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**Moic**

**Jun 04, 2020**



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## Contents:

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|          |                            |           |
|----------|----------------------------|-----------|
| <b>1</b> | <b>Getting Started</b>     | <b>3</b>  |
| <b>2</b> | <b>Autocompletion</b>      | <b>5</b>  |
| <b>3</b> | <b>Contribute</b>          | <b>7</b>  |
| 3.1      | Prerequisites . . . . .    | 7         |
| 3.2      | Setup . . . . .            | 7         |
|          | <b>Python Module Index</b> | <b>31</b> |
|          | <b>Index</b>               | <b>33</b> |



Freely inspired by <https://pypi.org/project/jira-cli/>

Command line utility to interact with issue manager such as Jira, Gitlab, etc...

### **Highlights**

- Modern CLI based on [Click](#) and [Rich](#)
- Context management
- Multiple tracker plugin
- Uniformed display



# CHAPTER 1

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## Getting Started

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- Install moic

```
> pip install moic
```

- Configure moic

```
> moic configure
```

- Commands

```
> moic
Usage: moic [OPTIONS] COMMAND [ARGS]...

Options:
  --help  Show this message and exit.

Commands:
  config      Configure Jira cli, setting up instance, credentials etc...
  issue       Create, edit, list Jira issues
  rabbit      Print an amazing rabbit: Tribute to @fattibenji...
  resources   List projects, issue_types, priorities, status
  sprint      Create, edit, list Jira Sprints
  template    List, edit templates
  version     Provide the current moic installed version
```



# CHAPTER 2

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## Autocompletion

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To activate bash autocompletion just add:

- \* For bash

```
# In your .bashrc
eval "$(_MOIC_COMPLETE=source_bash moic)"
```

- For zsh

```
# In your .zshrc
eval "$(_MOIC_COMPLETE=source_zsh moic)"
```



# CHAPTER 3

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## Contribute

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Feel free [open issues on Gitlab](#) or propose Merge Requests

### 3.1 Prerequisites

This project is based on [Poetry](#) as a package manager. It allows the use of virtual environments and the lock of package versions, whether they are in your dependencies or just sub-dependencies of these dependencies.

### 3.2 Setup

- Create virtualenv (Optionnaly you can use [pyenv](#) which is a Python Virtualenv Manager in combination with [Poetry](#))

```
poetry shell
```

- Install dependencies

```
poetry install
```

- Install pre-commit (using [Pre-commit framework](#))

```
pre-commit install
```

Pre-commit will check isort, black, flake8

### Commit messages

This project uses semantic versioning so it is important to follow the rules of conventional commits.

### 3.2.1 Configure

#### Contexts

Moic allows you to setup multiple contexts working with different instances of issue trakers.

You can get the list of defined context with:

#### List and use contexts

```
> moic context list
✓ jira-cogip      : Jira Tracker of COGIP Inc
  gitlab          : Gitlab.com
```

You can switch easily from a context to another with:

```
> moic context set gitlab
Context swithed to gitlab
```

#### Create/delete a context

To create a new configured context, run:

```
> moic context add <plugin_name> --name my_context --description "This is my new_
↪context"
Context created
```

Moic will ask you some basic configuration (instance, login etc...). It could store you password if needed within Keyring and will trigger the plugin specific configuration.

bq. Today only **jira** plugin is available, other plugins will be delivered soon (Gitlab, etc...)

You can delete a context with:

```
> moic context delete my_context
my_context deleted
```

#### Configuration file

The configuration is stored in a config file (default: `~/.moic/config.yaml`). Here is an example with Jira plugin custom configuration:

```
default:
  contexts:
    - custom_fields:
        peer: customfield_10800
        story_points: customfield_10106
        default_project: JIRA
        description: Jira Tracker of COGIP Inc
        instance: https://jira.cogip.fr
        login: bsantus
        name: jira-cogip
        plugin: jira
```

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```

projects:
  JIRA:
    workflow:
      done:
        - '10005'
        - '10001'
      indeterminate:
        - '10002'
        - '3'
        - '10007'
        - '10009'
      new:
        - '1'
        - '10000'
  current_context: jira-cogip

```

## 3.2.2 Plugins

MOIC allows creation of plugins to interact with several issue tracker. Today the only plugin setup is Jira. In a near future some other will be integrated starting with Gitlab.

The creation of a plugin is quite simple.

In the future it will be simplified using [plugin name convention](#) to unleashed plugin development

### Create a plugin

Plugins should be created under `moic/plugins/<plugin_name>`.

A plugin should provide several packages: \* **commands**: Contains method called by Moic for each actions \* **completion**: Contains autocompletion functions called by Moic \* **validators**: Contains data validator functions called by Moic

### Instance

First of all a plugin should expose a `Instance` class which herited from `MoicInstance`

```

from moic.cli import MoicInstance, console, global_settings, settings

custom_commands = [] # use to list the custom commands which could be load by moic

class Instance(MoicInstance):

    @property
    def session(self):
        """
        Store the session object which wrap tracker access and actions.
        It's also used to check the tracker connection access.
        """
        pass

    def create_session_instance(self) -> None:
        """

```

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```
This method is used to instanciate the session property if it doesn't exists.  
→ yet  
    """  
    pass  
  
def add_context(self, name: str, force: bool = False) -> dict:  
    """  
        This method should build a dict contains the tracker configuration  
  
        Returns:  
            dict: The cont  
    """  
    pass  
  
def custom_config(self, project: str, force: bool = False) -> None:  
    """  
        This method could be use to add more specific configuration in the context  
        using self.update_config(<dict>)  
    """  
    pass
```

## Context

A context should minimaly get the following properties:

- \* **instance**: Tracker url
- \* **login**: username to acces the tracker
- \* **default\_project**: The default project id/key used by moic

## Commands

For each resources and default commands, Moic will try to load a module.method corresponding and pass it the options/arguments provided by the user at runtime.

