VMRay Sandbox Analyzer Function for IBM Resilient

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Release Notes

v1.0.1

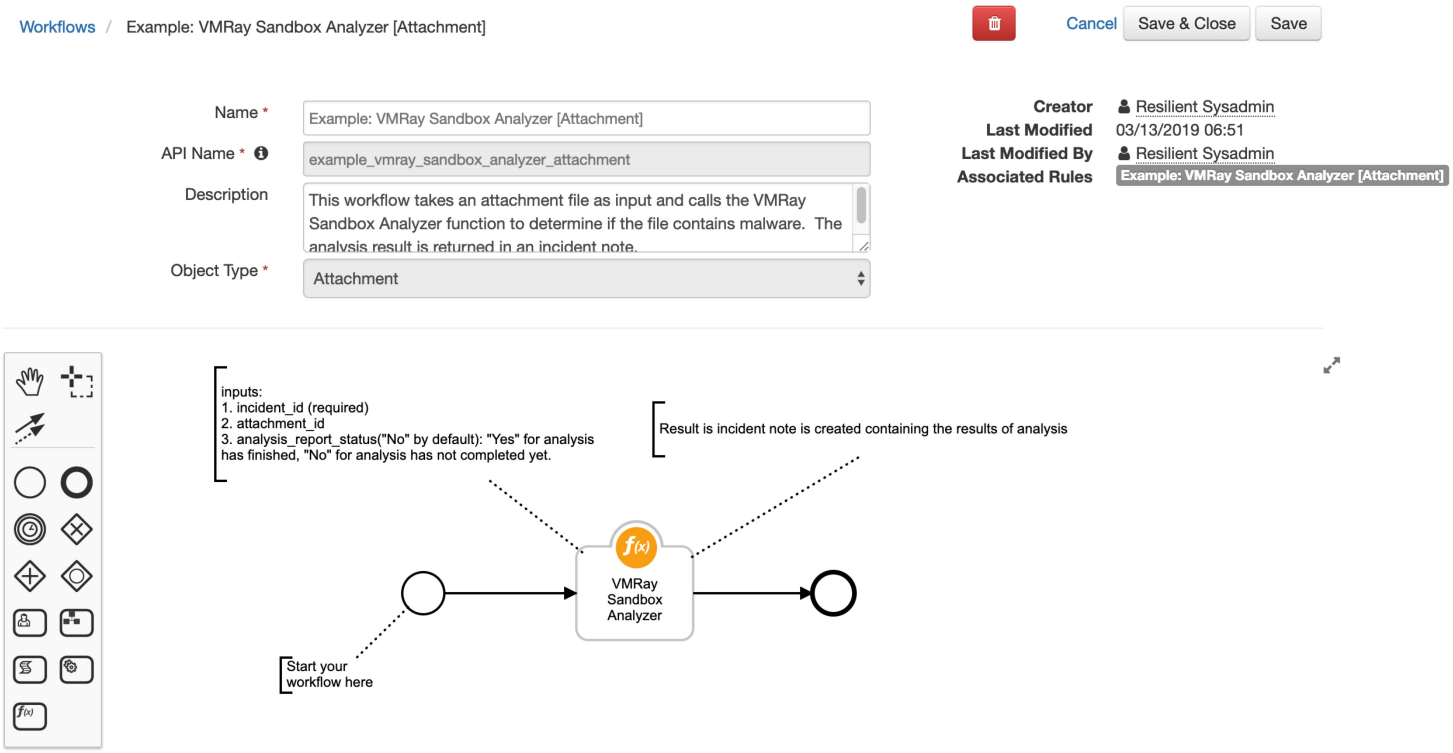
- App Host support

v1.0.0

- Initial Release

Overview

This package contains a function that executes a VMRay Malware Sandbox Analysis using VMRay Cloud API. Also included are two example workflows and two example rules that demonstrate how to use this function.



- The attachment or artifact to be analyzed must be a file.
- The report only supports JSON format. HTML and PDF are not supported.
- Supports a proxy. Add your proxy details to the [integrations] section of the `app.config` file.

Requirements

- Resilient platform >= `v35.0.0`
- An Integration Server running `resilient_circuits>=30.0.0`
  - To set up an Integration Server see: ibm.biz/res-int-server-guide

Installation

App Format

The app .zip file is in a container format and requires a Resilient platform configured with an App Host.

