fn_clamav

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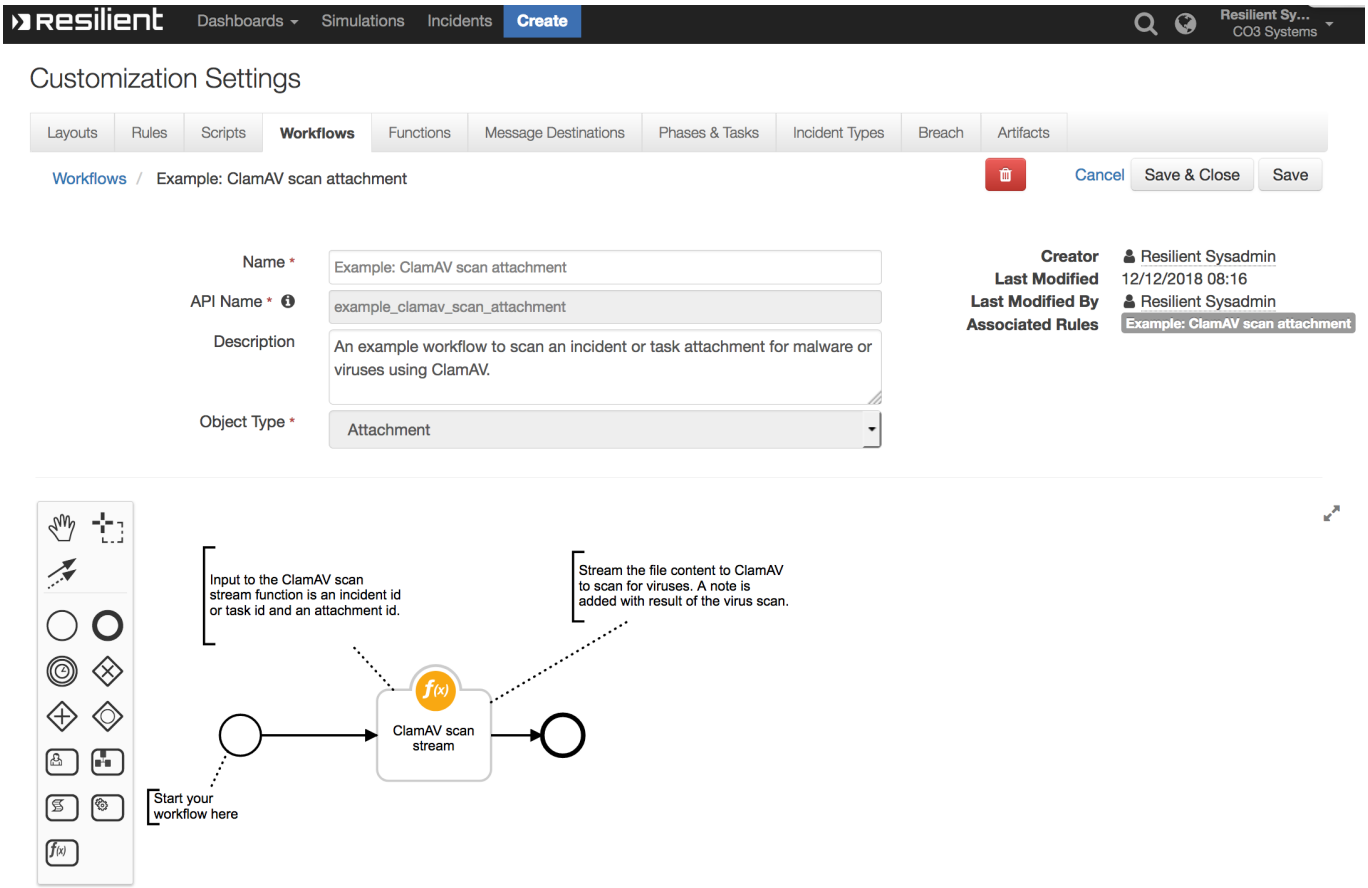
Release Notes

