

# Trac and mod\_python

Trac supports [?mod\\_python](#), which speeds up Trac's response times considerably and permits use of many Apache features not possible with [tracd/mod\\_proxy](#).

## Simple configuration

If you just installed mod\_python, you may have to add a line to load the module in the Apache configuration:

```
LoadModule python_module modules/mod_python.so
```

A simple setup of Trac on mod\_python looks like this:

```
<Location /projects/myproject>
  SetHandler mod_python
  PythonHandler trac.web.modpython_frontend
  PythonOption TracEnv /var/trac/myproject
  PythonOption TracUriRoot /projects/myproject
</Location>
```

Note that the option `TracUriRoot` may or may not be necessary in your setup. Try without first, and if the URLs produced by Trac look wrong or if Trac does not seem to recognize the URLs correctly, add the `TracUriRoot` option.

Configuring authentication works the same as for [CGI](#):

```
<Location "/projects/myproject/login">
  AuthType Basic
  AuthName "myproject"
  AuthUserFile /var/trac/myproject/.htaccess
  Require valid-user
</Location>
```

If the Trac installation isn't installed in your Python path, you'll have to tell Apache where to find the Trac mod\_python handler using the `PythonPath` directive:

```
<Location /projects/myproject>
  ...
  PythonPath "sys.path + ['/path/to/trac']"
  ...
</Location>
```

## Setting up multiple projects

The Trac mod\_python handler handler supports a configuration option similar to Subversion's `SvnParentPath`, called `TracEnvParentDir`:

```
<Location /projects>
  SetHandler mod_python
  PythonHandler trac.web.modpython_frontend
  PythonOption TracEnvParentDir /var/trac
  PythonOption TracUriRoot /projects
</Location>
```

When you request the `/projects` URL, you will get a listing of all subdirectories of the directory you set as `TracEnvParentDir`. Selecting any project in the list will bring you to the corresponding Trac environment.

If you don't want to have the subdirectory listing as your projects home page you can use a

```
<LocationMatch "/.+/">
```

This will instruct Apache to use `mod_python` for all locations different from root while having the possibility of placing a custom home page for root in your `DocumentRoot` folder.

You can also use the same authentication realm for all of the projects using a `<LocationMatch>` directive:

```
<LocationMatch "/[^/]+/login">
  AuthType Basic
  AuthName "Trac"
  AuthUserFile /var/trac/.htaccess
  Require valid-user
</LocationMatch>
```

## Virtual Host Configuration

Below is the sample configuration required to set up your trac as a virtual server (i.e. when you access it at the URLs like `http://trac.mycompany.com`):

```
<VirtualHost * >
  DocumentRoot /var/trac/myproject
  ServerName trac.mycompany.com
  <Directory />
    SetHandler mod_python
    PythonHandler trac.web.modpython_frontend
    PythonOption TracEnv /var/trac/myproject
    PythonOption TracUriRoot /
  </Directory>
  <Location /login>
    AuthType Basic
    AuthName "MyCompany Trac Server"
    AuthUserFile /var/trac/myproject/.htusers
    Require valid-user
  </Location>
</VirtualHost>
```

## Troubleshooting

### Form submission problems

If you're experiencing problems submitting some of the forms in Trac (a common problem is that you get redirected to the start page after submission), check whether your `DocumentRoot` contains a folder or file with the same path that you mapped the `mod_python` handler to. For some reason, `mod_python` gets confused when it is mapped to a location that also matches a static resource.

### Using `.htaccess`

Although it may seem trivial to rewrite the above configuration as a directory in your document root with a `.htaccess` file, this does not work. Apache will append a `/` to any Trac URLs, which interferes with its correct operation.

It may be possible to work around this with `mod_rewrite`, but I failed to get this working. In all, it is more hassle than it is worth. Stick to the provided instructions. :)

## Win32 Issues

If you run trac with mod\_python (3.1.3 or 3.1.4) on Windows, uploading attachments will **not** work. This is a known problem which we can't solve cleanly at the Trac level.

However, there is a workaround for this at the mod\_python level, which is to apply the following patch [?attachment:ticket:554:util\\_py.patch](#) to the (Lib/site-packages)/modpython/util.py file.

If you don't have the `patch` command, that file can be replaced with the [?fixed util.py](#) (fix which, although done prior to the 3.1.4 release, is *not* present in 3.1.4).

## OS X issues

When using mod\_python on OS X you will not be able to restart Apache using `apachectl restart`. This is apparently fixed in mod\_python 3.2, but there's also a patch available for earlier versions' [?here](#).

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See also [TracGuide](#), [TracInstall](#), [TracCgi](#), [TracFastCgi](#)