nifi-deploy Documentation

Release 0.1.9

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Contents

1 Installation 1

2 Usage 3

3 Package API documentation 7

4 License 9

5 Indices and tables 11

Python Module Index 13

CHAPTER 1

Installation

- Source
- PIP Package

1.1 Requirements

- Python 3
- PIP

1.2 Dependencies

For version details, please see requirements.txt

- nipyapi

1.3 Install from PyPI (recommended)

```
$ pip3 install nifi-deploy
```

1.4 Install from Source

```
$ git clone https://github.com/ragerin/nifi-deploy
$ pip3 install -e ./nifi-deploy
```

1.5 Run from source, without installing

Note: Ensure all dependencies are met, refer to the requirements.txt

```
$ git clone https://github.com/ragerin/nifi-deploy
$ python -m nifi-deploy/nifi_deploy
```

CHAPTER 2

Usage

```
nifi-deploy [-v] {export, import} [opts]
```

2.1 Show help

```
$ nifi-deploy --help
$ nifi-deploy export --help   # Export specific help
$ nifi-deploy import --help   # Import specific help
```

2.2 General parameters

Parameter	Alias	Description
`--version`	`-v`	Outputs nifi-deploy version and exits without any other action

2.3 Export parameters

```
$ nifi-deploy export <uuid> <name> [-n <hostname>] [-u <username>] [-p <password>] [-
↪d <description>] [-f <filename>] [-q] [-k]
```

Parameter	Alias	Description
uuid	n/a	Required The UUID of a process group located on NIFI_HOST
name	n/a	Required The name of the exported template (as presented within the Nifi template repository
--nifi_host	-n	Hostname of the Nifi server, where the */nifi-api/* endpoint is hosted. If not supplied, nifi-deploy will look for the NIFI_HOST environment variable
--username	-u	Username to authenticate as for the API request. If not supplied, nifi-deploy will look for the NIFI_USERNAME environment variable
--password	-p	Password for the user. If not supplied, nifi-deploy will first look for the NIFI_PASSWORD environment variable. If not set, nifi-deploy will prompt for the password through the terminal (this requires direct user action)
--description	-d	A description of the template to show within the Nifi template repository
--filename	-f	Filename to write the template XML to
--quiet	-q	Do not output anything, even if --filename is not supplied. Useful for automated tests
--keep_template	-k	Retain the template in the Nifi template repository, after exporting

2.4 Import parameters

```
$ nifi-deploy import <filename> [-n <hostname>] [-u <username>] [-p <password>]
```

Parameter	Alias	Description
filename	n/a	Template XML file to upload as a template to the Nifi template repository
--nifi_host	-n	Hostname of the Nifi server, where the */nifi-api/* endpoint is hosted. If not supplied, nifi-deploy will look for the NIFI_HOST environment variable
--username	-u	Username to authenticate as for the API request. If not supplied, nifi-deploy will look for the NIFI_USERNAME environment variable
--password	-p	Password for the user. If not supplied, nifi-deploy will first look for the NIFI_PASSWORD environment variable. If not set, nifi-deploy will prompt for the password through the terminal (this requires direct user action)

2.5 Environment variables

For improved usability and even some security concerns, it may be beneficial to set the following environment variables, instead of providing them at use-time:

Variable	Description
NIFI_HOST	Hostname of the Nifi-server, ending with the port-number and optionally */nifi-api/*
NIFI_USERNAME	Username of the user authenticating with the API
NIFI_PASSWORD	If not set and not supplied as an argument parameter, will prompt as non-echoing input

2.6 Exporting

Export a process group and output the XML to *stdout*:

```
$ nifi-deploy export -n https://nifihost:9090 -u john -p badpractice 0a7361fd-015f-
↪1000-ffff-ffffd2cbc7a7 my_great_template -d template description -f c:\\temp\\my_
↪great_template_export.xml --keep_template
```

CHAPTER 3

Package API documentation

3.1 nifi_deploy package

3.1.1 nifi_deploy.nifi module

Provides a NifiInstance class facilitating easy to use methods utilizing the NiPyApi (https://github.com/Chaffelson/nipyapi) wrapper library.

class nifi_deploy.nifi.**NifiInstance**(*url=None*, *username=None*, *password=None*, *verify_ssl=False*)

The NifiInstance class facilitating easy to use methods utilizing the NiPyApi (https://github.com/Chaffelson/nipyapi) wrapper library.

Parameters

- **url** (*str*) – Nifi host url, defaults to environment variable *NIFI_HOST*.
- **username** (*str*) – Nifi username, defaults to environment variable *NIFI_USERNAME*.
- **password** (*str*) – Nifi password, defaults to environment variable *NIFI_PASSWORD*.
- **verify_ssl** (*bool*) – Whether to verify SSL connection - UNUSED as of now.

create_template(*pg_id*, *name*, *desc=''*)

Create a template from process group id.

Parameters

- **pg_id** (*str*) – Process group ID to create the template from.
- **name** (*str*) – Name of the template to create.
- **desc** (*str*) – Optional, description of the template to create.

Returns nipyapi.nifi.TemplateEntity

delete_template(*template_id*)

Delete a template from Nifi template registry.

Parameters **template_id** (*str*) – ID of the template to delete.

Returns None

export_template(*template_id*, *file_path=None*)
Export a template as XML, and optionally write it to a file or stdout.

Parameters

- **template_id** (*str*) – ID of the template to export.
- **file_path** (*str*) – Optional, path of file to write the XML to.

Returns String (template xml)

import_template(*file_path*)
Imports a template XML into Nifi's template store.

Parameters **file_path** (*str*) – Path of the XML file to import into Nifi as a template.

Returns None

3.1.2 nifi_deploy.nifi_deploy module

This file is used for the CLI tool. By default setup.py links *nifi-deploy* as an executable to this file.

nifi_deploy.nifi_deploy.**cli**()

nifi_deploy.nifi_deploy.**export_function**(*args*)

nifi_deploy.nifi_deploy.**import_function**(*args*)

CHAPTER 4

License

MIT License

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CHAPTER 5

Indices and tables

- genindex
- modindex
- search

Python Module Index

n

nifi_deploy.nifi, 7
nifi_deploy.nifi_deploy, 8

Index

C

cli() (in module nifi_deploy.nifi_deploy), 8
create_template() (nifi_deploy.nifi.NifiInstance method), 7

D

delete_template() (nifi_deploy.nifi.NifiInstance method), 7

E

export_function() (in module nifi_deploy.nifi_deploy), 8
export_template() (nifi_deploy.nifi.NifiInstance method), 8

I

import_function() (in module nifi_deploy.nifi_deploy), 8
import_template() (nifi_deploy.nifi.NifiInstance method), 8

N

nifi_deploy.nifi (module), 7
nifi_deploy.nifi_deploy (module), 8
NifiInstance (class in nifi_deploy.nifi), 7