
forumsentry-sdk-for-python

Documentation

Release 0.1

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1.1 Quickstart

1.1.1 Installation

You can install the latest version of forumsentry with:

```
pip install forumsentry
```

1.1.2 Basic Usage

Import the Forum Sentry API and start using methods:

```
from forumsentry.api import api

forumsentry = api(username="admin", password="password")

# get a list of all listenerPolices
forumsentry.get_listener_polices()
```


CHAPTER 2

Tutorial

Coming soon.

CHAPTER 3

API Reference

If you are looking for information on a specific function, class or method, this part of the documentation is for you.

3.1 API

Note: Unless otherwise noted all arguments are of the `str` type.

3.1.1 forumsentry

3.1.2 forumsentry.api

3.1.3 forumsentry.config

3.1.4 forumsentry.errors

3.1.5 forumsentry.configuration_import_api

3.1.6 forumsentry.http_listener_policy_api

3.1.7 forumsentry.http_remote_policy_api

3.1.8 forumsentry.json_policies_api

3.1.9 forumsentry.serialization

3.1.10 forumsentry.task_list_groups_api

3.1.11 forumsentry.task_lists_api

3.1.12 forumsentry.documents_api

List of models which are currently supported

4.1 Models

Note: Unless otherwise noted all arguments are of the `str` type.

4.1.1 `forumsentry_api`

Models which represent objects in the forum sentry.

4.1.2 `forumsentry_api.models`

4.1.3 `forumsentry_api.models.http_listener_policy`

`forumsentry_api.models.http_listener_policy`
alias of `forumsentry_api.models.http_listener_policy`

4.1.4 `forumsentry_api.models.http_remote_policy`

`forumsentry_api.models.http_remote_policy`
alias of `forumsentry_api.models.http_remote_policy`

4.1.5 forumsentry_api.models.json_policies

`forumsentry_api.models.json_policies`
alias of `forumsentry_api.models.json_policies`

4.1.6 forumsentry_api.models.task_list_group

`forumsentry_api.models.task_list_group`
alias of `forumsentry_api.models.task_list_group`

4.1.7 forumsentry_api.models.task_list

`forumsentry_api.models.task_list`
alias of `forumsentry_api.models.task_list`

4.1.8 forumsentry_api.models.virtual_directory

`forumsentry_api.models.virtual_directory`
alias of `forumsentry_api.models.virtual_directory`

4.1.9 forumsentry_api.models.document

`forumsentry_api.models.document`
alias of `forumsentry_api.models.document`

5.1 Developer Documentation

5.1.1 Installing Development Environment

Your life will be a lot better if you use a virtualenv when working with python.

1. Fork and Clone this repo
2. Install `python-pip` and `virtualenv` if you do not already have it.
3. Create a new virtualenv with `virtualenv forumsentry-sdk-for-python`.
4. Activate the new virtualenv with `source forumsentry-sdk-for-python/bin/activate`.
5. Run `make dev`
6. Hack away!

5.1.2 Running Tests

Tests can be found in the `tests` directory.

You can run tests with `make tests`.

If you want to run a specific test file you can do so with:

```
python -m unittest tests/sentry/test_$MODULE.py
```

This project has two main types of tests.

- Unit tests. These are tests of specific functions using mocked API data.
- Integration tests. These are tests that actually hit a forum sentry device. Unfortunately, this will need to be setup by the developer and connectivity from the machine running the tests established.

In order to run the integration tests then setup the following environment variables.

```
:: export FORUM_REST_API_HOST=forumsentry-dev export FORUM_REST_API_PORT=8081 export FO-  
RUM_REST_API_USER=admin export FORUM_REST_API_PASSWORD=*****
```

Code Coverage

This project attempts to have 100% code coverage. when you run `make test` code coverage is automatically ran. You can view the code coverage report locally by opening up the `index.html` file in the `htmlcov` directory that gets created when you run `make test`.

5.1.3 Swagger

The forumsentry provide swagger documentation. A tools directory is provided with a script to generate python models from the swagger api.

To run this

```
cd tools  
export FORUM_REST_API_HOST=xxxxxxxxxxxxxx  
export FORUM_REST_API_USER=xxxxxxxxxxxxxx  
export FORUM_REST_API_PASSWORD=xxxxxxxxxxxx  
./generate_code.sh
```

This will place the models swagger generated code in a folder `_build`

- Note: `_build` is listed in the `.gitignore` file. For now you will need to manually merge/extract anything useful from there. *

If you need to make changes to the generate code first see if it can be made in the templates under `tools/templates/python`. That way adding new models will be easier in the future.

5.1.4 Documentation

This project uses sphinx for documentation. You can generate the latest docs locally by running `make docs`. You can then view them by opening up the `index.html` file in the `docs/build/html` directory.

5.1.5 Linting and Style

This project follows the [PEP 8](#) style guidelines. You can install `pylint` in order to ensure that all of your code is compliant with this standard.