If a plugin, module or method doesn't exists, Moic will fallback on a warning

Example:

```
# if you call: "moic issue get" with the context using Jira plugin  
# Moic will try to import  
from moic.plugins.jira.commands.issue import get
```

## Custom commands

If you need to add more specific method / resources than the basic one, you can just add them in the custom\_commands list exposed by your plugin.

Moic could be able to import moic.plugins.<plugin\_name>.custom\_commands

This commands should be click commands and will be directly imported and exposed by Moic

## Completion

Moic provides autocompletion for basic resources but you need to implement the way autocompletion retrieve results  
For eac

### 3.2.3 moic package

#### Subpackages

##### **moic.cli package**

#### Subpackages

##### **moic.cli.commands package**

#### Subpackages

##### **moic.cli.commands.context package**

#### Submodules

##### **moic.cli.commands.context.base module**

Module for base Moic configuration commands

#### Module contents

Module for Moic configuration commands

##### **moic.cli.commands.issue package**

#### Submodules

##### **moic.cli.commands.issue.base module**

Module for base Moic issue commands

#### Module contents

Module for base Moic issue commands

##### **moic.cli.commands.rabbit package**

#### Submodules

##### **moic.cli.commands.rabbit.base module**

Module for Moic fun commands

### Module contents

Module which do what the f\*\*\* things

#### **moic.cli.commands.resources package**

##### **Submodules**

###### **moic.cli.commands.resources.base module**

Module for base Moic resources commands

### Module contents

Module for Moic ressources commands

#### **moic.cli.commands.template package**

##### **Submodules**

###### **moic.cli.commands.template.base module**

Module for base Moic template commands

### Module contents

Module for template commands

##### **Submodules**

###### **moic.cli.commands.version module**

Module which contains the version command for moic

### Module contents

#### **moic.cli.completion package**

##### **Submodules**

###### **moic.cli.completion.base module**

Base module for completion functions It includes all function used for autocomplete click options and arguments

---

`moic.cli.completion.base.autocomplete_boards (ctx: click.core.Context, args: list, incomplete: str) → list`

Get autocompleted boards list

**Parameters**

- `ctx (click.core.Context)` – click.core.Context of the given command
- `args (list)` – List of commands args
- `incomplete (str)` – String input to autocomplete

**Returns** List available boards name

**Return type** list

`moic.cli.completion.base.autocomplete_comments (ctx: click.core.Context, args: list, incomplete: str) → list`

Get autocompleted comments list

**Parameters**

- `ctx (click.core.Context)` – click.core.Context of the given command
- `args (list)` – List of commands args
- `incomplete (str)` – String input to autocomplete

**Returns** List available comments name

**Return type** list

`moic.cli.completion.base.autocomplete_contexts (ctx: click.core.Context, args: list, incomplete: str) → list`

Get autocompleted contexts list from configuration

**Parameters**

- `ctx (click.core.Context)` – click.core.Context of the given command
- `args (list)` – List of commands args
- `incomplete (str)` – String input to autocomplete

**Returns** List available issuersautocompleted

**Return type** list

`moic.cli.completion.base.autocomplete_issue_types (ctx: click.core.Context, args: list, incomplete: str) → list`

Get issue types list completion

**Parameters**

- `ctx (click.core.Context)` – click.core.Context of the given command
- `args (list)` – List of commands args
- `incomplete (str)` – String input to autocomplete

**Returns** List of issue types names corresponding to the incomplete input

**Return type** list

`moic.cli.completion.base.autocomplete_plugins (ctx: click.core.Context, args: list, incomplete: str) → list`

Get autocompleted plugins list

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List available plugins autocompleted

**Return type** list

```
moic.cli.completion.base.autocomplete_priorities (ctx: click.core.Context, args: list, incomplete: str) → list
```

Get Jira priorities name list completion

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of priorities name corresponding to the incomplete input

**Return type** list

```
moic.cli.completion.base.autocomplete_projects (ctx: click.core.Context, args: list, incomplete: str) → list
```

Get projects list completion

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of project names corresponding to the incomplete input

**Return type** list

```
moic.cli.completion.base.autocomplete_sprints (ctx: click.core.Context, args: list, incomplete: str) → list
```

Get autocompleted sprints list

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List available sprints name

**Return type** list

```
moic.cli.completion.base.autocomplete_transitions (ctx: click.core.Context, args: list, incomplete: str) → list
```

Get transitions available for an issue

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of translation names corresponding to the incomplete input

**Return type** list

```
moic.cli.completion.base.autocomplete_users(ctx: click.core.Context, args: list, incomplete: str) → list
```

Get users list completion

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** *jira.client.ResultList*: List of users corresponding to the incomplete input

**Return type** list

## Module contents

Module for click commands autocomplete

### moic.cli.utils package

#### Submodules

#### moic.cli.utils.base module

Module for base Moic cli utils function

```
moic.cli.utils.base.check_instance_is_up()
```

Check if the Instance is accessible or not

```
moic.cli.utils.base.get_plugin_autocomplete(autocomplete: str)
```

Get the autocomplete method corresponding to the resource type within the given plugin

**Parameters** **autocomplete** (*str*) – Resource name to autocomplete

**Returns** The autocomplete function

**Return type** func

```
moic.cli.utils.base.get_plugin_command(command: str, method: str)
```

Get a command from a plugin base on the plugin name If the command or the method in the command doesn't exists, it will exit with a error message

**Parameters**

- **command** (*str*) – The command group used
- **method** (*str*) – The command inside the group