The app tar.gz file is an extension format and requires a Resilient platform configured with an integration server.

App Host

For a complete guide on how to configure App Host and install apps in the Resilient platform, please reference the Resilient Apps topic in the Knowledge Center. Knowledge Center.

All the components for running this integration in a container already exist when using the App Host app.

To install,

- Navigate to Administrative Settings and then the Apps tab.
- Click the Install button and select the downloaded file: app-fn_vmray_analyzer-x.x.x.zip.
- Go to the Configuration tab and edit the app.config file, editing the vmray_api_key and making any additional setting changes.

Config	Required	Example	Description
vmray_api_key	Yes	``	*VMRay Analyzer API Key*
vmray_analyzer_url	Yes	`https://cloud.vmray.com`	*VMRay Server URL*
vmray_analyzer_report_request_timeout	Yes	`60`	*Amount of time in seconds to wait until checking if the report is ready*

Integration Server

- Download the `app-fn_vmray_analyzer-x.x.x.zip` file.
- Copy the `.zip` to your Integration Server and SSH into it.
- **Unzip** the package:

```
$ unzip app-fn_vmray_analyzer-x.x.x.zip
```

- **Install** the package:

```
$ pip install fn_vmray_analyzer-x.x.x.tar.gz
```

- Import the **configurations** into your app.config file:

```
$ resilient-circuits config -u -l fn-vmray-analyzer
```

- Import the fn_vmray_analyzer **customizations** into the Resilient platform:

```
$ resilient-circuits customize -y -l fn-vmray-analyzer
```

- Open the config file, scroll to the bottom and edit your fn_vmray_analyzer configurations:

```
$ nano ~/.resilient/app.config
```

- Download the `fn_vmray_analyzer.zip` .
- Copy the `.zip` to your Integration Server and SSH into it.
- **Unzip** the package:

```
$ unzip fn_vmray_analyzer-x.x.x.zip
```

- **Change Directory** into the unzipped directory:

```
$ cd fn_vmray_analyzer-x.x.x
```

- **Install** the package:

```
$ pip install fn_vmray_analyzer-x.x.x.tar.gz
```

- Import the **configurations** into your app.config file:

```
$ resilient-circuits config -u -l fn-vmray-analyzer
```

- Import the fn_vmray_analyzer **customizations** into the Resilient platform:

```
$ resilient-circuits customize -y -l fn-vmray-analyzer
```

- Open the config file, scroll to the bottom and edit your fn_vmray_analyzer configurations:

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$ nano ~/.resilient/app.config
```

Config	Required	Example	Description
vmray_api_key	Yes	``	*VMRay Analyzer API Key*
vmray_analyzer_url	Yes	`https://cloud.vmray.com`	*VMRay Server URL*
vmray_analyzer_report_request_timeout	Yes	`60`	*Amount of time in seconds to wait until checking if the report is ready*

- **Save** and **Close** the app.config file.

- [Optional]: Run selftest to test the Integration you configured:

```
$ resilient-circuits selftest -l fn-vmray-analyzer
```

- **Run** resilient-circuits or restart the Service on Windows/Linux:

```
$ resilient-circuits run
```

Uninstall

If using an integration server, you can uninstall your app as follows:

- SSH into your Integration Server.
- **Uninstall** the package:

```
$ pip uninstall fn-vmray-analyzer
```

- Open the config file, scroll to the [fn_vmray_analyzer] section and remove the section or prefix `#` to comment out the section.
- **Save** and **Close** the app.config file.

Function Inputs:

Function Name	Type	Required	Example	Info
`incident_id`	`Number`	Yes	`1001`	The ID of the current Incident
`attachment_id`	`Number`	No	`5`	The ID of the Attachment to be analyzed
`artifact_id`	`Number`	No	`6`	The ID of the Artifact to be analyzed
`analyzer_report_status`	`Boolean`	Yes	`No`	Has the analysis report generated successfully. Options are: `Yes` or `No`

Function Output:

```
results = {
                "analysis_report_status": analysis_report_status,
                "incident_id": incident_id,
                "artifact_id": artifact_id,
                "attachment_id": attachment_id,
                "sample_final_result": sample_final_result
            }
```

Pre-Process Script:

Example: VMRAY Sandbox Analyzer [Attachment]

```
inputs.incident_id = incident.id
inputs.attachment_id = attatchment.id
```

Example: VMRAY Sandbox Analyzer [Artifact]

