Alien Vault OTX Search Function for IBM Resilient

Table of Contents

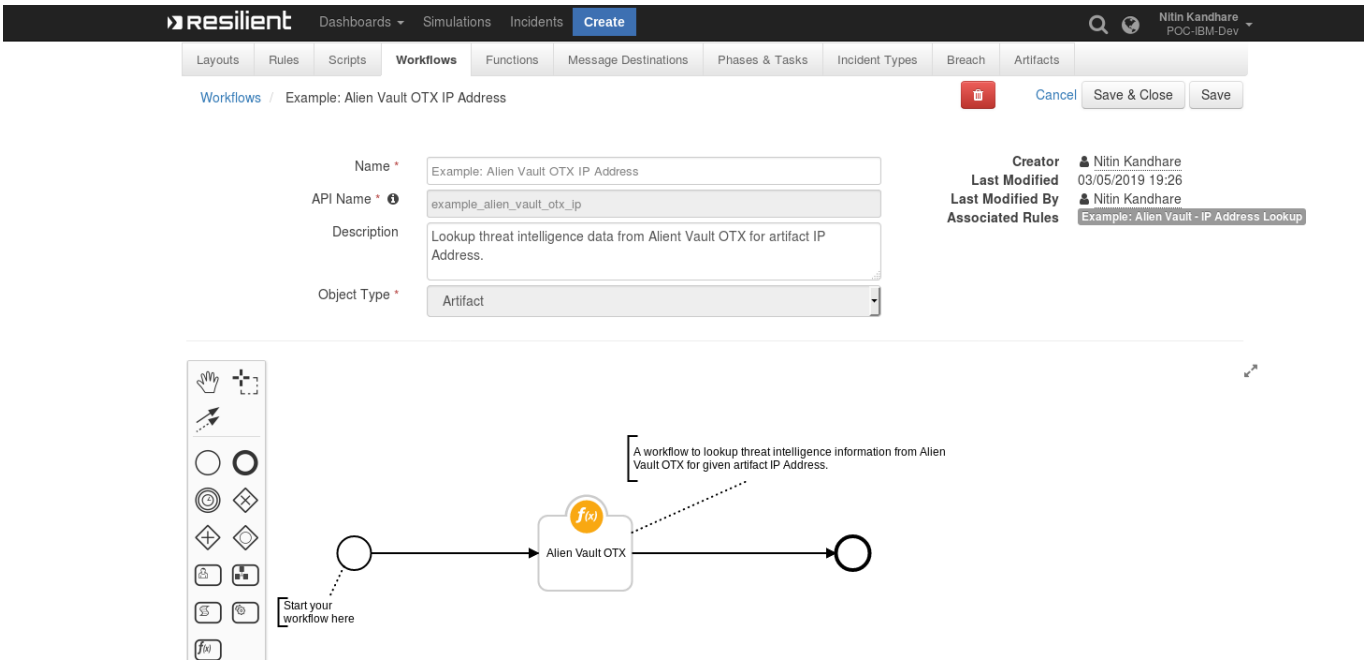
About This Package:

This package contains a Resilient Function that allows you to search your Alien Vault OTX platform with the given query for Threat Intelligence data about a particular Threat Indicator

- Threat intelligence indicators that can be searched for are:
    - IP Address
    - Domain
    - Host Name
    - File Hashes
    - URL
    - CVE
- The function makes use of the Alien Vault OTX `api/v1/indicators` API call to get information on a given query
- More information on Alien Vault OTX