**Returns** The function which should be called

**Return type** func

```
moic.cli.utils.base.get_plugin_custom_commands(plugin: str)
```

Get the list of custom commands and custom group defined in the plugin

**Parameters** **plugin** (*str*) – Plugin name

**Returns** List of custom command to add to Moic

**Return type** list

`moic.cli.utils.base.get_plugin_instance(plugin: str)`

Get the instance class within the given plugin

**Parameters** `plugin(str)` – Plugin name

**Returns** The plugin Instance

**Return type** class

`moic.cli.utils.base.get_plugin_validator(validation: str)`

Get the validator corresponding to the resource type within the given plugin

**Parameters** `validation(str)` – The validator type name

**Returns** The validator function

**Return type** func

`moic.cli.utils.base.get_template(project: str, type: str) → str`

Get template for a given project and type

**Parameters**

- `project(str)` – A project name
- `type(str)` – A issue type name

**Returns** Path to the corresponding template

**Return type** str

`moic.cli.utils.base.print_comment(comment, prefix: str = "", oneline: bool = False)`

`moic.cli.utils.base.print_comments(comments: list, prefix: str = "", oneline: bool = False)`

`moic.cli.utils.base.print_issue(issue, prefix: str = "", oneline: bool = False, subtasks: bool = False, last: bool = True) → None`

Print an issue

**Parameters**

- `issue` – Issue to print
- `prefix(str)` – Prefix to display before each issue line
- `oneline(bool)` – If set to true each issue will be printed on one line
- `subtasks(bool)` – If set to true it will display the issue's subtasks

**Returns** None

`moic.cli.utils.base.print_issues(issues: list, prefix: str = "", oneline: bool = False, subtasks: bool = False) → None`

Print issue list

**Parameters**

- `issues(list)` – List of issues to print
- `prefix(str)` – Prefix to display before each issue line
- `oneline(bool)` – If set to true each issue will be printed on one line
- `subtasks(bool)` – If set to true it will display the issue's subtasks

**Returns** None

---

`moic.cli.utils.base.print_status(status) → None`

Print a Status

**Parameters** `status` – Status to print

**Returns** None

`moic.cli.utils.base.sort_issue_per_status(issues: list, project: str = None) → list`

Sort an issue liste based on the project defined workflow It will call the dedicated plugin function

**Parameters**

- `issues (list)` – The list of issues to sort
- `project (str)` – The project key

**Returns** The sorted issues list

**Return type** list

## Module contents

Module for cli utils function

## moic.cli.validators package

### Submodules

#### moic.cli.validators.base module

Module for base Moic validator functions

`moic.cli.validators.base.validate_comment_id(ctx: click.core.Context, param: list, value: str) → str`

Validate a given comment id to check if it exists

**Parameters**

- `ctx (click.core.Context)` – click.core.Context of the given command
- `args (list)` – List of commands args
- `value (str)` – String input to validate

**Returns** Retrive the id if it's validated

**Return type** str

`moic.cli.validators.base.validate_issue_key(ctx: click.core.Context, param: list, value: str) → str`

Validate a given issue key to check if it exists

**Parameters**

- `ctx (click.core.Context)` – click.core.Context of the given command
- `args (list)` – List of commands args
- `value (str)` – String input to validate

**Returns** Retrive the key if it's validated

**Return type** str

```
moic.cli.validators.base.validate_issue_type(ctx: click.core.Context, param: list, value:  
                                              str) → str
```

Validate a given issue type name to check if it exists

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrive the name if it's validated

**Return type** str

```
moic.cli.validators.base.validate_priority(ctx, param, value)
```

Validate a given priority name to check if it exists

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrive the priority name if it's validated

**Return type** str

```
moic.cli.validators.base.validate_project_key(ctx: click.core.Context, param: list, value:  
                                              str) → str
```

Validate a given project key to check if it exists

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrive the key if it's validated

**Return type** str

```
moic.cli.validators.base.validate_user(ctx, param, value)
```

Validate a given user name to check if it exists

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrive the user name if it's validated

**Return type** str

## Module contents

Module for Moic cli arguments and options validators

## Submodules

### moic.cli.base module

Module for Moic configuration

Configuration file is stored under CONF\_DIR and contains the following architecture

**default:**

**contexts:**

- name: my\_context type: <plugin> login: my\_login

current\_context: my\_context

**class** moic.cli.base.**CustomSettings**

Bases: object

Class representing the current settings. It's a subtree of global\_settings containing only the configuration contained into the current context

**drill\_down** (conf: dict, keys: list) → str

Drill down into the configuration tree when the search key is composite For example :  
key.subkey.subsubkey

**Parameters**

- **conf** (dict) – The configuration to drill down
- **keys** (list) – The keys list which should be used to browse the conf

**Returns** The value of the key in the conf

**Return type** str

**get** (value, default=None) → str

Get a value into the Box element returned by global\_settings (dynaconf.LazySetting)

**Parameters** **value** (str) – The key value to return

**Returns** The value within the configuration

**Return type** str

**reload()**

Force reloading configurat from {CONF\_DIR}/config.yaml

**class** moic.cli.base.**MoicInstance**

Bases: object

MoicInstance Class represents the main class of the tool which should be herited by other Issuer Instance, such as MoicJiraInstance

**add\_context** (force: bool = False) → None

Add a new context in the configuration

**Parameters** **force** (bool) – If True it doesn't check the current configuration before

**create\_session\_instance()** → None

Setup the session instance

**custom\_config\_label** = 'Would you like to run custom configuration'

**delete\_context** (context\_name: str) → None

Delete the given context from the contexts list. If it's the current\_context, set the current context to ''

**Parameters** `context_name` (*str*) – The context name which should be deleted

**instance** = `None`

**session**  
Property which retrieve the session to interact with the issuer

**set\_current\_context** (*context\_name: str*) → `None`  
Set the current configuration context to use when executing commands

