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# **gits Documentation**

*Release stable*

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Gits is a web-based terminal emulator. The project is based on completely reworked source code of [Ajaxterm](#). It understands only Linux console escape and control sequences so far. The main goal of the project is to be used in [OpenStack](#) one day.



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## Installation

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Gits consists of two parts: a client and a server. The following sections describe how to install Gits automatically and manually. You will need `npm` to get the client package or build it from the source code. If you don't have `npm` installed, have a look at [nvm](#).

### Automatic installation

The Gits client is listed in [npm search](#) and can be installed with `npm`. For example:

```
npm install gits-client
```

The `node_modules` directory will be created inside the current working directory.

The Gits server is listed in [PyPI](#) and can be installed with `pip` or `easy_install`.

First, (*optionally*) prepare a `virtualenv`:

```
virtualenv -p python3 gits-env  
. gits-env/bin/activate
```

Then, install the server:

```
pip install gits
```

Finally, go to the directory where you executed `npm install gits-client` and run `server.py`. The server tries to use the `node_modules/gits-client/static` and `node_modules/gits-client/templates` directories by default. Also you can explicitly specify which directories should be used through the `--static-path` and `--templates-path` parameters.

### Manual installation

First, get the Gits source code:

```
git clone https://github.com/tolstoyevsky/gits.git  
cd gits
```

Then, build the client:

```
npm install  
npm run start
```

Next, (*optionally*) prepare a `virtualenv`:

```
virtualenv -p python3 gits-env  
. gits-env/bin/activate
```

After that, install the server:

```
python setup.py install
```

Finally, run the server:

```
server.py --static-path=static --templates-path=templates
```

or

```
./bin/server.py --static-path=static --templates-path=templates
```

As previously mentioned in *Automatic installation*, the server tries to use the `node_modules/gits-client/static` and `node_modules/gits-client/templates` directories by default. In this case they don't exist, so you have to explicitly specify which directories should be used through the `--static-path` and `--templates-path` parameters.

### Prerequisites

Gits uses

- [Tornado](#) to create a WebSocket server and multiplex input/output in a platform-independent way
- [PyYAML](#) to store escape and control sequences in a YAML file.

### Platforms

Theoretically Gits is platform-independent software (generally because of using Tornado), but practically the quality of its work may vary from platform to platform.

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**Licensing**

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Git is available under the [Apache License, Version 2.0](#).