```
inputs.incident_id = incident.id
inputs.artifact_id = artifact.id
```

Post-Process Script:

This example adds a Note to the Incident and color codes the `analysis_status` depending if it was **malicious** or **clean**

```
def  font_color(vti_score,sample_severity):
  color = "green"
  try:
    if sample_severity in ["malicious"] or int(vti_score) >= 75:
      color = "red"
    elif sample_severity in ["blacklisted","suspicious"] or int(vti_score) >= 50:
      color = "yellow"
  except:
      pass
  return color

if not results.analysis_report_status:
 noteText = u"""Successful submit <b>{}</b> to VMRay Cloud Analyzer.However it will take time to generate an anal

else:
 noteText = u"""Successful submit <b>{}</b> to VMRay Analyzer.Check the results below: <br>""".format(attachment.

 for sample in results.sample_final_result:
   noteText += u"""--------------------------------------------------------------------------------"""
   color = font_color(sample["sample_report"]["sample_score"],sample["sample_report"]["sample_last_reputation_sev
   noteText += u"""<br>VMRay Sandbox Analysis: <b>{sample_filename}</b> complete.<br>
                  VMRAY Online Attachment: <a href={sample_online_report}>{sample_online_report}</a><br>
                  VMRay Analyzer result:  VTI Score: <b style= "color:{color}">{sample_vti_score}</b>,  Severity
              """.format(sample_filename=sample["sample_report"]["sample_filename"],
                         sample_online_report=sample["sample_report"]["sample_webif_url"],
                         color = color,
                         sample_vti_score = sample["sample_report"]["sample_score"],
                         sample_severity = sample["sample_report"]["sample_last_reputation_severity"])

   noteText += u"""<br>| analysis_id | analysis_job_started | analysis_vti_score | analysis_severity |<br>"""

   for analysis in sample["sample_analysis_report"]:
     color = font_color(analysis["analysis_vti_score"],analysis["analysis_severity"])
     noteText += u"""| <a href={analysis_link}>  {analysis_id} </a> | {analysis_job_started} |  <b style= "color:
                 """.format(analysis_link=analysis["analysis_webif_url"],
                         analysis_id=analysis["analysis_id"],
                         analysis_job_started=analysis["analysis_job_started"],
                         analysis_vti_score=analysis["analysis_vti_score"],
                         analysis_severity=analysis["analysis_severity"],
                         color=color)

   reputations = [str(reputation["reputation_lookup_severity"]) for reputation in sample["sample_reputation_repor

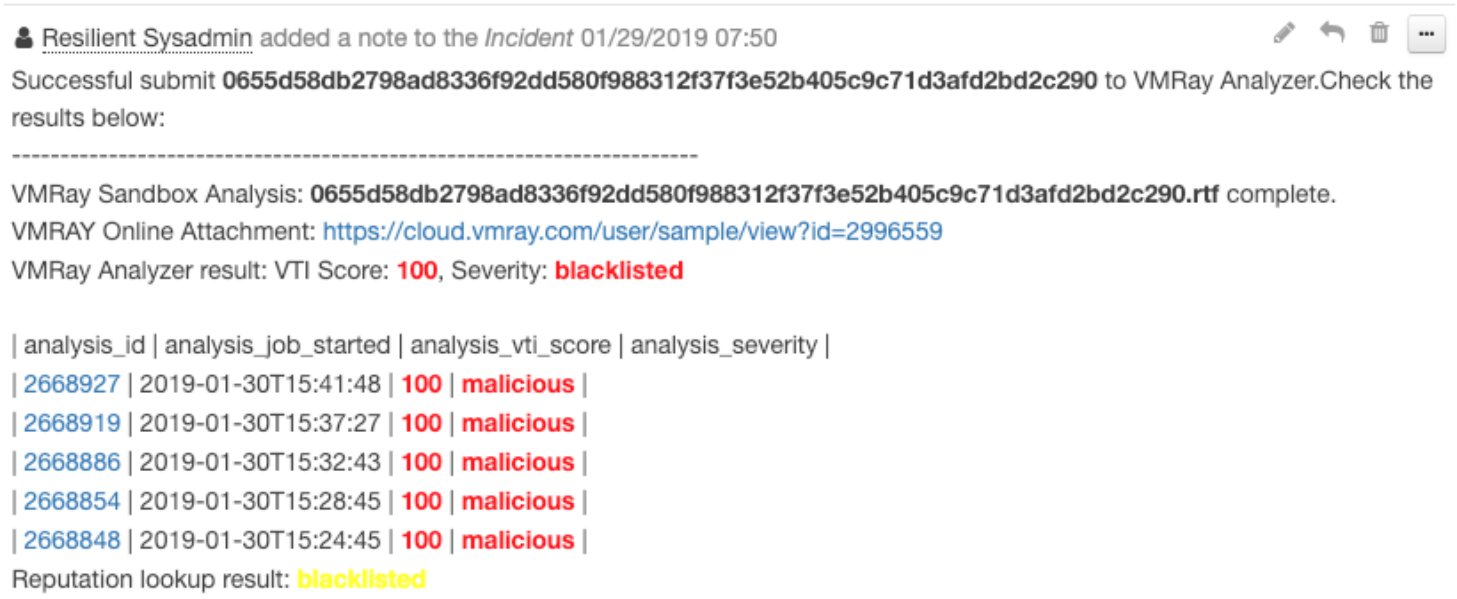
   if "malicious" in reputations:
     color = "red"
     reputation_lookup_severity = "malicious"
   elif "suspicious" in reputations:
     color = "yellow"
     reputation_lookup_severity = "suspicious"
   elif "blacklisted" in reputations:
     color = "yellow"
     reputation_lookup_severity = "blacklisted"
   elif "not_suspicious" in reputations:
     color = "green"
     reputation_lookup_severity = "not_suspicious"
   elif "whitelisted" in reputations:
```

