

ThreatQuotient



Resilient Functions Guide

Version 1.1.1

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Versioning

- Current integration version 1.1.1
- Integration Server \geq v37.0.214
- Supported on ThreatQ versions \geq 4.24.0

Introduction


ThreatQuotient's Resilient Functions App for IBM Security SOAR, enables analysts to automatically or manually sync incidents, artifacts, and other context, to ThreatQ, in real-time.



This app does not support use of a proxy server.

The screenshot displays the 'new incident' form in the Resilient Functions App. The interface includes a top navigation bar with 'Dashboards', 'Inbox', 'Incidents', and a 'Create' button. The main form area has tabs for 'Tasks', 'Details', 'Breach', 'Notes', 'Members', 'News Feed', 'Attachments', 'Stats', 'Timeline', 'Artifacts', and 'Email'. A progress bar shows '0% Complete'. Below the progress bar is a table with columns: Task Name, Owner, Due Date, Flags, and Actions. The table lists a task named 'Respond - (Data Breach - Organizational)' with a sub-task 'Investigate Exposure of Personal Information/Data'. The task is currently 'Unassigned' and has 'No due date'. To the right of the table is a 'Summary' section with fields for ID, Phase, Severity, Date Created, Date Occurred, Date Discovered, Date Determined, Was personal information or personal data involved?, and Incident Type. The 'Incident Type' field shows a 'Communication error (fax; email)'. Below the summary is a 'People' section listing 'Created By' and 'Owner' as 'Zach Shames', and 'Members' as 'There are no members.' At the bottom, there are sections for 'Related Incidents' (No related incidents) and 'Attachments' (There are no attachments). A URL bar at the bottom shows the incident ID: <https://10.13.0.193/#incidents/21907orgId=201&tab=d702e365-e684-465f-b628-6903c34a0940>.

Prerequisites

 This app does not support use of a proxy server.


- Python 3.x
- Resilient platform `>= v37.0.214`
- An Integration Server running `None`
 - See ibm.biz/res-int-server-guide for information on setting up an integration server.
 - If using API Keys, minimum required permissions are:
 - Org Data: Read, Edit
 - Function: Read
 - Incidents: Read
 - Incident Status: Edit
 - Incident Fields: Edit
 - Private Tasks: Read
 - Private Task Members: Edit
 - Private Task Notes: Edit
 - Public Tasks: Read
 - Public Task Members: Edit
 - Public Task Notes: Edit
 - Action Invocations: Read
 - Functions: Create, Read, Edit
 - Layouts: Read, Edit

Installation

The following links will point you to the steps required to install an app or integration on the Resilient Platform.

See the the steps found on ibm.biz/resilient-docs to install or uninstall an App or Integration on the *Resilient platform*.

See the steps under the *Orchestration and Automation* at ibm.biz/cp4s-docs to install or uninstall an App on *IBM Cloud Pak for Security*.

 This app does not support use of a proxy server.

APP Configuration

The following table provides the settings required to configure the app. These settings are made in the `app.config` file.

See the Resilient documentation links for the steps provided in the [Prerequisites](#) section of this guide for more details.

Config	Required	Example	Description
-----	:-----:	-----	-----
host	Yes	`threatq.<org>.com`	Enter the hostname or IP for your ThreatQ instance
username	Yes	`resilient`	Enter a ThreatQ username for authentication
password	Yes	`xxxx`	Enter a ThreatQ password for authentication
cid	Yes	`xxxx`	Enter your ThreatQ CID (Client ID) found under 'My Account'
custom_source	Yes	`Resilient`	Enter a source name for the data pushed to ThreatQ
custom_attributes	Yes	`mitre_tactic=MITRE Tactic`	Enter a comma-separated key/value pair, mapping the resilient field (api name) to a ThreatQ attribute
custom_objects	Yes	`mitre_technique=Attack Pattern, malware_family=Malware`	Enter a comma-separated key/value pair, mapping the resilient field (api name) to a ThreatQ object type

Configuring for Reboot

This section will describe how to configure the integration (resilient-circuits) to auto-run on reboot.

1. Create a file for the new service:

```
<> sudo vi /etc/systemd/system/  
    resilient_circuits_functions.service
```

2. Paste the following into the file:



Fill out required fields (between < >).

