

Python3 Jira Client

clazzes.org's python3 jira-client is a python Command Line Interface(CLI) tool which can create and read issues for projects. It can be heavily customized with config files and supports both Basic Authentication and OAuth 1.0a.

Supported Commands:

Note: The values needed for the commands are prioritized in this order:

Command line specified > custom config file with -c > user config file > global config file

Command	Required Parameters	Optional Parameters	Description	Requirements
listissues	--project: The project's identifier in Jira		Pretty prints, to stdout, all the issues for a given project name, in order of creation descending. Could redirect output to save in file.	Browsing Permissions
createissue	--project: The identifier of the project to add the issue to. --summary: Headline of the issue to be created. Put in quotation marks if it contains spaces. --desc: Description of the issue to be created. --issuetype: How the issue should be categorized. Examples are bug, task, feature, subtask,... --priority: Number from 1-5 where 1 is a Blocker and 5 is Trivial.	--assignee: The username of the requested assignee, if one should be immediately assigned. --parent: The identifier of the parent issue. Only required if you create a subtask.	Creates an issue for the given project name.	Browsing and Issue Creation Permissions
initconfig	None	--configfile: Absolute path to the file where the config values should be saved/overwritten. If it doesn't exist, attempt to create it there. Any of username, password, oAuthToken, consumerKey, consumerSecret, oAuthSecretToken, authMethod, privateKeyLocation, baseurl that should be saved in the config file	Initialize or change a config file	None
createoauth	None	--consumerkey: The name of the OAuth public key as configured on the Jira Server. Specify to use a different one than the config file has. --consumersecret: The OAuth secret as configured on the Jira Server. Specify to use a different one than the config file has. --pkeyloc: Path to the private to be used for the creation of this token.	Create an OAuth token. Important: OAuth Consumer must have been configured server-side by an Administrator. A Tutorial on how to configure that can be found on the official Atlassian Jira Documentation: https://developer.atlassian.com/server/jira/platform/oauth/ (Only Step 1 is relevant, Step 2 and 3 are handled by JiraClient)	Consumer secret and key already configured on Jira. Private Key used must correspond to configured public key.

Example Command Usage

listissues

List issues for project with "id" attribute EXAMPLEPROJECTNAME

```
jira-client listissues --project EXAMPLEPROJECTNAME
```

Example Output:

```
EXAMPLEPROJECTNAME-2 (Bug):
Priority 3 - Heavy
DB leaks lead to security invulnerabilities
Created by John Doe at Thu, 14.06.2012 17:39:21 (UTC+02:00)
Assigned to Will Dugh
Last updated: Tue, 13.11.2012 17:26:06 (UTC+01:00)
-----
EXAMPLEPROJECTNAME-1 (Feature):
Priority 4 - Minor
Should allow filtering of currently online users
Created by Will Dugh at Wed, 14.06.2012 17:39:21 (UTC+02:00)
Assigned to Nobody
Last updated: Never
-----
```

createissue

Create an issue for EXAMPLEHOSTINGNAME project which is a Bug with Priority Minor(4):

```
jira-client createissue --project EXAMPLEPROJECTNAME --summary "This is the headline" --desc "This is a multi-
lined\ndescription" --issuetype Bug --priority 4
```

No output when successful.

initconfig

Initialize the user config file from scratch interactively:

```
> jira-client initconfig

Enter config file path (Alternatively enter 'u' for user or 'g' for global config):

> u

Enter remaining configurable values, leave empty to ignore:

username: > johndoe
password: > notapassword123
oAuthToken:
consumerKey: > notakey987
consumerSecret:
authMethod: > OAUTH
privateKeyLocation: > /home/johndoe/mykeyring/pkey.pem
baseurl: > https://jira.mydomain.com
```

This will set username, password, consumerKey, authMethod, privateKeyLocation and baseurl to the specified values and leave the rest alone.

Initialize a config file to a custom path with all parameters already set:

```
> jira-client initconfig --conf file /home/johndoe/customjira.conf --username johndoe --password notapw123 --
oauthtoken Jb72NuBYBvT9zfrYfXCzdfF7y1lX6ewC -oauthsecrettoken lxpMs8QI1lXE3Y9kxGu3yakyyqHs5kh3 -auth OAUTH -
consumersecret notasecret1923 -consumerkey notakey29 --pkeyloc /home/johndoe/mykeyring/pkey.pem --baseurl
https://jira.mydomain.com
```

No output if successful.

createoauth

Can only be done interactively because OAuth1.0a requires manual user authentication.

Creating the OAuthToken and saving it to user config file:

```
> jira-client createoauth
Request token recieved, please authorize me in the Browser via the following URL:
https://jira.mydomain.com/plugins/servlet/oauth/authorize?oauth_token=60uUqPdN237z3qjOCafLeNWHJHO2g6zw

Have you authorized me? (Y/n)

--(Manual authentication in browser)--

> Y

{'oauth_token': 'yPpXwNyWeLpc923qIpKvMLCabVqztb28', 'oauth_token_secret': 'uDtPg6ePeKwG9JsNZZblubAWfnwbCoN1',
'oauth_expires_in': '157680000', 'oauth_session_handle': 'bmF8KVnnF2AMwUX6AAZ8P5Oc3WtS0b5A',
'oauth_authorization_expires_in': '160272000'}
Save OAuth Token to user or global config, or none (u/g/n)?
Alternatively, enter a custom absolute file path(starting with /):

> u
```

Installation & configuration tips

Apt sources

<http://deb.clazzes.org/any/sources.list.d/any/any-xpkg-1.list>

<http://deb.clazzes.org/any/sources.list.d/any/any-pytools-1.list>

OAuth token creation

See <https://developer.atlassian.com/server/jira/platform/oauth/>

But not all fields in step 3 of "Create an application link" are irrelevant ;-)

Sample cnf

jira-client.cnf example

```
[CLI]
username = jdoe
#password = myPass
baseurl = https://jira.company.test/

privatekeylocation=/etc/jira-client/jira_privatekey.pem
consumerkey=OAuthKey
consumersecret=secret

oauthtoken=Q.....a
auth=OAUTH
oauthsecrettoken=4....Y
```