**Parameters** `context_name` (*str*) – The context name which should be present in the contexts list

**setup\_home\_dir** () → `None`  
Setup configuration directory. It creates the root configuration directory an empty .yaml conf file and the templates directory

**Returns** `None`

**update\_config** (*sub\_conf: dict*) → `None`  
Update the local configuration merging in it a new dict of configuration

**Parameters** `sub_conf` (*dict*) – The new configuration to merge into the config.yaml file

**Returns** `None`

`moic.cli.base.merge_config` (*a: dict, b: dict, path: str = None*) → `dict`  
Merge two config dict together

**Parameters**

- **a** (*dict*) – The main config dict
- **b** (*dict*) – The secondary config dict which should be merged into a
- **path** (*str*) – The path where to merge

**Returns** The merged dict

**Return type** `dict`

`moic.cli.base.merge_contexts` (*current\_contexts: list, new\_contexts: list*) → `list`  
Merge two context list based on the context.name key. It will update exiting contexts with new values and append non existing contexts

**Parameters**

- **current\_contexts** (*list*) – The context list present in the configuration
- **new\_contexts** (*list*) – The new context list to merge into the configuration

**Returns** The aggregated context list

**Return type** `list`

## Module contents

Moic Cli Package

### moic.plugins package

#### Subpackages

## moic.plugins.jira package

### Subpackages

#### moic.plugins.jira.commands package

### Subpackages

#### moic.plugins.jira.commands.issue package

### Submodules

#### moic.plugins.jira.commands.issue.base module

Module for base Moic issue commands

moic.plugins.jira.commands.issue.base.**add** (*summary, project, issue\_type, priority*)  
Create new issue

moic.plugins.jira.commands.issue.base.**add\_subtasks** (*issue\_key, subtask*)  
Add subtasks to a Jira issue

moic.plugins.jira.commands.issue.base.**assign** (*issue\_key, assignee*)  
Assign a Jira issue

moic.plugins.jira.commands.issue.base.**comment** (*issue\_key, comment*)  
Add a comment on an issue

moic.plugins.jira.commands.issue.base.**edit\_comment** (*issue\_key, comment\_id*)  
Edit a comment on an issue

moic.plugins.jira.commands.issue.base.**get** (*id, all, project, search, oneline, subtasks*)  
Get a Jira issue

moic.plugins.jira.commands.issue.base.**list\_comments** (*issue\_key, last, oneline*)  
List comments on an issue

moic.plugins.jira.commands.issue.base.**move** (*issue\_key, transition*)  
Apply a transition on a Jira issue

moic.plugins.jira.commands.issue.base.**rank** (*issue\_key, priority*)  
Change the priority of a Jira issue

moic.plugins.jira.commands.issue.base.**set\_peer** (*issue\_key, peer*)  
Define the peer user on a Jira issue

moic.plugins.jira.commands.issue.base.**show** (*issue\_key*)  
Show a Jira Issue description

### Module contents

Module for base Moic issue commands

### moic.plugins.jira.commands.resources package

#### Submodules

##### moic.plugins.jira.commands.resources.base module

Module for base Moic resources commands

```
moic.plugins.jira.commands.resources.base.issue_type()
```

List Jira Issue Type

```
moic.plugins.jira.commands.resources.base.priorities()
```

List Jira Priorities

```
moic.plugins.jira.commands.resources.base.projects()
```

List Jira Projects

```
moic.plugins.jira.commands.resources.base.status()
```

List Jira status

#### Module contents

Module for Moic ressources commands

### moic.plugins.jira.commands.sprint package

#### Submodules

##### moic.plugins.jira.commands.sprint.base module

Module for base Moic sprint commands

#### Module contents

Module for Moic sprint commands

#### Module contents

### moic.plugins.jira.completion package

#### Submodules

##### moic.plugins.jira.completion.base module

Base module for completion functions It includes all function used for autocomplete click options and arguments

```
moic.plugins.jira.completion.base.autocomplete_boards (ctx: click.core.Context, args:  
list, incomplete: str) → list
```

Get autocompleted boards list

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List available boards name**Return type** list

```
moic.plugins.jira.completion.base.autocomplete_comments (ctx: click.core.Context,
                                                       args: list, incomplete: str)
                                                       → list
```

Get autocompleted comments list

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List available comments id**Return type** list

```
moic.plugins.jira.completion.base.autocomplete_issue_types (ctx:
                                                               click.core.Context,
                                                               args: list, incomplete:
                                                               str) → list
```

Get Jira issue types list completion

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of issue types names corresponding to the incomplete input**Return type** list

```
moic.plugins.jira.completion.base.autocomplete_priorities (ctx: click.core.Context,
                                                               args: list, incomplete:
                                                               str) → list
```

Get Jira priorities name list completion

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of priorities name corresponding to the incomplete input**Return type** list

```
moic.plugins.jira.completion.base.autocomplete_projects (ctx: click.core.Context,
                                                               args: list, incomplete:
                                                               str) → list
```

Get Jira projects list completion

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of project names corresponding to the incomplete input

**Return type** list

```
moic.plugins.jira.completion.base.autocomplete_sprints(ctx: click.core.Context,  
                                                       args: list, incomplete: str)  
                                                       → list
```

Get autocompleted sprints list

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List available sprints name

**Return type** list

```
moic.plugins.jira.completion.base.autocomplete_transitions(ctx:  
                                                       click.core.Context,  
                                                       args: list, incomplete:  
                                                       str) → list
```

Get Jira translations available for an issue

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of translation names corresponding to the incomplete input

**Return type** list

```
moic.plugins.jira.completion.base.autocomplete_users(ctx: click.core.Context, args:  
                                                       list, incomplete: str) →  
                                                       jira.client.ResultList
```