Delete lines 4 and 5 completely (After=... and Requires=...) if you are *not* installing this directly on the Resilient Server.

```
[Unit]  
Description=Resilient-Circuits Service for Functions  
# Comment out these 2 lines if you are running on an integration server  
After=resilient.service  
Requires=resilient.service  
[Service]  
Type=simple  
User=res-integration  
WorkingDirectory=/home/<username>  
ExecStart=/home/<username>/.resilient/functions-env/bin/resilient-circuits run  
Restart=always  
TimeoutSec=10  
Environment=APP_CONFIG_FILE=/home/<username>/.resilient/app.config  
Environment=APP_LOCK_FILE=/home/<username>/.resilient/functions.lock  
[Install]  
WantedBy=multi-user.target
```

3. Give the service file the correct privileges:

```
<> sudo chmod 664 /etc/systemd/system/  
    resilient_circuits_functions.service
```

4. Reload the system daemon and enable the functions service:

```
<> sudo systemctl daemon-reload  
  
    sudo systemctl enable resilient_circuits_functions.service
```

5. Start the service:

```
<> sudo systemctl start resilient_circuits_functions
```

6. You can view the logs for the service by running the following:

```
<> sudo journalctl -u resilient_circuits_functions -f
```



This will "follow" the logs in real-time.

Customizing Functionality

By default, the integration includes the following automatic actions:

- Sync Incident
- Sync Indicator
- Sync Task
- Sync Comment

If you do not want those actions to be automated, you can convert them to menu item actions.

Disabling Rules (Actions)

1. Go to **Customization Settings -> Rules**.
2. Find the rule you want to disable.
3. Move the switch to the off position.

Switching to Menu Item Rules

1. Go to **Customization Settings -> Rules**
2. Choose the rule you want to switch to be a menu item



Make note the name. Usually ThreatQ:, followed by the action name - see the Features section.

3. Delete the rule
4. Create a new rule and then make it a menu item.
5. Enter the name noted in step 2.
6. Set the message destination to `fn_threatq` and then save.

Additionally, two of the actions support some custom fields. If you have converted these automatic actions to menu item actions, see the Features section to see what fields they support.

- Sync Incident

- Sync Indicator

Functions

Due to requirements from IBM Resilient, functions are required to create import definitions. However, this integration does not utilize functions, only actions. Adding functions from this integration to your workflow will not work.

If you wish to use the functions in a workflow (not via an action), please submit a request to support@threatq.com

Actions

The following actions are supported by the integration.

Sync Incident

This action will sync an incident with ThreatQ. If the incident is updated, it will update ThreatQ with the new/updated information.

FIELD	DETAILS
Rule	Automatic
Type	Incident
Supported Fields (if menu item)	<ul style="list-style-type: none">• Import Artifacts into ThreatQ<ul style="list-style-type: none">◦ Type: Select◦ Options: [Yes, No]• Import Indicators from ThreatQ<ul style="list-style-type: none">◦ Type: Select◦ Options: [Yes, No]

Sync Indicator

This action will add an artifact to ThreatQ as an indicator.

FIELD	DETAILS
Rule	Automatic
Type	Artifact
Supported Fields (if menu item)	<ul style="list-style-type: none">• ThreatQ Indicator Status<ul style="list-style-type: none">◦ Description: The status for the indicator in ThreatQ◦ Type: Select◦ Options: [Active, Review, Indirect, Whitelisted, Expired]• ThreatQ Indicator Confidence<ul style="list-style-type: none">◦ Description: A confidence level for the artifact. This will get set as an attribute within ThreatQ◦ Type: Select◦ Options: [Low, Medium, High]

Mark as False Positive

This action will mark the artifact as a false positive within ThreatQ. An attribute will be added to the indicator with the name, "False Positive" and value, **Yes**.

ThreatQ: Mark as False Positive ×

Remove Artifact After Marking * ?

FIELD

DETAILS

Rule Menu Item

Type Artifact

Fields ThreatQ Remove Artifact After Marking

- Description: Setting this to **Yes** will remove the artifact from the Artifact list in Resilient after marking
- Type: Select
- Options: [Yes, No]

Mark as True Positive

This action will mark the artifact as a true positive within ThreatQ. An attribute will be added to the indicator with the name, "True Positive" and value, **Yes**.

FIELD	DETAILS
-------	---------

Rule	Menu Item
------	-----------

Type	Artifact
------	----------

Find Related Indicators

This action will look for any related indicators to the indicator within ThreatQ. Any related indicators will be added to Resilient.

FIELD	DETAILS
-------	---------

Rule	Menu Item
------	-----------

Type	Artifact
------	----------

Sync Comment

This action will add a note/comment to the associated ThreatQ Incident *or* Task. Comments in ThreatQ do not support markup, so the comment will not maintain the formatting from Resilient.

FIELD DETAILS

Rule Menu Item

Type Artifact

Import Attachment

This action will import an attachment into ThreatQ. It gives you the ability to choose what type of attachment it is, as well as the ability to choose whether or not to parse the attachment for indicators.

