

TRAC

Installation & Setup

Introduction

“Trac is an enhanced wiki and issue tracking system for software development projects.

Trac uses a minimalistic approach to web-based software project management. Our mission; **to help developers write great software while staying out of the way**. Trac should impose as little as possible on a team’s established development process and policies.

All aspects of Trac have been designed with one single goal, to **simplify tracking and communication** of software issues, enhancements and monitoring overall progress. “ [1]

What is Trac

Trac is: “

- An integrated system for managing software projects
- An enhanced [wiki](#)
- A flexible web-based issue tracker
- An interface to the [Subversion](#) revision control system

At the core of Trac lies an **integrated wiki and issue/bug database**. Using wiki markup, all objects managed by Trac can directly link to other issues/bug reports, code changesets, documentation and files.

Around the core lies other modules, providing additional features and tools to make software development more streamlined and effective. Our goal is to help programmers focus on the important stuff: Developing software.“ [1]

What does Trac do

“Trac lets software project developers and users track, use and manage:

- software issues
- bug reports
- feature requests
- overall progress over time
- project tasks
- source code changes
- documentation / wiki text “ [1]

Requirements

- Linux Debian Sarge (for my test I used a server with hostname “sarge”)
- “subversion” package and user “svnadmin” with primary group “www-data” and secondary “svnadmin” and “umask 002” as I discribed in an other document.

Installation

With the user root:

- apt-get install libapache2-mod-python trac
- Activate the module mod_python with “a2enmod mod_python”
- Create the file “trac” (giving the ownership to svnadmin with “chown svnadm trac”) in /etc/apache2/sites-available

Alias /trac/ "/usr/share/trac/htdocs/"

```

<Directory "/usr/share/trac/htdocs">
    Options Indexes MultiViews
    AllowOverride None
    Order allow,deny
    Allow from all
</Directory>

<Location /trac_projects>
    SetHandler mod_python
# PythonHandler trac.web.modpython_frontend
    PythonHandler trac.ModPythonHandler
    PythonOption TracEnvParentDir /home/svnadmin/trac_projects
    PythonOption TracUriRoot /trac_projects
</Location>

<LocationMatch "[^/]+/login">
    AuthType Basic
    AuthName "Trac"
    AuthUserFile /home/svnadmin/etc/.htaccess
    Require valid-user
</LocationMatch>

```

- Activate the new site with “a2ensite trac”

With the user “svnadmin”:

- mkdir /home/svnadmin/etc & /home/svnadmin/trac_projects
- create a password file if it doesn't exist with “htpasswd2 -c /home/svnadmin/etc/.htaccess username”
- restart apache2 with “sudo /etc/init.d/apache2 restart”

Create a new Trac project

With the user “svnadmin” to create the project “pirellicom”:

- check that you have already created the subversion repository “pirellicom” under /home/svnadmin/svn_projects/pirellicom.
- cd /home/svnadmin/trac_projects
- umask 002 (if it wasn't already set)
- Create the project with “trac-admin pirellicom initenv”

```

svnadmin@sarge:~/trac_projects$ trac-admin pirellicom initenv
Creating a new Trac environment at /home/svnadmin/trac_projects/pirellicom
Trac will first ask a few questions about your environment
in order to initialize and prepare the project database.
Please enter the name of your project.
This name will be used in page titles and descriptions.

```

```

Project Name [My Project]> PirelliCom
Please specify the absolute path to the project Subversion repository.
Repository must be local, and trac-admin requires read+write
permission to initialize the Trac database.
Path to repository [/var/svn/test]> /home/svnadmin/svn_projects/pirellicom

```

Please enter location of Trac page templates.

Default is the location of the site-wide templates installed with Trac.

Templates directory [/usr/share/trac/templates]>

Creating and Initializing Project

...

- `chmod g+w pirellicom/db/trac.db`

Now the project can be browsed with the url "http://sarge/trac_projects/pirellicom"

Setup Permissions

The authentication (users and passwords) is managed by apache2 with htpasswd2

To setup permissions for "pirellicom" project, with the user "svnadmin":

```
cd /home/svnadmin/trac_projects/pirellicom
```

and then lunch:

```
trac-admin . permission list -- List permission rules
trac-admin . permission add <user> <action> [action] [...] -- Add a new permission rule
trac-admin . permission remove <user> <action> [action] [...] -- Remove permission rule
```

For instance we want to create a group developer and assign it to the user teo:

- `trac-admin . permission add developer WIKI_ADMIN`
- `trac-admin . permission add developer REPORT_ADMIN`
- `trac-admin . permission add developer TICKET_MODIFY`
- `trac-admin . permission add teo developer`

Setup Milestones

To setup milestones for "pirellicom" project, with the user "svnadmin":

```
cd /home/svnadmin/trac_projects/pirellicom
```

and then lunch:

```
trac-admin . milestone list -- Show milestones
trac-admin . milestone add <name> [time] -- Add milestone
trac-admin . milestone rename <name> <newname> -- Rename milestone
trac-admin . milestone time <name> <time> -- Set milestone date (Format: "Jun 3, 2003")
trac-admin . milestone remove <name> -- Remove milestone
```

For instance:

- `trac-admin . milestone remove "milestone1"`
- `trac-admin . milestone remove "milestone2"`
- `trac-admin . milestone remove "milestone3"`
- `trac-admin . milestone remove "milestone4"`
- `trac-admin . milestone add "0.8"`
- `trac-admin . milestone add "0.9"`
- `trac-admin . milestone add "1.0"`

Setup Components

To setup components for “pirellicom” project, with he user “svnadmin”:

```
cd /home/svnadmin/trac_projects/pirellicom
```

and lunch:

```
trac-admin . component list           -- Show available components
trac-admin . component add <name> <owner> -- Add a new component
trac-admin . component rename <name> <newname> -- Rename a component
trac-admin . component remove <name>      -- Remove/uninstall component
trac-admin . component chown <name> <owner> -- Change component ownership
```

Changing permissions

References

[1] <http://www.edgewall.com/trac/>