Get Jira users list completion

**Parameters**

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **incomplete** (*str*) – String input to autocomplete

**Returns** List of users corresponding to the incomplete input

**Return type** *jira.client.ResultList*

## Module contents

Module for click commands autocomplete

## moic.plugins.jira.utils package

### Submodules

#### moic.plugins.jira.utils.base module

Module for base Moic cli utils function

**class** moic.plugins.jira.utils.base.**Board**(*json\_board*: dict)  
Bases: object

Class representing a Jira Board

moic.plugins.jira.utils.base.**get\_board\_sprints**(*board\_id*: str, *closed*: bool = False) → dict  
Return le sprint list of a board

#### Parameters

- **board\_id** (str) – The Jira Board ID
- **closed** (bool) – Indicate if we should returned only opened sprints

**Returns** Dict {“board\_id”: id, “sprints”: list} of sprints

**Return type** dict

moic.plugins.jira.utils.base.**get\_project\_boards**(*project\_key*: str) → list  
Get the board list of a given project

This function is used waiting the 3.0.0 release of Python Jira which include it built-in

**Parameters** **project\_Key** (str) – The Jira project Key used to filtered

**Returns** A list of boards dict

**Return type** list

moic.plugins.jira.utils.base.**get\_sprint\_issues**(*sprint\_id*: str) → jira.client.ResultList  
Returns list of Jira Issues linked to a given Jira Sprint

**Parameters** **sprint\_id** (str) – Jira Sprint ID

**Returns** ResultList: List Jira Issues contained into the sprint

moic.plugins.jira.utils.base.**get\_sprint\_story\_points**(*sprint\_id*: str) → dict  
Return the detailed list of story points for a given sprint Id Splitted between done points and todo points

**Parameters** **sprint\_id** (str) – Jira Sprint ID

**Returns** {“sprint\_id”: id, “points”: {“todo”: float, “done”: float}}

**Return type** dict

moic.plugins.jira.utils.base.**sort\_issue\_per\_status**(*issues*: list, *project*: str = None) → list  
Sort an issue liste based on the project defined workflow

#### Parameters

- **issues** (list) – The list of Jira issues to sort
- **project** (str) – The Jira project key

**Returns** The sorted Jira issues list

**Return type** list

## moic.plugins.jira.utils.parser module

Module for a Jira Textile like to Markdown parser

```
class moic.plugins.jira.utils.parser.BlockElement(raw: str, content: str = "",  
                                                 content_type: str = None, content_style: str = None, oneline: bool  
                                                 = False)
```

Bases: *moic.plugins.jira.utils.parser.JiraElement*

This class represent block part element such as code snippets They could be multiline or note

```
class moic.plugins.jira.utils.parser.HeadElement(raw, content: str = None, level: int =  
                                                 1)
```

Bases: *moic.plugins.jira.utils.parser.JiraElement*

This class represents Header element

```
class moic.plugins.jira.utils.parser.JiraDocument(raw: str)
```

Bases: object

Class which represent a Jira Rich text field such as an Issue Description or comment It provides methods to convert it to Markdown and prepare it for rendering through Rich

```
HEAD_COLORS = ['dodger_blue3', 'dodger_blue2', 'dodger_blue1', 'deep_sky_blue3', 'deep  
isoneline(line: str)
```

Check if the given line is a oneline block With a pair of {quotelcodeletc... } tags

**Parameters** `line(str)` – The line to check

```
class moic.plugins.jira.utils.parser.JiraElement
```

Bases: object

A root custom JiraElement It represent any kind of element

```
class moic.plugins.jira.utils.parser.ListItemElement(raw: str, content: str = "", level:  
                                                 int = 1, item_type: str = '*')
```

Bases: *moic.plugins.jira.utils.parser.JiraElement*

Class representing a list item such as: \* item

```
class moic.plugins.jira.utils.parser.NewLineElement
```

Bases: *moic.plugins.jira.utils.parser.JiraElement*

Class representing an empty line

```
class moic.plugins.jira.utils.parser.QuoteElement(raw, content: str = None)
```

Bases: *moic.plugins.jira.utils.parser.JiraElement*

Class representing a quote (tag bq. in Jira)

```
class moic.plugins.jira.utils.parser.TextElement(raw: str)
```

Bases: object

## Module contents

Module for cli utils function

## moic.plugins.jira.validators package

### Submodules

#### moic.plugins.jira.validators.base module

Module for base Moic validator functions

```
moic.plugins.jira.validators.base.validate_comment_id(ctx: click.core.Context,
                                                     param: list, value: str) → str
```

Validate a given comment id to check if it exists in Jira

##### Parameters

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrive the id if it's validated

**Return type** str

```
moic.plugins.jira.validators.base.validate_issue_key(ctx: click.core.Context, param:
                                                     list, value: str) → str
```

Validate a given issue key to check if it exists in Jira

##### Parameters

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrive the key if it's validated

**Return type** str

```
moic.plugins.jira.validators.base.validate_issue_type(ctx: click.core.Context,
                                                    param: list, value: str) → str
```

Validate a given issue type name to check if it exists in Jira

##### Parameters

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrive the name if it's validated

**Return type** str

```
moic.plugins.jira.validators.base.validate_priority(ctx, param, value)
```

Validate a given priority name to check if it exists in Jira

##### Parameters

- **ctx** (*click.core.Context*) – *click.core.Context* of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrieve the priority name if it's validated

**Return type** str

```
moic.plugins.jira.validators.base.validate_project_key(ctx: click.core.Context,
                                                       param: list, value: str) →
                                                       str
```

Validate a given project key to check if it exists in Jira

#### Parameters

- **ctx** (*click.core.Context*) – click.core.Context of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrieve the key if it's validated

