

# Installing Trac as CGI

## Error: Macro TracGuideToc(None) failed

```
'NoneType' object has no attribute 'find'
```

### 1. Installing Trac as CGI

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*Please note that using Trac via CGI is the slowest deployment method available. It is slower than `mod_wsgi`, `mod_python`, `FastCGI` and even `IIS/AJP` on Windows.*

CGI script is the entrypoint that web-server calls when a web-request to an application is made. The `trac.cgi` script can be created using the `trac-admin <env> deploy <dir>` command which automatically substitutes the required paths, see [TracInstall#cgi-bin](#). Make sure the script is executable by your web server.

## Apache web-server configuration

In [?Apache](#) there are two ways to run Trac as CGI:

1. Use a `ScriptAlias` directive that maps a URL to the `trac.cgi` script (recommended)
2. Copy the `trac.cgi` file into the directory for CGI executables used by your web server (commonly named `cgi-bin`). You can also create a symbolic link, but in that case make sure that the `FollowSymLinks` option is enabled for the `cgi-bin` directory.

To make Trac available at `http://yourhost.example.org/trac` add `ScriptAlias` directive to Apache configuration file, changing `trac.cgi` path to match your installation:

```
ScriptAlias /trac /path/to/www/trac/cgi-bin/trac.cgi
```

*Note that this directive requires that the `mod_alias` module is enabled.*

If you're using Trac with a single project you need to set its location using the `TRAC_ENV` environment variable:

```
<Location "/trac">
  SetEnv TRAC_ENV "/path/to/projectenv"
</Location>
```

Or to use multiple projects you can specify their common parent directory using the `TRAC_ENV_PARENT_DIR` variable:

```
<Location "/trac">
  SetEnv TRAC_ENV_PARENT_DIR "/path/to/project/parent/dir"
</Location>
```

*Note that the `SetEnv` directive requires that the `mod_env` module is enabled.*

An alternative to `SetEnv` is editing `TRAC_ENV` or `TRAC_ENV_PARENT_DIR` in `trac.cgi`:

```
os.environ['TRAC_ENV'] = "/path/to/projectenv"
```

```
os.environ['TRAC_ENV_PARENT_DIR'] = "/path/to/parent/dir"
```

If you are using the [?Apache suEXEC](#) feature please see [?ApacheSuexec](#).

On some systems, you *may* need to edit the shebang line in the `trac.cgi` file to point to your real Python installation path. On a Windows system you may need to configure Windows to know how to execute a `.cgi` file (Explorer -> Tools -> Folder Options -> File Types -> CGI).

## Python Egg Cache

The [egg-cache](#) can be configured using an `os.environ` statement in `trac.cgi`, as shown above. To do the same from the Apache configuration, use the `SetEnv` directive:

```
SetEnv PYTHON_EGG_CACHE /path/to/dir
```

Put this directive next to where you set the path to the [Trac environment](#), i.e. in the same `<Location>` block.

```
<Location /trac>
  SetEnv TRAC_ENV /path/to/projenv
  SetEnv PYTHON_EGG_CACHE /path/to/dir
</Location>
```

## Using WSGI

You can run a [?WSGI handler](#) [?under CGI](#). You can [write your own application function](#), or use the deployed `trac.wsgi`'s application.

## Mapping Static Resources

See [TracInstall#MappingStaticResources](#).

## Adding Authentication

See [TracInstall#ConfiguringAuthentication](#).

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See also: [TracInstall](#), [TracModWSGI](#), [TracFastCgi](#), [TracModPython](#)