAN *fetches all information regarding connection (IP address, DNS hostname and FQDN) and the report will be sent to configuration item. If both are provided, then the IP address(es) mentioned is/are used as white list.*
4. Click on **Initiate scan**.

3.3.4 Scan Information

- To check if there are any errors, go to **Outpost24 Vulnerability Management >Administration > Logs**.
- To see the scan history, go to **Outpost24 Vulnerability Management > Vulnerability Scanning > History**.
- Go to **Outpost24 Vulnerability Management > Vulnerabilities > Vulnerable Items**, click on the **Vulnerability** field on each ID to see the threat, and proposed solution.

4 Frequently Asked Questions

Which data and how is the data sent from scanners to ServiceNow?

ServiceNow to Outpost24

- Each configuration item's installed operating system and software components (for Outpost24 Scan-less Scanning SLS)
- Target network information (hostname, IP)

Outpost24 to ServiceNow

- Scanner metadata
- Scan policies
- Vulnerability database
- Detected findings

The data is transmitted via HTTPS.

How is SLS performed?

The operating system is fetched from the Configuration Item, name and version from installed_ons and sent in the RESTMessageV2 to the XMLAPI with parameters ACTION=SERVICENOWSCAN, SCANNER, SCANMODE, SCANPOLICY, MAXSCANTIME, and TARGETINFO.

OUTSCAN interprets this information and activates the vulnerability rule engine that generates findings based on which software components were submitted for the Configuration Item.

What volume have you tested and what is the speed at which they were imported? How does that compare to an existing large customer of yours (top 10% based on Configuration Items and Vulnerabilities)?

Our vulnerability database contains ~140000 items and is the largest dataset we attempted to import; the requests are however paged by 10000 in each request.

It appears that the response is read as a single String in memory. How large is the response anticipated to be? This can be a memory constraint that can affect our platform. If the response is XML or JSON our Datasource/import set/transform map implementation can step over results more efficiently in some cases. Also, this can be reduced by paging.

It depends on how many findings are detected on the scanned asset but the number of Vulnerable Items will typically range between a few and a few hundred.

Does this application import all vulnerability data from Outpost24 or does it only import results from scans initiated from within ServiceNow? How are Configuration Items matched from scan result data? We have some APIs for that but I don't see them used. If this is limited to scans initiated from ServiceNow this might not be important.

The application import results from scans initiated from within ServiceNow only, so this shouldn't be a concern.