**Return type** str

```
moic.plugins.jira.validators.base.validate_user(ctx, param, value)
```

Validate a given user name to check if it exists in Jira

#### Parameters

- **ctx** (*click.core.Context*) – click.core.Context of the given command
- **args** (*list*) – List of commands args
- **value** (*str*) – String input to validate

**Returns** Retrieve the user name if it's validated

**Return type** str

## Module contents

Module for Moic cli arguments and options validators

## Submodules

### [moic.plugins.jira.api module](#)

Jira Api custom calls module

```
moic.plugins.jira.api.get_project_status(projectIdOrKey: str, url: str = None, login: str =
                                           None, password: str = None) → dict
```

Get project status using a given project Key or ID

#### Parameters

- **projectIdOrKey** (*str*) – The Jira project ID or Key
- **url** (*str*) – The base url of the Jira instance
- **login** (*str*) – The login credential to access the API
- **password** (*str*) – The password credential to access the API

**Returns** Dict of status existing for the given project

**Return type** dict

---

```
moic.plugins.jira.api.get_project_story_status(projectIdOrKey: str, url: str = None, lo-
                                              gin: str = None, password: str = None)
                                              → dict
```

Get project status using a given project Key or ID which correspond to issue type stories

#### Parameters

- **projectIdOrKey** (*str*) – The Jira project ID or Key
- **url** (*str*) – The base url of the Jira instance
- **login** (*str*) – The login credential to access the API
- **password** (*str*) – The passowrd credential to access the API

**Returns** Dict of status existing for the given project

**Return type** dict

## moic.plugins.jira.base module

This module represents the the Jira Instance class

```
class moic.plugins.jira.base.Instance
Bases: moic.cli.base.MoicInstance
```

Instance class which allow you to access Jira's API using basic auth credentials It allows to setup several configuration such as: - Default project, custom fields, sprint workflow etc...

```
add_context(name: str, force: bool = False) → dict
```

Setup the main configuration and saved it: Instance, credentials and default project

**Parameters** **force** (*bool*) – Force configuration to be setup even if it exists

**Returns** None

```
create_session_instance() → None
```

Setup the instance if it doesn't exist yet

**Returns** None

```
custom_config(project: str, force: bool = False) → None
```

Configure the agile settings It configured several custom fields: \* Story point custom field \* Peer custom field

**Parameters**

- **project** (*str*) – Jira Project key which should be configured
- **force** (*bool*) – Force configuration to be setup even if it exists

**Returns** None

```
custom_config_label = 'Would you like to configure Jira Agile'
```

```
instance = None
```

```
session
```

Session object which represents a JIRA API session

**Returns** A Jira API session

**Return type** JIRA

**moic.plugins.jira.core module**

This module is used to build objects which could be used by moic.cli.utils method For example the print\_issue function

```
class moic.plugins.jira.core.JiraComment (raw: jira.resources.Comment)
Bases: object

JiraComment Class represents a normalized issue comment based on Jira.Comment resource

class moic.plugins.jira.core.JiraIssue (raw: jira.resources.Issue)
Bases: object

JiraIssue Class represents a normalized issue based on a Jira.Issue resource

class moic.plugins.jira.core.JiraIssueType (raw: jira.resources.IssueType)
Bases: object

JiraIssueType Class represents a normalized issue type based on Jira.IssueType resource

class moic.plugins.jira.core.JiraStatus (raw: jira.resources.Status)
Bases: object

JiraStatus Class represents a normalized status based on a Jira.Status resource
```

**Module contents**

Moic Jira Package

**Module contents****Submodules****moic.base module**

Moic cli definition base module

```
moic.base.run()
Run the cli application
```

**Module contents**

Main Moic module

---

## Python Module Index

---

### M

moic, 30  
moic.base, 30  
moic.cli, 20  
moic.cli.base, 19  
moic.cli.commands, 12  
moic.cli.commands.context, 11  
moic.cli.commands.context.base, 11  
moic.cli.commands.issue, 11  
moic.cli.commands.issue.base, 11  
moic.cli.commands.rabbit, 12  
moic.cli.commands.rabbit.base, 11  
moic.cli.commands.resources, 12  
moic.cli.commands.resources.base, 12  
moic.cli.commands.template, 12  
moic.cli.commands.template.base, 12  
moic.cli.commands.version, 12  
moic.cli.completion, 15  
moic.cli.completion.base, 12  
moic.cli.utils, 17  
moic.cli.utils.base, 15  
moic.cli.validators, 18  
moic.cli.validators.base, 17  
moic.plugins, 30  
moic.plugins.jira, 30  
moic.plugins.jira.api, 28  
moic.plugins.jira.base, 29  
moic.plugins.jira.commands, 22  
moic.plugins.jira.commands.issue, 21  
moic.plugins.jira.commands.issue.base,  
    21  
moic.plugins.jira.commands.resources,  
    22  
moic.plugins.jira.commands.resources.base,  
    22  
moic.plugins.jira.commands.sprint, 22  
moic.plugins.jira.commands.sprint.base,  
    22  
moic.plugins.jira.completion, 24



