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**jxctl**

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**Sep 10, 2020**



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## 1.1 Installation

Install the package (or add it to your `requirements.txt` file):

```
pip install jxctl
```

## 1.2 Configuration

### 1.2.1 Add new context

```
jxctl context set <CONTEXT_NAME> --url <Jenkins URL> --user <Username> --token  
↪<Password/Access Token>  
jxctl context set <CONTEXT_NAME> --url <Jenkins URL> --user <Username> --token  
↪<Password/Access Token> --default
```

### 1.2.2 Context Info

```
jxctl context info
```

### 1.2.3 List context

```
jxctl context list  
jxctl context list --all
```

### 1.2.4 Update context

```
jxctl context set <CONTEXT_NAME> --url <Jenkins URL>  
jxctl context set <CONTEXT_NAME> --user <Username> --token <Password/Access Token>
```

### 1.2.5 Rename context

```
jxctl context rename <CONTEXT_FROM> <CONTEXT_TO>
```

### 1.2.6 Delete context

```
jxctl context delete <CONTEXT_NAME>
```

## 1.3 Usage

### 1.3.1 Version

```
jxctl version
```

### 1.3.2 Jobs List

```
jxctl get jobs --all -f table  
jxctl get jobs -o maven -o freestyle --count -f json  
jxctl get jobs --option pipeline -c
```

### 1.3.3 Folders List

```
jxctl get folders -f table  
jxctl get folders -c
```

### 1.3.4 Plugins List

```
jxctl get pluinjs  
jxctl get pluinjs -c
```

### 1.3.5 Nodes List

```
jxctl get nodes  
jxctl get nodes -c -f table
```



## 1.3.6 Job

### Job info

```
jxctl job <JOB NAME>  
jxctl job <JOB NAME> --format table
```

### Delete a job

```
jxctl job <JOB NAME> --delete
```

### Trigger job build

```
jxctl job <JOB NAME> --build  
jxctl job <JOB NAME> --build --params <JSON>
```

### Build info

```
jxctl job <JOB NAME> --buildinfo <Build Number>
```

### Abort a build

```
jxctl job <JOB NAME> --abort <Build Number>
```

## 1.3.7 Plugin

```
jxctl plugin <Plugin Name>
```

## 1.3.8 Node

### Node info

```
jxctl node <NODE NAME>  
jxctl node <NODE NAME> -f table
```

**Make offline**

```
jxctl node <NODE NAME> --make-offline  
jxctl node <NODE NAME> --make-offline -m <MESSAGE>
```

**Make online**

```
jxctl node <NODE NAME> --make-online
```

## DEVELOPER DOCUMENTATION

### 2.1 ctxcore

ctxcore - Core module for context operation

**class** `ctxcore.CtxCore`

CtxCore class for context operation

**delete\_context** (*context\_name*)

Delete the context :param *context\_name*: context name *str*

**list\_context** (*all=None, context\_name=None*)

List Jenkins context :param *name*: all *bool* :param *context\_name*: context name *str*

**load\_context** ()

Load context file from `~/jxctl/config` :raise *FileNotFoundError*: raise file not found exception

**rename\_context** (*context\_from, context\_to*)

Rename the context name :param *context\_from*: old context name *str* :param *context\_to*: new context name *str*

**set\_context** (*name, url=None, user=None, token=None, default=None*)

Add/Edit Jenkins context

#### Parameters

- **name** – context name *str*
- **url** – jenkins url *url*
- **user** – jenkins user *str*
- **token** – jenkins password/token *str*
- **default** – set as default *bool*

**set\_current\_context** (*name*)

Change the current context

**Parameters** **name** – context name

**validate\_context ()**  
Check jenkins user, token and url is not null in context

**write\_context\_file ()**  
Write changes to context config file

## 2.2 jxcore

jxcore - Core module to interact with Jenkins API

```
class jxcore.JxCore
    JxCore class for Jenkins operations

    abort_job (job_name, build_number)
        Abort the job build :param job_name: job name str :param build_number: build number of the job int

    build_info (job_name, build_no, format_display='json')
        Build Info :param job_name: job name str :param build_no: build number of the job int :param format_display: display format by json is default format str

    delete_job (job_name)
        Delete a job from Jenkins :param job_name: job name str

    fetch_job_type (search_value)
        Find the key by give the value in DICT :param name: Value name search_value str :returns: Key of the given Value key str

    get_plugin_info (plugin_name)
        Get a plugin info :param plugin_name: plugin name str

    info ()
        Display the Context Information

    job_info (job_name, format_display='json')
        Display needed Job info in a table :param job_name: Job name job_name str :param format_display: display format by json is default format str

    list_all_folders (format_display='json', count=False)
        Display all folders in Jenkins Context :param format_display: display format by json is default format str :param count: count flag bool

    list_all_jobs (format_display='json', count=False)
        Display all jobs in Jenkins Context in a table :param format_display: display format by json is default format str :param count: count flag bool

    list_all_plugins (format_display='json', count=False)
        Display all plugins in Jenkins context as a table :param format_display: display format by json is default format str :param count: count flag bool

    list_jobs (option_list, format_display='json', count=False)
        Display only the specified class jobs in a table :param name: Job class list option_list list :param format_display: display format by json is default format str :param count: count flag bool

    list_nodes (format_display='json')
        Get list of nodes :param format_display: display format by json is default format str

    node_action (node_name, action, message=None)
        Node operations like make offline and online :param node_name: node name str :param action: node operation (offline/online) str :param message: offline reason str
```