Workflow Name	Description	Object Type	Rules
Example: Alien Vault OTX CVE	Lookup threat intelligence data from Alient Vault OTX for artifact threat CVE ID.	Artifact	Example: Alien Vault - CVE Lookup
Example: Alien Vault OTX DNS Name	Lookup threat intelligence data from Alient Vault OTX for artifact DNS Name.	Artifact	Example: Alien Vault - DNS Name Lookup
Example: Alien Vault OTX Hash	Lookup threat intelligence data from Alient Vault OTX for artifact File Hashes.	Artifact	Example: Alien Vault - File Hash Lookup
Example: Alien Vault OTX Host Name	Lookup threat intelligence data from Alient Vault OTX for artifact Host Name.	Artifact	Example: Alien Vault - Host Name Lookup
Example: Alien Vault OTX IP Address	Lookup threat intelligence data from Alient Vault OTX for artifact IP Address.	Artifact	Example: Alien Vault - IP Address Lookup
Example: Alien Vault OTX URL	Lookup threat intelligence data from Alient Vault OTX for artifact URL.	Artifact	Example: Alien Vault - URL Lookup

Sample Function layout:



Sample Pre-Process Script

Sample Post-Process Script

Prerequisites:

- Resilient Appliance >= v31.0.0
- Integrations Server running resilient_circuits >= v30.0.0 30
- Account with Alien Vault OTX
- A `DirectConnect OTX` API Key from Alien Vault

Installation

This package requires that it is installed on a RHEL or CentOS platform and uses the resilient-circuits framework.

- Install this package using `pip`:
- Download the `.zip` file from our App Exchange and extract it. You will find a file called: `fn_alienvault_otx-<version>.tar.gz`
- Copy this file to your Integrations Server
- To install the package, run:

```
$ pip install pip install fn_alienvault_otx-<version>.tar.gz
```

- To import the function, example rules and workflows into your Resilient Appliance, run:

```
$ resilient-circuits customize -y -l fn-alienvault-otx
```

- To update your `app.config` file with the required Alien Vault configurations, run:

```
$ resilient-circuits config -u
```

- Then open your `app.config` file and the following configuration data is added:

```
  [fn_alienvault_otx]
  # OTX API Key to Access the Alien Vault OTX Service
  av_api_key=<<DirectConnect OTX API Key>>

  #Base URL Path of Alien Vault OTX
  av_base_url=https://otx.alienvault.com/api/v1

  # Proxy Server by Default will be None
  proxy=None
```

- Run resilient-circuits:

```
$ resilient-circuits run
```

- To uninstall:

```
$ pip uninstall fn_alienvault_otx
```

Function Inputs

Function Name	Type	Required	Example	Info
`alien_search_value`	`String`	Yes	`"192.168.0.1"`	The search value to send to Alien Vault OTX (may be any String that contains an IP Address, URL, Hash, Threat CVE ID, DNS Name, System Name.)

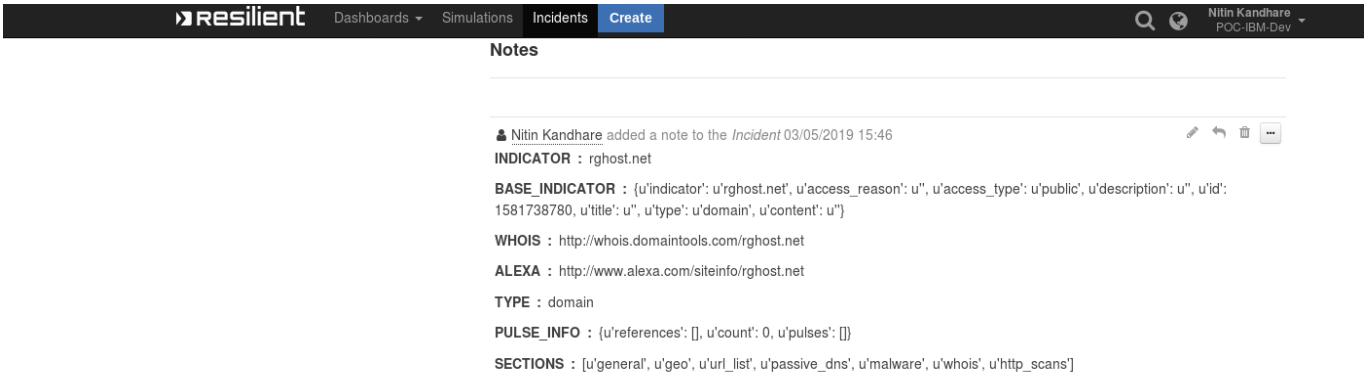
Function Name	Type	Required	Example	Info
`alien_search_type`	`String`	Yes	`IP Address`	The search type to send to Alien Vault OTX (may be any String type can be an IP Address, URL, Hash, Threat CVE ID, DNS Name, System Name.)
`alien_section`	`select`	Yes	`reputation`	The section to search for Threat Intelligence Data from Alien Vault, this section may be different for different search type (may be any string general, geo, malware, reputation, url_list, passive_dns, http_scans etc)

