

# IBM Resilient



## Incident Response Platform Integrations

### Create Zoom Meeting Function V1.0.0

Release Date: July 2018

Resilient Functions simplify development of integrations by wrapping each activity into an individual workflow component. These components can be easily installed, then used and combined in Resilient workflows. The Resilient platform sends data to the function component that performs an activity then returns the results to the workflow. The results can be acted upon by scripts, rules, and workflow decision points to dynamically orchestrate the security incident response activities.

This guide describes the Create Zoom Meeting Function.

## Overview

This Resilient Function package provides a function `fn_create_zoom_meeting` that takes in a host email, a meeting topic, a meeting agenda, a meeting password, and a Boolean indicating whether to record or not. The `fn_create_zoom_meeting` function uses these arguments to create a Zoom meeting and return the host url and the attendee url.

Included in the package is one example workflow that use the `fn_create_zoom_meeting` function:

- Example: Create Zoom Meeting: Incident

The workflow calls `fn_create_zoom_meeting` to create a meeting for the incident using the name and description from the incident and puts the meeting details in the incident notes section.

Also included in the package is an example rule for calling the workflow from an incident.

# Installation

Before installing, verify that your environment meets the following prerequisites:

- Resilient platform is version 30 or later.
- You have a Resilient account to use for the integrations. This can be any account that has the permission to view and modify administrator and customization settings, and read and update incidents. You need to know the account username and password.
- You have access to the command line of the Resilient appliance, which hosts the Resilient platform; or to a separate integration server where you will deploy and run the functions code. If using a separate integration server, you must install Python version 2.7.10 or later, or version 3.6 or later, and “pip”. (The Resilient appliance is preconfigured with a suitable version of Python.)

## Install the Python components

The functions package contains Python components that are called by the Resilient platform to execute the functions during your workflows. These components run in the Resilient Circuits integration framework.

The package also includes Resilient customizations that will be imported into the platform later.

Complete the following steps to install the Python components:

1. Ensure that the environment is up-to-date, as follows:

```
sudo pip install --upgrade pip
sudo pip install --upgrade setuptools
sudo pip install --upgrade resilient-circuits
```

2. Run the following command to install the package:

```
sudo pip install --upgrade fn_create_zoom_meeting-1.0.0.zip
```

## Configure the Python components

The Resilient Circuits components run as an unprivileged user, typically named integration. If you do not already have an integration user configured on your appliance, create it now.

Complete the following steps to configure and run the integration:

1. Using sudo, switch to the integration user, as follows:

```
sudo su - integration
```

2. Use one of the following commands to create or update the resilient-circuits configuration file. Use `-c` for new environments or `-u` for existing environments.

```
resilient-circuits config -c
```

or

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

3. Edit the resilient-circuits configuration file, as follows:

- a. In the [resilient] section, ensure that you provide all the information required to connect to the Resilient platform.

- b. In the [create\_zoom\_meeting] section, edit the settings as follows:

```
zoom_api_url=https://api.zoom.us/v2
zoom_api_key=<zoom api key>
zoom_api_secret=<zoom api secret>
```

A Zoom API key and Zoom API secret can be retrieved from <https://developer.zoom.us/me/#api> by registering for a developer account.

## Deploy customizations to the Resilient platform

This Resilient Function package provides a function `fn_create_zoom_meeting`, an example workflow that invokes the `fn_create_zoom_meeting` function, a message destination, and a rule for creating the `fn_create_zoom_meeting` menu item.

1. Use the following command to deploy these customizations to the Resilient platform:

```
resilient-circuits customize
```

2. Respond to the prompts to deploy functions, message destinations, workflows and rules.

## Run the integration framework

To test the integration package before running it in a production environment, you must run the integration manually with the following command:

```
resilient-circuits run
```

The `resilient-circuits` command starts, loads its components, and continues to run until interrupted. If it stops immediately with an error message, check your configuration values and retry.

## Configure Resilient Circuits for restart

For normal operation, Resilient Circuits must run continuously. The recommend way to do this is to configure it to automatically run at startup. On a Red Hat appliance, this is done using a systemd unit file such as the one below. You may need to change the paths to your working directory and `app.config`.

1. The unit file must be named `resilient_circuits.service` To create the file, enter the following command:

```
sudo vi /etc/systemd/system/resilient_circuits.service
```

2. Add the following contents to the file and change as necessary:

```
[Unit]
Description=Resilient-Circuits Service
After=resilient.service
Requires=resilient.service

[Service]
Type=simple
User=integration
WorkingDirectory=/home/integration
ExecStart=/usr/local/bin/resilient-circuits run
Restart=always
TimeoutSec=10
Environment=APP_CONFIG_FILE=/home/integration/.resilient/app.config
Environment=APP_LOCK_FILE=/home/integration/.resilient/resilient_circuits.lock

[Install]
WantedBy=multi-user.target
```

3. Ensure that the service unit file is correctly permissioned, as follows:

```
sudo chmod 664 /etc/systemd/system/resilient_circuits.service
```

4. Use the systemctl command to manually start, stop, restart and return status on the service:

```
sudo systemctl resilient_circuits [start|stop|restart|status]
```

You can view log files for systemd and the resilient-circuits service using the journalctl command, as follows:

```
sudo journalctl -u resilient_circuits --since "2 hours ago"
```

## Function Descriptions

Once the function package deploys the function(s), you can view them in the Resilient platform Functions tab, as shown below. The package also includes example workflows and rules that show how the functions can be used. You can copy and modify these workflows and rules for your own needs.