ThreatQ: Import Attachment ×

Attachment Type * ⓘ

Malware Sample ▼

Parse Indicators ⓘ

Yes ▼

Indicator Status ⓘ

Active ▼

Cancel

Execute

FIELD		DETAILS
Rule	Menu Item	
Type	Artifact	
Fields	<ul style="list-style-type: none">• ThreatQ Attachment Type<ul style="list-style-type: none">◦ Description: The type of attachment that the attachment will be imported as into ThreatQ◦ Type: Select◦ Options: [Malware Sample, Spearphish, PDF, Intelligence, Malware Analysis Report, Generic Text]• ThreatQ Parse Indicators<ul style="list-style-type: none">◦ Description: Whether or not you want to parse indicators out of the attachment◦ Type: Select◦ Options: [Yes, No]• ThreatQ Indicator Status<ul style="list-style-type: none">◦ Description: The status for any parsed indicators (if enabled)◦ Type: Select◦ Options: [Active, Review, Indirect, Whitelisted, Expired]	

Sync Task

This action will sync a task to ThreatQ. Any updates made to the task will be updated within ThreatQ.

FIELD

DETAILS

Rule

Menu Item

Type

Task

Set Task Status

This actions allows you to set the task's status within ThreatQ. By default, the integration syncs tasks with the status **To Do**. If you want to mark the task as a different status, you can use this action.

ThreatQ: Set Task Status ✕

ThreatQ Task Status * ?

FIELD

DETAILS

Rule Menu Item

Type Task


Fields ThreatQ Task Status

- Description: The status for the task within threatQ
- Type: Select
- Options: [To Do, In Progress, Review, Done]

Historical Sync

This action allows you to sync incidents historically. You will be able to customize the date to search since, as well as if you want to sync the related tasks or not.

ThreatQ: Historical Sync ✕

Created After Date * ? 

Historically Sync Tasks * ?

Cancel Execute

FIELD		DETAILS
Rule	Menu Item	
Type	Incident	
Fields	<ul style="list-style-type: none">• ThreatQ Created After Date<ul style="list-style-type: none">◦ Description: The date to go back to sync incidents from◦ Type: Date Picker• ThreatQ Historically Sync Tasks<ul style="list-style-type: none">◦ Description: Enabling this option will sync related tasks to a historical incident◦ Type: Select◦ Options: [Yes, No]	

Updating Versions

This section describes any modifications required when upgrading.



There are no modifications required to upgrade from version 1.1.0 to 1.1.1.

Updating from v1.0.x to v1.1.1

There are a few changes in the v1.0.1 that would call for some manual modifications.



Some functions have been removed due to not fully supporting workflows correctly.

1. In your Customization Settings, go to the Functions tab and remove the following items:
 - ThreatQ: Sync Incident
 - ThreatQ: Sync Indicator
 - ThreatQ: Import Attachment
 - ThreatQ: Sync Task
 - ThreatQ: Historical Sync
 - ThreatQ: Set Task Status
 - ThreatQ: Sync Comment
 - ThreatQ: Find Related Indicators
 - ThreatQ: Mark as False Positive
 - ThreatQ: Mark as True Positive
2. The following items will be re-added back to your Functions configuration when you rerun `resilient-circuits customize`:
 - ThreatQ: Mark as False Positive
 - ThreatQ: Mark as True Positive
 - ThreatQ: Find Related Indicators



See Updating from v1.0.0 to v1.0.1 if you are currently on v1.0.0.

3. There are 3 new config items you can add to your `app.config` file under the `[fn_threatq]` section to support custom attribute mapping, custom object mapping, and a custom source
 - `custom_attributes=`
 - `custom_objects=`
 - `custom_source=Resilient`
 - See the *Configuration* section on how to properly set these options
4. Re-run `resilient-circuits customize` (if you did not do this in step 2).

Troubleshooting

There are several ways to verify the successful operation of a function.

Resilient Action Status

- When viewing an incident, use the Actions menu to view **Action Status**.
- By default, pending and errors are displayed.
- Modify the filter for actions to also show Completed actions.
- Clicking on an action displays additional information on the progress made or what error occurred.

Resilient Scripting Log

- A separate log file is available to review scripting errors.
- This is useful when issues occur in the pre-processing or post-processing scripts.
- The default location for this log file is: `/var/log/resilient-scripting/resilient-scripting.log`.

Resilient Logs

- By default, Resilient logs are retained at `/usr/share/co3/logs`.
- The `client.log` may contain additional information regarding the execution of functions.

Resilient-Circuits

- The log is controlled in the `.resilient/app.config` file under the section `[resilient]` and the property `logdir`.
- The default file name is `app.log`.
- Each function will create progress information.
- Failures will show up as errors and may contain python trace statements.

Change Log

- **Version 1.1.1**
 - Addressed an issue with the Resilient DNS Name stripping `www.` from content.
- **Version 1.1.0**
 - Added the ability to:
 - sync tasks
 - historically sync incidents (manually)
 - sync comments/notes (manually)
 - sync attachments (manually)
 - Added custom field mapping in configuration to map Resilient fields to ThreatQ objects
 - Added custom field mapping in configuration to map Resilient fields to ThreatQ attributes
- **Version 1.0.0**
 - Initial Release