```
      color = "green"
      reputation_lookup_severity = "whitelisted"
    else:
      color = "green"
      reputation_lookup_severity = "unknown"

    noteText += u"""Reputation lookup result:  <b style= "color:{color}">{reputation_lookup_severity} </b> <br>"""

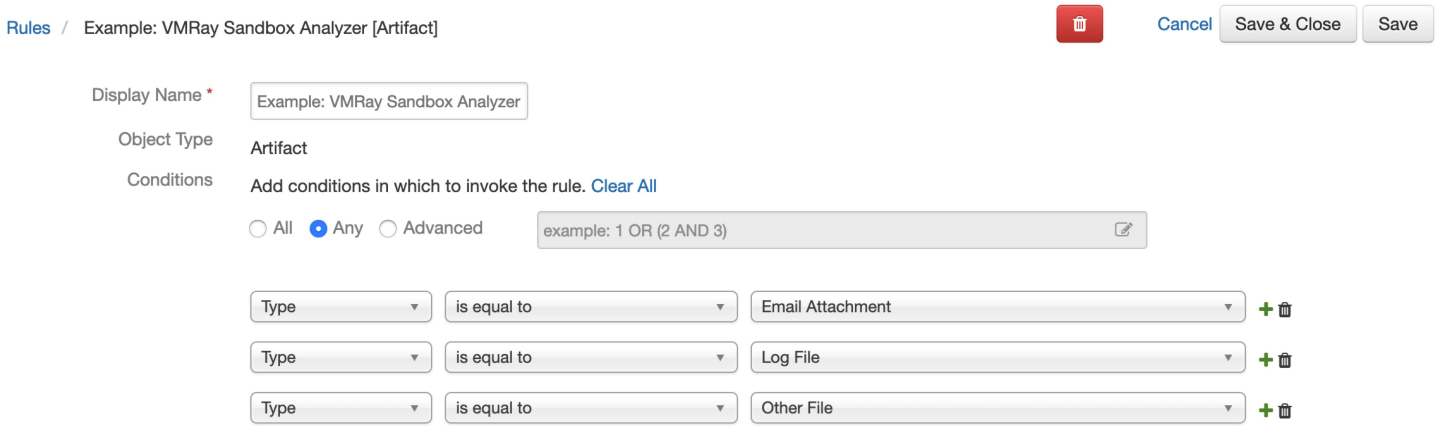
incident.addNote(helper.createRichText(noteText))
```

Example of adding a incident note from post-processing scripts:



Rules

Rule Name	Object Type	Workflow Triggered
Example: VMRay Sandbox Analysis [Artifact]	`Artifact`	`Example: VMRay Sandbox Analyzer [Artifact]`



Rule Name	Object Type	Workflow Triggered
Example: VMRay Sandbox Analyzer [Attachment]	`Attachment`	`Example: VMRay Sandbox Analyzer [Attachment]`