Version	Date	Notes
1.1.0	09/2021	Convert to App Host
1.0.0	12/2018	Initial Release

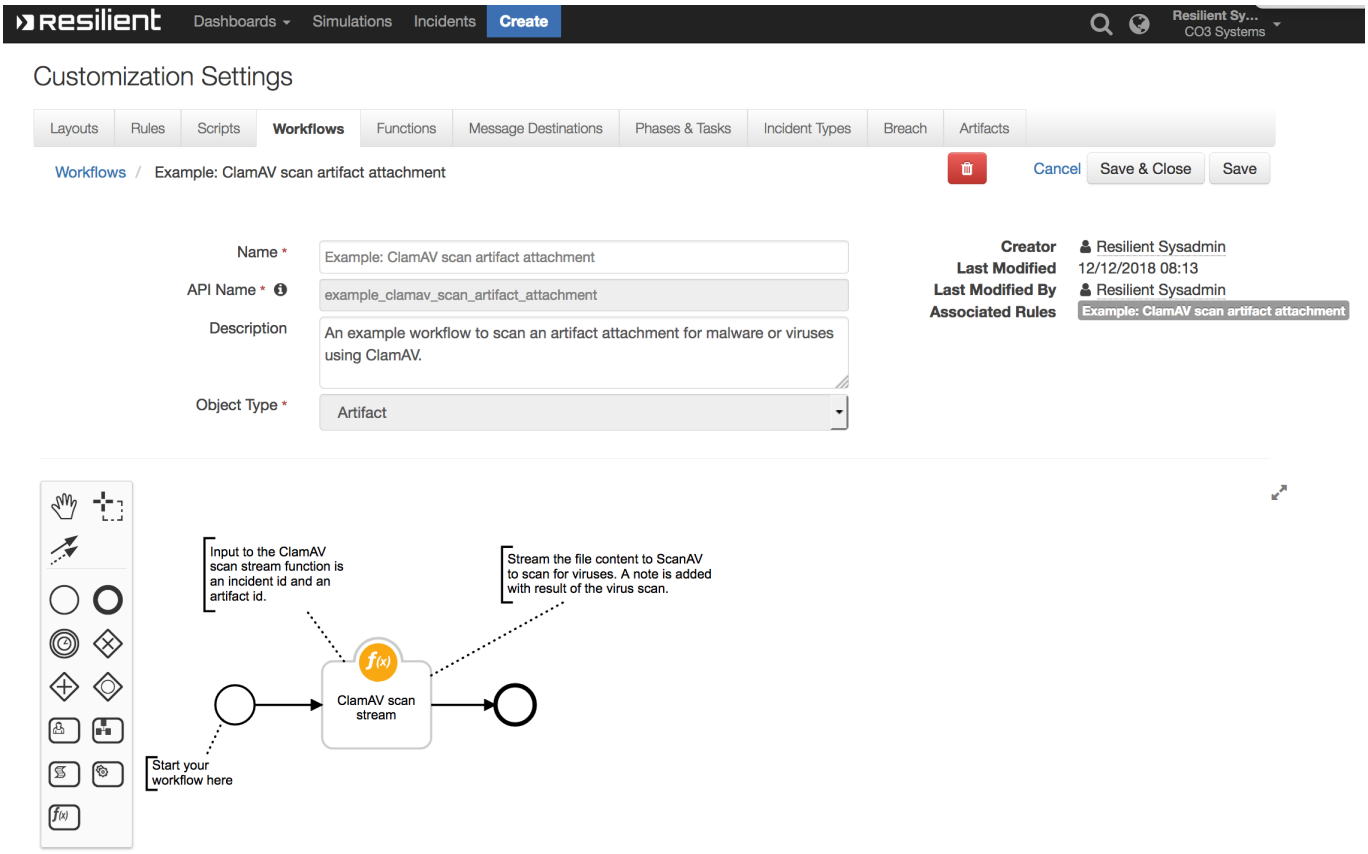
Overview

This package contains a single function which uses ClamAV to scan a file or attachment for viruses and returns the results of the scan **Resilient Circuits Components for 'fn_clamav'** Resilient Circuits Components for 'fn_clamav'

- Example: ClamAV scan attachment



- Example: ClamAV scan artifact attachment



Key Features

- Both workflows create a task or incident note containing the status of the ClamAV malware scan.

