
AutoJenkins Documentation

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AutoJenkins is a tool to automate or remote-control Jenkins. You can e.g. create and delete build jobs, trigger builds, read latest build results, etc.

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INTRODUCTION TO AUTOJENKINS

AutoJenkins was written to handle automation (remote control) of Jenkins tasks. Includes a class `autojenkins.Jenkins` that you can use to drive Jenkins.

Things you can do with it:

- Copy a job (e.g. from a template job)
- Delete a job
- Obtain the `config.xml` file for that job
- Trigger building of a job
- Obtain latest execution results
- ...

AutoJenkins may be used as an API or as a command-line tool.

1.1 AutoJenkins as API

Sample use:

```
from autojenkins import Jenkins

j = Jenkins('http://jenkins.pe.local')

# trigger a manual build and check results
j.build('warehouse-screens-us544_login')
j.last_result('warehouse-screens-us544_login')

# get only the result string (one of 'SUCCESS', 'UNSTABLE', 'FAILURE'):
j.last_result('warehouse-screens-us544_login')['result']

# get the configuration file for a job:
j.get_config_xml('template')

# Create a new job from a job named 'template', replacing variables
j.create_copy('my-new-job', 'template',
              repo='mbf-warehouse-screens',
              branch='us544_login',
              package='warehouse_screens')

# build
```

```
j.build('my-new-job')

# check result and delete if successful:
result = j.last_result('my-new-job')['result']
if result == 'SUCCESS':
    j.delete('my-new-job')
```

1.2 AutoJenkins from the Command Line

Available commands:

- `ajk-list` - list all jobs in a server
- `ajk-create` - create a job
- `ajk-build` - start building a job
- `ajk-delete` - delete a job

1.2.1 `ajk-list`

List all jobs in a Jenkins server. Each line in the output represents a job, and is colored according to the job's last build state:

- Blue: success
- Yellow: unstable
- Red: failure
- Gray: not built

A `*` symbol next to a job name indicates that the job is being built right now.

If instead of colored output, you prefer a string stating the status of the build, use the `--no-color` option. This is useful if you e.g. want to pipe the output into a `grep` command that filters jobs depending on status.

```
$ ajk-list -h
```

Usage: `ajk-list host`

Run `autojenkins` to list all jobs.

Options:

- `-h, --help` show this help message and exit
- `-n, --no-color` do not use colored output

1.2.2 `ajk-create`

Create a job from a template job, replacing variables that use the `django/jinja2` syntax `{{ variable }}`.

Usage help:

```
$ ajk-create -h
```

Usage: `ajk-create host jobname [options]`

Run autojenkins to create a job.

Options:

-h, --help	show this help message and exit
-t TEMPLATE, --template=TEMPLATE	the template job to copy from
-D PROP=VALUE	substitution variables for the template
-b, --build	start a build right after creation

Sample command:

```
$ ajk-create http://my.server my-job -t template -Dbranch=my-branch
```

1.2.3 ajk-delete

Delete a job from a Jenkins server.

Usage help:

```
Usage: ajk-delete host [jobname] [options]
```

Run autojenkins to delete a job.

Options:

-h, --help	show this help message and exit
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1.3 More Info

Sources can be found in Github at <https://github.com/txels/autojenkins>

AUTOJENKINS . JOBS

```
class autojenkins.jobs.Jenkins (base_url, auth=None)
    Main class to interact with a Jenkins server.

    all_jobs ()
        Get a list of tuples with (name, color) of all jobs in the server.

        Color is blue, yellow or red depending on build results (SUCCESS, UNSTABLE or FAILED).

    build (jobname)
        Trigger Jenkins to build a job.

    copy (jobname, copy_from='template')
        Copy a job from another one (by default from one called template).

    create (jobname, config_file, **context)
        Create a job from a configuration file.

    create_copy (jobname, template_job, enable=True, **context)
        Create a job from a template job.

    delete (jobname)
        Delete a job.

    disable (jobname)
        Trigger Jenkins to disable a job.

    enable (jobname)
        Trigger Jenkins to enable a job.

    get_config_xml (jobname)
        Get the config.xml file that contains the job definition.

    job_info (jobname)
        Get all information for a job as a Python object (dicts & lists).

    job_url (jobname)
        Get the human-browseable URL for a job.

    last_build_info (jobname)
        Get information for last build of a job.

    last_build_report (jobname)
        Get full report of last build.

    last_result (jobname)
        Obtain results from last execution.
```

last_success (*jobname*)

Return information about the last successful build.

transfer (*jobname, to_server*)

Copy a job to another server.

Sources can be found at <https://github.com/txels/autojenkins>

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`autojenkins.jobs, ??`