Function Output

- To see the output of each of the API calls for this Function, we recommend running `resilient-circuits` in `DEBUG` mode.
- To do this run:

```
$ resilient-circuits run --loglevel=DEBUG
```

Sample Output Displayed on Incident Notes Section



Pre-Process Script

This example sets the `alienvault_search_value`, `alienvault_search_type`, `alienvault_section` inputs to the value and type of the Artifacts and sections the user took action on

```
# The search value to send to Alien Vault OTX (may be any String that
contains an IP Address, URL, Hash,Threat CVE ID,DNS Name,System Name.)
inputs.alienvault_search_value = artifact.value
#The search type to send to Alien Vault OTX (may be any String type can be
an IP Address, URL, Hash,Threat CVE ID,DNS Name,System Name.)
```

```
inputs.alienvault_search_type = artifact.type
#The section to search for Threat Intelligence Data from Alien Vault, this
section may be different for different search type(may be any string
general, geo, malware,reputation, url_list, passive_dns, http_scans etc)
inputs.alienvault_section = rule.properties.alien_vault_search_section_ip
```

Post-Process Script

```
result_data = results['content']
for key_data,value_data in result_data.items():
rich_text_tmp +=
rich_text_format.format(key_data.upper(),value_data)browse_rich_text_final
= helper.createRichText(rich_text_tmp)
incident.addNote(browse_rich_text_final)
```

Rules

Rule Name	Object Type	Workflow Triggered	Activity Fields
Example: Alien Vault - CVE Lookup	`Artifact`	`Example: Alien Vault OTX CVESearch`	`Alien Vault Search Section CVE` values : general
Example: Alien Vault - DNS Name Lookup	`Artifact`	`Example: Alien Vault OTX DNS Name`	`Alien Vault Search Section DNS Name` values : general,geo,malware,url_list,passive_dns,whois,http_scans
Example: Alien Vault - File Hash Lookup	`Artifact`	`Example: Alien Vault OTX Hash`	`Alien Vault Search Section Hash` values : general,analysis
Example: Alien Vault - Host Name Lookup	`Artifact`	`Example: Alien Vault OTX Host Name`	`Alien Vault Search Section Host Name` values : general,geo,malware,url_list,passive_dns,http_scans
Example: Alien Vault - IP Address Lookup	`Artifact`	`Example: Alien Vault OTX IP Address`	`Alien Vault Search Section IP Address` values : general,reputation,geo,malware,url_list,passive_dns,http_scans

Rule Name	Object Type	Workflow Triggered	Activity Fields
Example: Alien Vault - URL Lookup	`Artifact`	`Example: Alien Vault OTX URL`	`Alien Vault Search Section URL` values : general,url_list

Using the Alien Vault OTX Function

- The Alien Vault Function can be called on artifact like IP Address, DNS Name, System Name, URL, URL Referer,
  Hashes, Threat CVE ID.
- After invoking a Rule on the Artifact, we need to choose the `Section` based on the Artifact
- For more info on what `section` refers to, please see: https://otx.alienvault.com/api