---

## Index

---

### A

add () (in module `moic.plugins.jira.commands.issue.base`),  
    21  
add\_context () (in `moic.cli.base.MoicInstance`  
    method), 19  
add\_context () (in `moic.plugins.jira.base.Instance`  
    method), 29  
add\_subtasks () (in module  
    `moic.plugins.jira.commands.issue.base`),  
    21  
assign () (in module  
    `moic.plugins.jira.commands.issue.base`),  
    21  
autocomplete\_boards () (in module  
    `moic.cli.completion.base`), 12  
autocomplete\_boards () (in module  
    `moic.plugins.jira.completion.base`), 22  
autocomplete\_comments () (in module  
    `moic.cli.completion.base`), 13  
autocomplete\_comments () (in module  
    `moic.plugins.jira.completion.base`), 23  
autocomplete\_contexts () (in module  
    `moic.cli.completion.base`), 13  
autocomplete\_issue\_types () (in module  
    `moic.cli.completion.base`), 13  
autocomplete\_issue\_types () (in module  
    `moic.plugins.jira.completion.base`), 23  
autocomplete\_plugins () (in module  
    `moic.cli.completion.base`), 13  
autocomplete\_priorities () (in module  
    `moic.cli.completion.base`), 14  
autocomplete\_priorities () (in module  
    `moic.plugins.jira.completion.base`), 23  
autocomplete\_projects () (in module  
    `moic.cli.completion.base`), 14  
autocomplete\_projects () (in module  
    `moic.plugins.jira.completion.base`), 23  
autocomplete\_sprints () (in module  
    `moic.cli.completion.base`), 14

autocomplete\_sprints () (in module  
    `moic.plugins.jira.completion.base`), 24  
autocomplete\_transitions () (in module  
    `moic.cli.completion.base`), 14  
autocomplete\_transitions () (in module  
    `moic.plugins.jira.completion.base`), 24  
autocomplete\_users () (in module  
    `moic.cli.completion.base`), 15  
autocomplete\_users () (in module  
    `moic.plugins.jira.completion.base`), 24

### B

`BlockElement` (class  
    `moic.plugins.jira.utils.parser`), 26  
`Board` (class in `moic.plugins.jira.utils.base`), 25

### C

check\_instance\_is\_up () (in module  
    `moic.cli.utils.base`), 15  
comment () (in module  
    `moic.plugins.jira.commands.issue.base`),  
    21  
create\_session\_instance ()  
    (`moic.cli.base.MoicInstance` method), 19  
create\_session\_instance ()  
    (`moic.plugins.jira.base.Instance` method),  
    29  
custom\_config () (`moic.plugins.jira.base.Instance`  
    method), 29  
custom\_config\_label (`moic.cli.base.MoicInstance`  
    attribute), 19  
custom\_config\_label  
    (`moic.plugins.jira.base.Instance` attribute),  
    29  
`CustomSettings` (class in `moic.cli.base`), 19