5.1.6 Generating p12 for testing

When working with the KeyPairs API we need a p12 to upload. To create one use the following

```
#Create a temp server cert with SANs  
export CNAME=forumsentry-sdk-for-python  
export PASSWORD=password  
#create private key  
openssl genrsa -out ${CNAME}.key 4096  
#create temp CA  
openssl req -new -x509 -sha256 -nodes -days 3650 -key ${CNAME}.key -out ${CNAME}-ca.  
↪pem -subj "/CN=${CNAME}-ca"  
#cp ${CNAME}-ca.pem /etc/pki/ca-trust/source/anchors/${CNAME}-ca.pem; update-ca-trust  
↪extract
```

```

#create config file for request/signing
cat /etc/pki/tls/openssl.cnf > ${CNAME}.cnf
cat >> ${CNAME}.cnf << END
[req]
req_extensions = v3_req

[ v3_req ]

# Extensions to add to a certificate request

basicConstraints = CA:FALSE
keyUsage = nonRepudiation, digitalSignature, keyEncipherment
extendedKeyUsage = serverAuth
subjectAltName = @alt_names

[alt_names]
DNS.1 = ${CNAME}
END

#Generate CSR
openssl req -subj "/CN=${CNAME}" -sha256 -new -key ${CNAME}.key -out ${CNAME}.csr -
↳config ${CNAME}.cnf
#Sign the CSR with the temp CA
openssl x509 -req -sha256 -in ${CNAME}.csr -CA ${CNAME}-ca.pem -CAkey ${CNAME}.key -
↳CAcreateserial -out ${CNAME}.cer -days 730 -extfile ${CNAME}.cnf -extensions v3_req
#Create passphrase file
echo -n ${PASSWORD} > .${CNAME}_passphrase

#Create p12
openssl pkcs12 -export -out ${CNAME}.p12 -in ${CNAME}.cer -inkey ${CNAME}.key -
↳certfile ${CNAME}-ca.pem -password file:.${CNAME}_passphrase
#Create jks
keytool -importkeystore -srckeystore ${CNAME}.p12 -srcstoretype pkcs12 -destkeystore $
↳${CNAME}.jks -deststoretype JKS -srcstorepass ${PASSWORD} -deststorepass ${PASSWORD}

```


6.1 Logging

6.1.1 Defaults

By default, (if you do nothing) the forumsentry sdk for python will setup the root logger to stream to stderr.

This works better with ansible and other tools that may call it.

Additionally logging level is set to **FATAL** which means no messages will be emitted from forumsentry sdk for python.

6.1.2 Debugging

If the environment **FSENTRY_DEBUG** is set then the logging level will be set to debug

```
export FSENTRY_DEBUG=TRUE
```

6.1.3 Config

A yaml config file can be used to gain full control over logging.

Set the environment variable **FSENTRY_LOG_YAML** to the location of your yaml config file.

E.g

```
export FSENTRY_LOG_YAML=/etc/fsentry.yaml
```

The default location if the **FSENTRY_LOG_YAML** is **~/fsentry_log.yaml**

If the file given by **FSENTRY_LOG_YAML** or the default **~/fsentry_log.yaml** exists then those settings will be used.

If the file is not found then the default above will be used.

See below for an example config

```
---
#https://docs.python.org/2/library/logging.config.html#logging-config-dictschema

version: 1
disable_existing_loggers: False
formatters:
    simple:
        format: "%(asctime)s - %(levelname)s - %(name)s - %(module)s.%(funcName)s:
↪ %(message)s"

handlers:
    console:
        class: logging.StreamHandler
        level: ERROR
        formatter: simple
        stream: ext://sys.stderr

    debug_file_handler:
        class: logging.handlers.RotatingFileHandler
        level: DEBUG
        formatter: simple
        filename: /tmp/logs/debug.log
        maxBytes: 10485760 # 10MB
        backupCount: 20
        encoding: utf8

    info_file_handler:
        class: logging.handlers.RotatingFileHandler
        level: INFO
        formatter: simple
        filename: /tmp/logs/info.log
        maxBytes: 10485760 # 10MB
        backupCount: 20
        encoding: utf8

    error_file_handler:
        class: logging.handlers.RotatingFileHandler
        level: ERROR
        formatter: simple
        filename: /tmp/logs/errors.log
        maxBytes: 10485760 # 10MB
        backupCount: 20
        encoding: utf8

loggers:
    forumsentry:
        level: DEBUG
        handlers: [console, debug_file_handler, info_file_handler, error_file_handler]
        propagate: false
    urllib3:
        level: CRITICAL
        handlers: [console, info_file_handler, error_file_handler]

root:
    level: CRITICAL
    handlers: [console, info_file_handler, error_file_handler]
```

7.1 Changelog

Here you can see the full list of changes between each forumsentry-sdk-for-python release.

7.1.1 Version 0.1

Released on November 17, 2017

- Basic project setup.
 - Continuous Integration with CircleCI
 - Packaging and uploading to PyPI
 - Code Coverage
 - Testing with unittest
- Basic Documentation in place

CHAPTER 8

Attribution

- This project relies on the wonderful [requests](#) library for all HTTP requests. This library is licensed under the [Apache License, Version 2.0](#).

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