Requirements

- resilient_circuits version 30 or later
- Python package pyclamd >=0.4.

This app supports the IBM Resilient SOAR Platform and the IBM Cloud Pak for Security.

Resilient platform

The Resilient platform supports two app deployment mechanisms, App Host and integration server.

If deploying to a Resilient platform with an App Host, the requirements are:

- Resilient platform >= `41.0.6783`.
- The app is in a container-based format (available from the AppExchange as a `zip` file).

If deploying to a Resilient platform with an integration server, the requirements are:

- Resilient platform >= `41.0.6783`.
- The app is in the older integration format (available from the AppExchange as a `zip` file which contains a `tar.gz` file).
- Integration server is running `resilient_circuits>=30.0.0`.
- If using an API key account, make sure the account provides the following minimum permissions:

Name	Permissions
Org Data	Read
Function	Read

The following Resilient platform guides provide additional information:

- *App Host Deployment Guide*: provides installation, configuration, and troubleshooting information, including proxy server settings.
- *Integration Server Guide*: provides installation, configuration, and troubleshooting information, including proxy server settings.
- *System Administrator Guide*: provides the procedure to install, configure and deploy apps.

The above guides are available on the IBM Knowledge Center at ibm.biz/resilient-docs. On this web page, select your Resilient platform version. On the follow-on page, you can find the *App Host Deployment Guide* or *Integration Server Guide* by expanding **Resilient Apps** in the Table of Contents pane. The System Administrator Guide is available by expanding **System Administrator**.

Cloud Pak for Security

If you are deploying to IBM Cloud Pak for Security, the requirements are:

- IBM Cloud Pak for Security >= 1.4.
- Cloud Pak is configured with an App Host.
- The app is in a container-based format (available from the AppExchange as a `zip` file).

The following Cloud Pak guides provide additional information:

- *App Host Deployment Guide*: provides installation, configuration, and troubleshooting information, including proxy server settings. From the Table of Contents, select Case Management and Orchestration & Automation > **Orchestration and Automation Apps**.
- *System Administrator Guide*: provides information to install, configure, and deploy apps. From the IBM Cloud Pak for Security Knowledge Center table of contents, select Case Management and Orchestration & Automation > **System administrator**.

These guides are available on the IBM Knowledge Center at ibm.biz/cp4s-docs. From this web page, select your IBM Cloud Pak for Security version. From the version-specific Knowledge Center page, select Case Management and Orchestration & Automation.

Proxy Server

The app **does/does not** support a proxy server.

Python Environment

Both Python 2.7 and Python 3.6 are supported. Additional package dependencies may exist for each of these packages:

- pyclamd >= 0.4.0
- resilient_circuits>=30.0.0

Installation

Install

- To install or uninstall an App or Integration on the *Resilient platform*, see the documentation at ibm.biz/resilient-docs.
- To install or uninstall an App on *IBM Cloud Pak for Security*, see the documentation at ibm.biz/cp4s-docs and follow the instructions above to navigate to Orchestration and Automation.