### D

delete\_context () (`moic.cli.base.MoicInstance`  
    method), 19

drill\_down() (moic.cli.base.CustomSettings method), 19

**E**

edit\_comment() (in module moic.plugins.jira.commands.issue.base), 21

**G**

get() (in module moic.plugins.jira.commands.issue.base), 21

get() (moic.cli.base.CustomSettings method), 19

get\_board\_sprints() (in module moic.plugins.jira.utils.base), 25

get\_plugin\_autocomplete() (in module moic.cli.utils.base), 15

get\_plugin\_command() (in module moic.cli.utils.base), 15

get\_plugin\_custom\_commands() (in module moic.cli.utils.base), 15

get\_plugin\_instance() (in module moic.cli.utils.base), 16

get\_plugin\_validator() (in module moic.cli.utils.base), 16

get\_project\_boards() (in module moic.plugins.jira.utils.base), 25

get\_project\_status() (in module moic.plugins.jira.api), 28

get\_project\_story\_status() (in module moic.plugins.jira.api), 28

get\_sprint\_issues() (in module moic.plugins.jira.utils.base), 25

get\_sprint\_story\_points() (in module moic.plugins.jira.utils.base), 25

get\_template() (in module moic.cli.utils.base), 16

**H**

HEAD\_COLORS (moic.plugins.jira.utils.parser.JiraDocument attribute), 26

HeadElement (class in moic.plugins.jira.utils.parser), 26

**I**

Instance (class in moic.plugins.jira.base), 29

instance (moic.cli.base.MoicInstance attribute), 20

instance (moic.plugins.jira.base.Instance attribute), 29

isoneline() (moic.plugins.jira.utils.parser.JiraDocument method), 26

issue\_type() (in module moic.plugins.jira.commands.resources.base), 22

**J**

JiraComment (class in moic.plugins.jira.core), 30

JiraDocument (class in moic.plugins.jira.utils.parser), 26

JiraElement (class in moic.plugins.jira.utils.parser), 26

JiraIssue (class in moic.plugins.jira.core), 30

JiraIssueType (class in moic.plugins.jira.core), 30

JiraStatus (class in moic.plugins.jira.core), 30

**L**

list\_comments() (in module moic.plugins.jira.commands.issue.base), 21

ListItemElement (class in moic.plugins.jira.utils.parser), 26

**M**

merge\_config() (in module moic.cli.base), 20

merge\_contexts() (in module moic.cli.base), 20

moic (module), 30

moic.base (module), 30

moic.cli (module), 20

moic.cli.base (module), 19

moic.cli.commands (module), 12

moic.cli.commands.context (module), 11

moic.cli.commands.context.base (module), 11

moic.cli.commands.issue (module), 11

moic.cli.commands.issue.base (module), 11

moic.cli.commands.rabbit (module), 12

moic.cli.commands.rabbit.base (module), 11

moic.cli.commands.resources (module), 12

moic.cli.commands.resources.base (module), 12

moic.cli.commands.template (module), 12

moic.cli.commands.template.base (module), 12

moic.cli.commands.version (module), 12

moic.cli.completion (module), 15

moic.cli.completion.base (module), 12

moic.cli.utils (module), 17

moic.cli.utils.base (module), 15

moic.cli.validators (module), 18

moic.cli.validators.base (module), 17

moic.plugins (module), 30

moic.plugins.jira (module), 30

moic.plugins.jira.api (module), 28

moic.plugins.jira.base (module), 29

moic.plugins.jira.commands (module), 22

moic.plugins.jira.commands.issue (module), 21

moic.plugins.jira.commands.issue.base (module), 21

|   |   |
|---|---|
| moic.plugins.jira.commands.resources<br>(module), 22                                  | session ( <i>moic.plugins.jira.base.Instance</i> attribute), 29                     |
| moic.plugins.jira.commands.resources.base<br>(module), 22                             | set_current_context()<br>( <i>moic.cli.base.MoicInstance</i> method), 20            |
| moic.plugins.jira.commands.sprint (mod-<br>ule), 22                                   | set_peer()<br>(in module<br><i>moic.plugins.jira.commands.issue.base</i> ),<br>21   |
| moic.plugins.jira.commands.sprint.base<br>(module), 22                                | setup_home_dir()<br>( <i>moic.cli.base.MoicInstance</i><br>method), 20              |
| moic.plugins.jira.completion (module), 24   | show () (in module <i>moic.plugins.jira.commands.issue.base</i> ),<br>21            |
| moic.plugins.jira.completion.base (mod-<br>ule), 22                                   | sort_issue_per_status()<br>(in module<br><i>moic.cli.utils.base</i> ), 17           |
| moic.plugins.jira.core (module), 30   | sort_issue_per_status()<br>(in module<br><i>moic.plugins.jira.utils.base</i> ), 25  |
| moic.plugins.jira.utils (module), 26  | status()<br>(in module<br><i>moic.plugins.jira.commands.resources.base</i> ),<br>22 |
| moic.plugins.jira.utils.base (mod-<br>ule), 25  |   |
| moic.plugins.jira.utils.parser (module),<br>26  |   |
| moic.plugins.jira.validators (module), 28   |   |
| moic.plugins.jira.validators.base (mod-<br>ule), 27                                   |   |
| MoicInstance (class in <i>moic.cli.base</i> ), 19                                     |   |
| move () (in module <i>moic.plugins.jira.commands.issue.base</i> ),<br>21              | TextElement (class in <i>moic.plugins.jira.utils.parser</i> ),<br>26                |
| <b>N</b>  |   |
| NewLineElement (class<br><i>moic.plugins.jira.utils.parser</i> ), 26                  |   |
| <b>P</b>  |   |
| print_comment () (in module <i>moic.cli.utils.base</i> ), 16                          | update_config()<br>( <i>moic.cli.base.MoicInstance</i><br>method), 20               |
| print_comments () (in module <i>moic.cli.utils.base</i> ),<br>16                      |   |
| print_issue () (in module <i>moic.cli.utils.base</i> ), 16                            |   |
| print_issues () (in module <i>moic.cli.utils.base</i> ), 16                           |   |
| print_status () (in module <i>moic.cli.utils.base</i> ), 16                           |   |
| priorities () (in module<br><i>moic.plugins.jira.commands.resources.base</i> ,<br>22) |   |
| projects () (in module<br><i>moic.plugins.jira.commands.resources.base</i> ,<br>22)   |   |
| <b>Q</b>  |   |
| QuoteElement (class<br><i>moic.plugins.jira.utils.parser</i> ), 26                    |   |
| <b>R</b>  |   |
| rank () (in module <i>moic.plugins.jira.commands.issue.base</i> ),<br>21              |   |
| reload() ( <i>moic.cli.base.CustomSettings</i> method), 19                            |   |
| run () (in module <i>moic.base</i> ), 30  |   |
| <b>S</b>  |   |
| session ( <i>moic.cli.base.MoicInstance</i> attribute), 20                            |   |
| set_current_context()<br>( <i>moic.cli.base.MoicInstance</i> method), 20              |   |
| set_peer()<br>(in module<br><i>moic.plugins.jira.commands.issue.base</i> ),<br>21     |   |
| setup_home_dir()<br>( <i>moic.cli.base.MoicInstance</i><br>method), 20                |   |
| show () (in module <i>moic.plugins.jira.commands.issue.base</i> ),<br>21              |   |
| sort_issue_per_status()<br>(in module<br><i>moic.cli.utils.base</i> ), 17             |   |
| sort_issue_per_status()<br>(in module<br><i>moic.plugins.jira.utils.base</i> ), 25    |   |
| status()<br>(in module<br><i>moic.plugins.jira.commands.resources.base</i> ),<br>22   |   |
| <b>T</b>  |   |
| TextElement (class in <i>moic.plugins.jira.utils.parser</i> ),<br>26                  |   |
| <b>U</b>  |   |
| update_config()<br>( <i>moic.cli.base.MoicInstance</i><br>method), 20                 |   |
| <b>V</b>  |   |
| validate_comment_id () (in module<br><i>moic.cli.validators.base</i> ), 17            |   |
| validate_comment_id () (in module<br><i>moic.plugins.jira.validators.base</i> ), 27   |   |
| validate_issue_key () (in module<br><i>moic.cli.validators.base</i> ), 17             |   |
| validate_issue_key () (in module<br><i>moic.plugins.jira.validators.base</i> ), 27    |   |
| validate_issue_type () (in module<br><i>moic.cli.validators.base</i> ), 17            |   |
| validate_issue_type () (in module<br><i>moic.plugins.jira.validators.base</i> ), 27   |   |
| validate_priority () (in module<br><i>moic.cli.validators.base</i> ), 18              |   |
| validate_priority () (in module<br><i>moic.plugins.jira.validators.base</i> ), 27     |   |
| validate_project_key () (in module<br><i>moic.cli.validators.base</i> ), 18           |   |
| validate_project_key () (in module<br><i>moic.plugins.jira.validators.base</i> ), 28  |   |
| validate_user () (in module<br><i>moic.cli.validators.base</i> ), 18                  |   |
| validate_user () (in module<br><i>moic.plugins.jira.validators.base</i> ), 28         |   |