

Installation and Configuration of Trac

SANOG 10, New Delhi, India

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These instructions are based upon a guide created by Luis Soares, but with considerable changes. The original guides is available here:

<http://www.mdlabs.est.ips.pt/majestic13/TracFeisty>

This installation allows for the following:

- Multiple trac projects on a single box.
- Authentication via trac and not the web server.
- Administration of trac users via a web interface.
- Write-protection of your trac project from anonymous users (i.e. avoid spammer defacing of your site).
- Ability to add-on Subversion version control to future trac projects.
- Use of the Aztec planning calendar plug-in.

Let's now do the installation of the trac system. For trac to work we'll be needing python and a number of other packages. Then we'll have to create a trac environment for each repository we want trac to serve. Your instructor will describe what you are doing in more detail in class. This guide is available as text at:

<http://noc/workshop/day3/trac/install-trac.txt>

```
$ sudo apt-get install trac libapache2-svn libapache2-mod-python  
libapache2-mod-python-doc python-setuptools  
$ sudo mkdir /var/lib/trac  
$ sudo chown -R www-data:www-data /var/lib/trac  
$ sudo ln -s /var/lib/trac/ /trac
```

Now to add your trac site as a virtual site in Apache:

```
$ sudo vi /etc/apache2/sites-available/trac
```

In this file you will add the code on the next page:

```
<Location /trac>
  SetHandler mod_python
  PythonHandler trac.web.modpython_frontend
  PythonOption TracEnvParentDir /var/lib/trac
  PythonOption TracEnv /trac/sanog
  PythonOption TracUriRoot /trac/sanog
  SetEnv PYTHON_EGG_CACHE /trac/sanog/python-eggs
</Location>
```

Now we enable the new virtual site:

```
$ sudo a2ensite trac
$ sudo /etc/init.d/apache2 reload
```

Next, we must initialize the trac project using the trac-admin facility. You will be asked several questions with lots of explanatory text. Here are the answers for each prompt you will see. If it says “[ENTER]”, then just press ENTER and continue:

```
$ sudo trac-admin /trac/sanog initenv

Project Name [My Project]> WHATEVER YOU WANT
Database connection string [sqlite:db/trac.db]> [ENTER]
Repository type [svn]> [ENTER]
Path to repository [/path/to/repos]> [ENTER]
Templates directory [/usr/share/trac/templates]> [ENTER]
```

Now you will see quite a bit of text on your screen detailing items as your new trac project is created. Once this is done we have several more things to do:

```
$ sudo chown -R www-data:www-data /var/lib/trac
$ sudo apache2ctl restart
```

Now to install some customization features for trac in the form of trac plug-ins:

```
$ sudo easy_install http://svn.edgewall.com/repos/trac/sandbox/webadmin
$ sudo easy_install http://trac-hacks.org/svn/accountmanagerplugin/0.10
$ sudo easy_install http://trac-hacks.org/svn/calendarplugin
```

Now we must edit the main trac configuration file with a number of items. For this we recommend that you view the file in a web browser at <http://noc/workshop/day4/trac/trac.ini> while completing this section.

trac.ini

Below are the items you need to *add or change* in your default trac.ini file. To edit this file do:

```
$ sudo vi /trac/sanog/conf/trac.ini
```

The first 2 items (account-manager and components) cango at the top of the file starting on line 3:

```
[account-manager]
password_file = /trac/sanog/.htpasswd
password_format = htpasswd
password_store = HtpasswdStore

[components]
acct_mgr.* = enabled
acct_mgr.admin.accountmanageradminpage = enabled
acct_mgr.api.accountmanager = enabled
acct_mgr.db.sessionstore = enabled
acct_mgr.htfile.htpasswdstore = enabled
acct_mgr.web_ui.accountmodule = enabled
acct_mgr.web_ui.loginmodule = enabled
acct_mgr.web_ui.registrationmodule = enabled
trac.web.auth.loginmodule = disabled
webadmin.* = enabled
azcalendar.* = enabled
```

The following three sections (header_logo, notification, project) replace what is in your trac.ini file:

```
[header_logo]
alt = SANOG 10 Net Mgmnt Workshop
height = 50
link = http://www.sanog.org/sanog10
src = site/apnic-sanog10.jpg
width = 200
```

```
[notification]
always_notify_owner = true
always_notify_reporter = false
always_notify_updater = true
mime_encoding = base64
smtp_always_bcc = admin@localhost
smtp_always_cc =
smtp_default_domain =
smtp_enabled = true
smtp_from = sanog10@localhost
smtp_password =
smtp_port = 25
smtp_replyto = sanog10@localhost
smtp_server = localhost
smtp_subject_prefix = __default__
smtp_user =
use_public_cc = false
use_short_addr = false
use_tls = false
```

```
[project]
descr = SANOG 10 Network Management Workshop
footer = SANOG 10, New Delhi, India<br><a
href="mailto:admin@localhost">admin@localhost</a>
icon = common/favicon.ico
name = SANOG 10, India
url = http://www.sanog.org/sanog10/
```

Note: Some items are not strictly necessary, and a couple will not work as we are currently configured, but won't cause problems either. You can find the `apnic-sanog10.jpg` file in <http://noc/workshop/day4/trac/>. This goes in `/trac/sanog/htdocs` on your machine.

Once all this is done you have just a few more steps. First we must configure the trac user environment. We'll set up a user called "sanog" that is an *authenticated* user, and a user called "admin" that will be a *trac-admin* user. Finally, all other users who view the project will be *anonymous* users. We will restrict their view of the project to be read-only. To do all this do:

```
$ sudo trac-admin /trac/sanog permission remove anonymous
CAL_ADMIN CAL_EDIT CONFIG_VIEW MILESTONE_VIEW REPORT_SQL_VIEW
REPORT_VIEW ROADMAP_VIEW SEARCH_VIEW TICKET_CREATE TICKET_MODIFY
WIKI_CREATE WIKI_MODIFY WIKI_DELETE

$ sudo trac-admin /trac/sanog permission add authenticated
CAL_ADMIN CAL_EDIT MILESTONE_MODIFY MILESTONE_VIEW REPORT_ADMIN
REPORT_CREATE REPORT_MODIFY TICKET_APPEND TICKET_CREATE
TICKET_MODIFY TICKET_VIEW WIKI_CREATE WIKI_MODIFY WIKI_VIEW

$ sudo trac-admin /trac/sanog permission add sanog authenticated

$ sudo trac-admin /trac/sanog permission add admin TRAC_ADMIN
```

Now we need to be sure that Apache has access to all the trac files using the user/group of `www-data`:

```
$ sudo chown -R www-data:www-data /trac/*
$ sudo apache2ctl restart
```

Last, but not least, you must actually create the users "admin" and "sanog" and give them passwords:

```
$ sudo htpasswd -c /trac/sanog/.htpasswd admin [use any password]
$ sudo htpasswd /trac/sanog/.htpasswd sanog [use workshop password]
$ sudo trac-admin /trac/sanog upgrade
```

At this point you are done setting up trac. You can now look at the result of your work by going to:

<http://localhost/trac/sanog>

By default you are seeing your trac project as an *anonymous* user. You can log in as "sanog" to see how things look as an *authenticated* user and then as "admin" to see things as a *trac-admin* user.