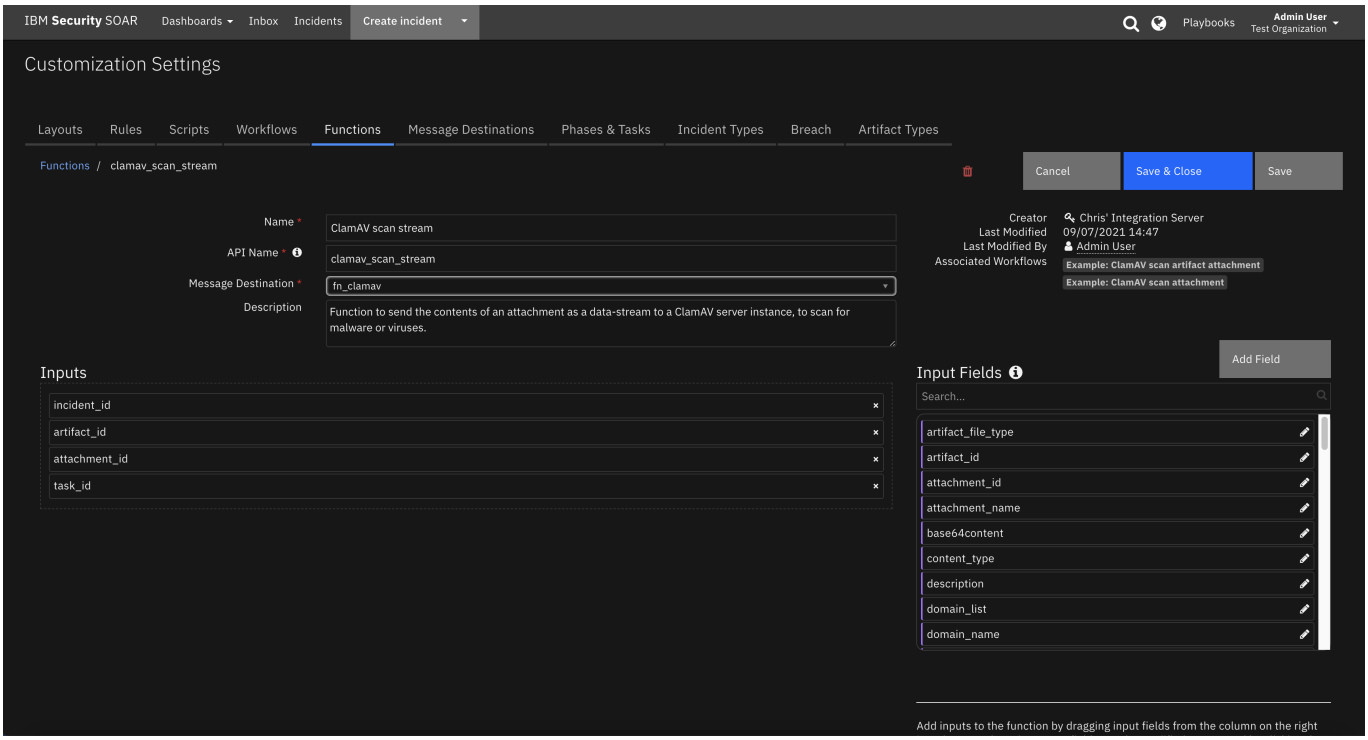
App Configuration

The following table provides the settings you need to configure the app. These settings are made in the app.config file. See the documentation discussed in the Requirements section for the procedure.

Config	Required	Example	Description
host	Yes	`localhost`	*Enter a description of the config here.*
port	Yes	`3310`	*Enter a description of the config here.*
timeout	Yes	`500`	*Enter a description of the config here.*

Function - ClamAV scan stream

Function to send the contents of an attachment as a data-stream to a ClamAV server instance, to scan for malware or viruses.