### fn\_create\_zoom\_meeting: Create Zoom Meeting

The Resilient Function `fn_create_zoom_meeting` takes in a host email, a meeting topic, a meeting agenda, a meeting password, and a Boolean indicating whether to record or not. The `fn_create_zoom_meeting` function uses these arguments to create a Zoom meeting and return the host url and the attendee url. A user may want to use `fn_create_zoom_meeting` to create a meeting for incidents, artifacts, or tasks, in order to organize completion.

### Customization Settings

Layouts	Rules	Scripts	Workflows	Functions	Message Destinations	Phases & Tasks	Incident Types
<a href="#">Functions</a> / <a href="#">fn_create_webex_meeting</a>							
Name *		<input type="text" value="Create WebEx Meeting"/>					
API Name * ⓘ		<input type="text" value="fn_create_webex_meeting"/>					
Message Destination *		<input type="text" value="webex"/>					
Description		<input type="text" value="Creates a webex meeting and returns the URL"/>					

### Inputs

<input type="text" value="webex_meeting_name"/>	✕
<input type="text" value="webex_meeting_agenda"/>	✕
<input type="text" value="webex_meeting_password"/>	✕

## Example: Create Zoom Meeting: Incident

The incident name and the incident description are passed into the example workflow in the pre-processor script.

Input	Pre-Process Script	Output	Post-Process Script
<div>Language: Python Theme <span>light</span> Mode <span>Default</span> Tab Size <span>2</span> <span>- Font</span> <span>+ Font</span></div> <pre>1 inputs.zoom_host_email = incident.creator_id 2 inputs.zoom_topic = incident.name 3 inputs.zoom_agenda = incident.description.content 4 inputs.zoom_record_meeting = False</pre>			

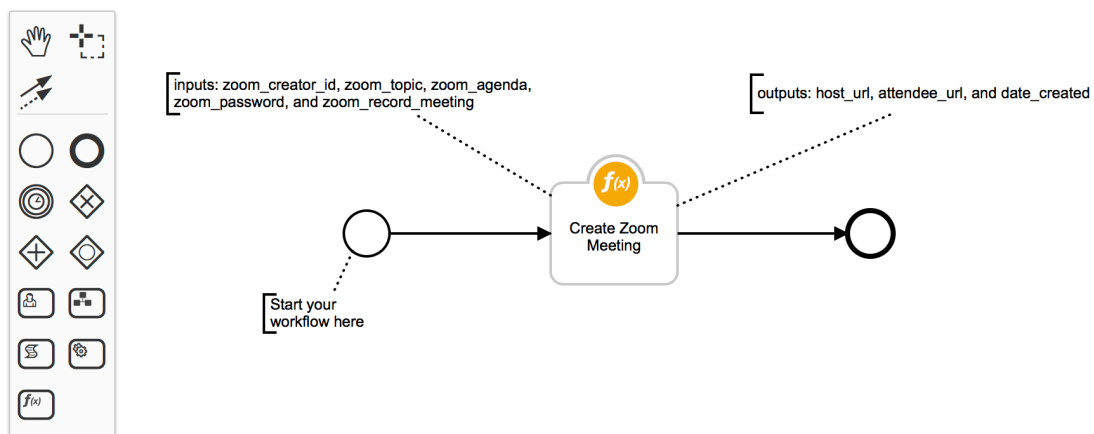
The screenshot below shows the example workflow with an incident as input and the post-processor script that retrieves the host url and attendee url from the `fn_create_zoom_meeting` function and adds them to a note associated with the incident.

[Workflows](#) / [Example: Create Zoom Meeting: Incident](#)



Name *	<input type="text" value="Example: Create Zoom Meeting: Incident"/>
API Name * <small>i</small>	<input type="text" value="example_create_zoom_meeting_incident"/>
Description	<input type="text" value="An example that creates a Zoom meeting based on incident properties."/>
Object Type *	<input type="text" value="Incident"/>

Last M  
Last Modi  
Associat



```
Input    Pre-Process Script    Output    Post-Process Script

Language: Python  Theme light  Mode Default  Tab Size 2  - Font + Font

1 ▾ if results.host_url is not None and results.attendee_url is not None:
2   host_url = results.host_url
3   attendee_url = results.attendee_url
4
5 ▾ if host_url is None:
6   | host_url = ""
7
8 ▾ if attendee_url is None:
9   | attendee_url = ""
10
11 text = "Zoom Meeting:\n\tHost URL: " + results.host_url + "\n\tAttendee URL: " + results.attendee_url
12 note = helper.createPlainText(text)
13 incident.addNote(note)
```

## 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.

## Support

For additional support, contact [support@resilientsystems.com](mailto:support@resilientsystems.com).

Including relevant information from the log files will help us resolve your issue.

### Documentation Guidelines

*<Do NOT include this section in your guide.>*

*Here are some writing guidelines:*

- *Never use "Resilient," instead use "Resilient platform."*
- *Use "deploy to the Resilient platform" to describe the resilient-circuits customize command.*

- *Do not initial cap function, workflow, etc. unless you are referring to a specific item (proper name), such as Utilities Function.*
- *Try to avoid passive voice and future tense.*
- *For the guide's file name, use this format: Resilient Integration <name> Function*
- *In the Word file, open properties and make these changes:*
  - *Author = IBM Resilient*
  - *Title = Resilient IRP Integrations <name> Function Guide*

*If you don't know how to open properties:*

1. *Click **File > Info**.*
2. *On the right side of the Info page, click the **Properties** drop-down and select **Show Document Panel**. This shows the Document Properties with the Author and Title fields.*