

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.



Cancel

Save & Close

Save

Name *

API Name *

Description

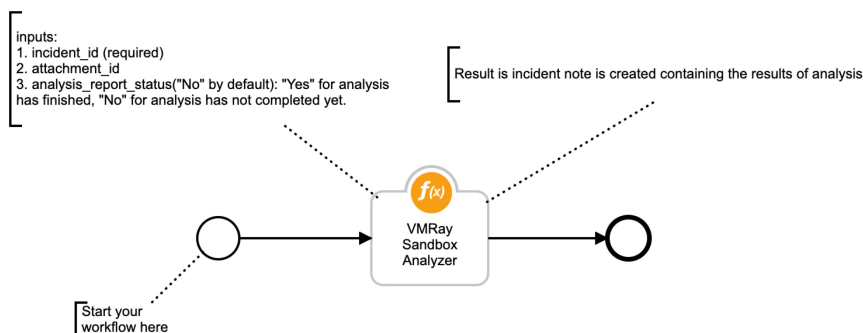
Object Type *

Creator Resilient Sysadmin

Last Modified 03/13/2019 06:51

Last Modified By Resilient Sysadmin

Associated Rules Example: VMRay Sandbox Analyzer [Attachment]



- 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:

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

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

- **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 = attachment.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:

Resilient Sysadmin added a note to the *Incident* 01/29/2019 07:50

Successful submit **0655d58db2798ad8336f92dd580f988312f37f3e52b405c9c71d3afd2bd2c290** to VMRay Analyzer.Check the results below:

VMRay Sandbox Analysis: **0655d58db2798ad8336f92dd580f988312f37f3e52b405c9c71d3afd2bd2c290.rtf** complete.
VMRAY Online Attachment: <https://cloud.vmray.com/user/sample/view?id=2996559>
VMRay Analyzer result: VTI Score: **100**, Severity: **blacklisted**

analysis_id	analysis_job_started	analysis_vti_score	analysis_severity
2668927	2019-01-30T15:41:48	100	malicious
2668919	2019-01-30T15:37:27	100	malicious
2668886	2019-01-30T15:32:43	100	malicious
2668854	2019-01-30T15:28:45	100	malicious
2668848	2019-01-30T15:24:45	100	malicious

Reputation lookup result: **blacklisted**

Rules

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

Display Name *

Example: VMRay Sandbox Analyzer

Object Type

Artifact

Conditions

Add conditions in which to invoke the rule. [Clear All](#)

☐ All

☒ Any

☐ Advanced

example: 1 OR (2 AND 3)

Type

is equal to

Email Attachment

+

Type

is equal to

Log File

+

Type

is equal to

Other File

+

Activities

Ordered

Ordered Activities will be invoked in the order specified below. They include: *Add Tasks, Run Script, and Set Field.* [Add New](#)

Workflows

Workflow Activities are started after all Ordered Activities complete.

Example: VMRAY Sandbox Analyzer [Artifact]

Destinations

Transaction Data is posted to Message Destinations after all Ordered Activities complete and all Workflows have been started.

Select Destinations

Show Activity Fields

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

Display Name *

Example: VMRay Sandbox Analyzer

Object Type

Attachment

Conditions

Add conditions in which to invoke the rule. [Add New](#)

Activities

Ordered

Ordered Activities will be invoked in the order specified below. They include: *Add Tasks, Run Script, and Set Field.* [Add New](#)

Workflows

Workflow Activities are started after all Ordered Activities complete.

Example: VMRay Sandbox Analyzer [Attachment]

Destinations

Transaction Data is posted to Message Destinations after all Ordered Activities complete and all Workflows have been started.

Select Destinations

Show Activity Fields