▶ Inputs:

Name	Type	Required	Example	Tooltip
artifact_id	number	No	–	-
attachment_id	number	No	–	-
incident_id	number	Yes	–	-
task_id	number	No	–	-

▶ Outputs:

```
results = {
    # TODO: Copy and paste an example of the Function Output within this code block.
    # To view the output of a Function, run resilient-circuits in DEBUG mode and invoke the Function.
    # The Function results will be printed in the logs: "resilient-circuits run --loglevel=DEBUG"
}
```

▶ Example Pre-Process Script:

```
# Required inputs are: the incident id and artifact id
inputs.incident_id = incident.id
inputs.artifact_id = artifact.id
```

▶ Example Post-Process Script:

```
##  CLAMAV - clamav_scan_stream script ##
# Example results:
"""
# Virus found incident attachment
Result:    { "inputs": {"incident_id": 2095, "attachment_id": 3,
"artifact_id": null, "task_id": null},
             "response": {"stream": ["FOUND", "Eicar-Test-Signature"]},
             "file_name": "eicar.txt"
}
# Virus found task attachment
Result:    { "inputs": {"incident_id": 2095, "attachment_id": 25,
"artifact_id": null, "task_id": 2251251},
             "response": {"stream": ["FOUND", "Eicar-Test-Signature"]},
             "file_name": "eicar.txt"
}

# Virus found artifact attachment
Result:    { "inputs": {"incident_id": 2095, "attachment_id": null,
"artifact_id": 10, "task_id": null},
             "response": {"stream": ["FOUND", "Eicar-Test-Signature"]},
             "file_name": "eicar.txt"
}
# No malware or  detected
Result:    { "inputs": {"incident_id": 2095, "attachment_id": 3,
"artifact_id": null, "task_id": null}
             "response": {"stream": ["OK", '']},
             "file_name": "test.txt",
           }

# Got an error
Result:    { "inputs": {"incident_id": 2095, "attachment_id": 3,
"artifact_id": null, "task_id": null
             "response": {"stream": ["ERROR", '<reason>']},
             "file_name": "test.txt",
           }
"""
# Processing

color = "#45bc27"

response = results.response
file_name = results.file_name
inputs = results.inputs

if response is not None and response.stream[0] != "ERROR":
    if response.stream[0] == "FOUND":
        color = "#ff402b"

    if inputs.incident_id is not None and inputs.artifact_id is not None:
        noteText = u"""<br>ClamAV scan complete
                       <br><b>Incident ID:</b></br> '{0}'
```

```
                        <br><b>Artifact ID:</b></br> '{1}'
                        <br><b>Attachment Name:</b></br> '{2}'
                        <br><b>Scan Status:</b> <b style="color: {3}">{4}
</b></br>""".format(inputs.incident_id,

inputs.artifact_id,

file_name, color, response.stream[1])
    elif inputs.attachment_id is not None:
        if inputs.task_id is not None:
            noteText = u"""<br>ClamAV scan complete
                        <br><b>Task ID:</b></br> '{0}'
                        <br><b>Attachment ID:</b></br> '{1}'
                        <br><b>Attachment Name:</b></br> '{2}'
                        <br><b>Scan Status:</b> <b style="color: {3}">
{4}</b></br>""".format(inputs.task_id,

inputs.attachment_id,

file_name, color, response.stream[1])
        elif inputs.incident_id is not None:
            noteText = u"""<br>ClamAV scan complete
                        <br><b>Incident ID:</b></br> '{0}'
                        <br><b>Attachment ID:</b></br>'{1}'
                        <br><b>Attachment Name:</b></br> '{2}'
                        <br><b>Scan Status:</b> <b style="color: {3}">
{4}</b></br>""".format(inputs.incident_id,

inputs.attachment_id,

file_name, color, response.stream[1])
    if inputs.task_id is not None:
        task.addNote(helper.createRichText(noteText))
    else:
        incident.addNote(helper.createRichText(noteText))
```

Rules

Rule Name	Object	Workflow Triggered
Example: ClamAV scan attachment	attachment	`example_clamav_scan_attachment`
Example: ClamAV scan artifact attachment	artifact	`example_clamav_scan_artifact_attachment`

Troubleshooting & Support

Refer to the documentation listed in the Requirements section for troubleshooting information.

For Support

This is a IBM Community provided App. Please search the Community https://ibm.biz/resilientcommunity for assistance.