# fn-scheduler Functions for IBM Resilient

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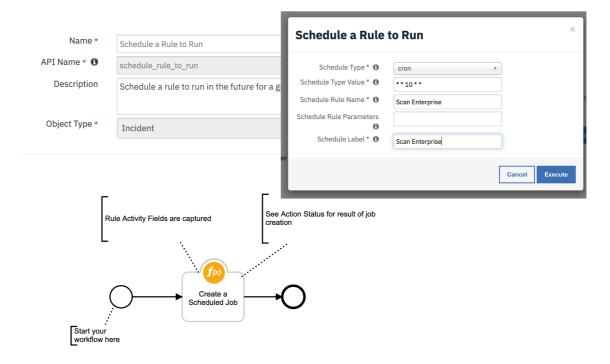
### Release Notes

#### v1.0.0

• Initial Release

### Overview

#### **Resilient Circuits Components for fn\_scheduler**



This package of functions allows an enterprise to schedule a rule to run in the future associated with a incident, task, artifact, and datatable. Times to run can be specified in the following ways:

- 1. cron (ex. \* 0 \* \* \* for every night at midnight)
- 2. interval (ex. 5h for every 5 hours)
- 3. date (ex. 2019/10/23 12:00:00)
- 4. delta (ex. 1h for one hour in the future)

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Schedule rules using **cron** and **interval** are reocurring whereas **date** and **delta** are single event schedules. Scheduled rules are persisted so that restarts of resilient-circuits will resume already scheduled rules.

Functions available include:

- 1. Scheduling a rule
- 2. Listing scheduled rules
- 3. Removing a scheduled rule

## Requirements

- Resilient platform >= v33.0.5087
- An Integration Server running resilient\_circuits>=30.0.0
  - To set up an Integration Server see: https://ibm.biz/res-int-server-guide

### Installation

- Download the fn\_scheduler.zip.
- Copy the .zip to your Integration Server and SSH into it.
- Unzip the package:

```
$ unzip fn_scheduler-x.x.x.zip
```

• Change Directory into the unzipped directory:

```
$ cd fn_scheduler-x.x.x
```

• Install the package:

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

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

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

• Import the fn\_scheduler **customizations** into the Resilient platform:

```
$ resilient-circuits customize -y -l fn-scheduler
```

• Open the config file, scroll to the bottom and edit your fn\_scheduler configurations:

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

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Config	Required	Example	Description
timezone	Yes	utc	Specify the timezone (ex. America/New_York) which scheduled rules should follow
thread_max	Yes	20	Number of threads which can run at the same. Typically, triggered rules run for a very short time to kick off a Resilient rule.
datastore_dir	Yes		Specify a data path and file name for the sqlite persistent datafile (ex. /path/to/scheduler.sqlite)

- Save and Close the app.config file.
- [Optional]: Run selftest to test the Integration you configured:

```
$ resilient-circuits selftest -l fn-scheduler
```

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

```
$ resilient-circuits run
```

### Uninstall

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

```
$ pip uninstall fn-scheduler
```

- Open the config file, scroll to the [fn\_scheduler] section and remove the section or prefix # to comment out the section.
- Save and Close the app.config file.

## 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.

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### **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

Name	Version	Author	Support URL
fn_scheduler	1.0.0	IBM	support@resilientsystems.com

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