**node\_info** (*node\_name*, *format\_display='json'*)  
Node info :param *node\_name*: node name *str* :param *format\_display*: displat format by *json* is default format *str*

**trigger\_job** (*job\_name*, *params=None*)  
Build a Job :param *job\_name*: job name *str* :param *params*: parameters for job *dict*

## 2.3 jxsupport

jxsupport support module jxctl

**class** jxsupport.**JxSupport**  
JxSupport class for support operations like display

**print** (*source*, *format\_display='json'*, *count=False*)  
Print method to display result :param *source*: source dictionary *dict* :param *format\_display*: displat format by *json* is default format *str* :param *count*: count flag *bool*

**static print\_json** (*source*, *count=False*)  
Display the dictionary in json format :param *source*: source dictionary *dict* :param *count*: count flag *bool*

**static print\_table** (*source*, *count=False*)  
Display the dictionary in table format :param *source*: source dictionary *dict* :param *count*: count flag *bool*



## COMMANDS REFERENCES

### 3.1 jxctl

jxctl - jenkins command line tool

```
jxctl [OPTIONS] COMMAND [ARGS]...
```

#### 3.1.1 context

Set and Get Jenkins context

```
jxctl context [OPTIONS] COMMAND [ARGS]...
```

##### delete

Delete a jenkins context

```
jxctl context delete [OPTIONS] CONTEXT_NAME
```

#### Arguments

**CONTEXT\_NAME**

Required argument

##### info

Show the infomation about jenkins

```
jxctl context info [OPTIONS]
```

### list

List available jenkins context

```
jxctl context list [OPTIONS] [CONTEXT_NAME]
```

### Options

**-a, --all**

### Arguments

**CONTEXT\_NAME**

Optional argument

### rename

Rename the jenkins context

```
jxctl context rename [OPTIONS] CONTEXT_FROM CONTEXT_TO
```

### Arguments

**CONTEXT\_FROM**

Required argument

**CONTEXT\_TO**

Required argument

### set

Set jenkins Context

```
jxctl context set [OPTIONS] CONTEXT_NAME
```

### Options

**--url** <url>

URL of the Jenkins instance

**--user** <user>

Username of the Jenkins instance

**--token, --password** <token>

Access token / password of the username

**--default**

Set as current context



## Arguments

### CONTEXT\_NAME

Required argument

## set-current

Set the current jenkins context

```
jxctl context set-current [OPTIONS] CONTEXT_NAME
```

## Arguments

### CONTEXT\_NAME

Required argument

## 3.1.2 get

Get the jenkins resources(jobs, plugin, nodes, etc.. ) from jenkins

```
jxctl get [OPTIONS] COMMAND [ARGS]...
```

## folders

Get all folders from jenkins

```
jxctl get folders [OPTIONS]
```

## Options

**-f, --format** <format>  
Display format(json/table). Default=json

**-c, --count**  
Returns the number of plugin installed

## jobs

Get list of job from jenkins

```
jxctl get jobs [OPTIONS]
```

## Options

- c, --count**  
Returns number of jobs
- a, --all**  
List all(maven,freestly, pipelinemulti-branch, matrix and org) jobs
- o, --option <option>**  
Possible Options pipeline, multi-branch, maven, freestyle, matrix, org
- f, --format <format>**  
Display format(json/table). Default=json
- help**  
Print help message

## nodes

Get list of nodes from jenkins

```
jxctl get nodes [OPTIONS]
```

## Options

- f, --format <format>**

## plugins

List all installed plugins from jenkins

```
jxctl get plugins [OPTIONS]
```

## Options

- f, --format <format>**  
Display format(json/table). Default=json
- c, --count**  
Returns the number of plugin installed

## 3.1.3 job

Job info and operation

```
jxctl job [OPTIONS] JOB_NAME
```

## Options

- build**  
Triggers the build
- params** <params>  
Trigger build with params in Key:Value pair
- abort** <abort>  
Abort the build
- buildinfo** <buildinfo>  
Get build info
- d, --delete**  
Delete a job
- f, --format** <format>  
Display format(json/table). Default=json

## Arguments

- JOB\_NAME**  
Required argument

### 3.1.4 node

Get node info and operation

```
jxctl node [OPTIONS] NODE_NAME
```

## Options

- make-offline**
- make-online**
- m, --message** <message>  
Offline reason
- f, --format** <format>  
Display format(json/table). Default=json

## Arguments

- NODE\_NAME**  
Required argument

### 3.1.5 plugin

Get plugin information

```
jxctl plugin [OPTIONS] PLUGIN_NAME
```

#### Arguments

**PLUGIN\_NAME**

Required argument

### 3.1.6 version

Show the version and info of jxctl

```
jxctl version [OPTIONS]
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