Drupal installation notes

Preliminary steps
• Disable SELINUX (security enabled Linux which is default for Fedora). Personally, I never used it as we code in Ubuntu but we do know that it requires a specific level of expertise in order to successfully install pretty much anything. If you are not comfortable with SELINUX, I recommend you switch it off.
• In order to install Drupal, you have to unpack the tar archive into your Apache web server (or equivalent) Document Root or set it as your document root.
• You can name the main directory however you wish (e.g. Drupal-6.xx is the default, where xx is the minor version number). Let's assume you call it drupal. We also assume that your apache directory is called /var/www but this varies with each operating system
• You will also benefit if your Apache has mod_rewrite installed/enabled. This will allow the conversion of the ?q=page URLs to /page, which is more user friendly.
• FInd out the name of your apache user (e.g. apache or www-data)

Apache configuration

For example, to set the Drupal directory inside the document root (/var/www/drupal), your apache configuration file will look similar to this:

```
<VirtualHost *:80>
        ServerAdmin webmaster@localhost
        ServerName localhost
        DocumentRoot /var/www/
        Alias /gbrowse "/var/www/gbrowse/"
        <Directory /var/www>
                Options Indexes FollowSymLinks MultiViews
                AllowOverride None
                Order allow,deny
                allow from all
        </Directory>
        <Directory /var/www/drupal>
                Options Indexes FollowSymLinks MultiViews
                AllowOverride None
                Order allow,deny
                allow from all
                RewriteEngine on
                RewriteBase /drupal
                RewriteCond %{REQUEST_FILENAME} !-f
                RewriteCond %{REQUEST_FILENAME} !-d
                RewriteRule ^(.*)$ index.php?q=$1 [L,QSA]
        </Directory>
        <Directory "/var/www/gbrowse">
            AllowOverride None
            Order allow,deny
            allow from all
        </Directory>

        ScriptAlias /cgi-bin/ /usr/lib/cgi-bin/
        <Directory "/usr/lib/cgi-bin">
                AllowOverride None
                Options +ExecCGI -MultiViews +SymLinksIfOwnerMatch
                Order allow,deny
                Allow from all
        </Directory>
```

Where my cgi-bin is really in /usr/lib/cgi-bin/, my Document root is /var/www and I have gbrowse installed in /var/www/gbrowse (you can have it anywhere, not the Alias /gbrowse line).

If the drupal directory is your DocumentRoot then it will look like this:
        DocumentRoot /var/www/drupal

```
<Directory /var/www/drupal>
      Options Indexes FollowSymLinks MultiViews
      AllowOverride None
      Order allow,deny
      allow from all
      RewriteEngine on
      RewriteBase /
      RewriteCond %{REQUEST_FILENAME} !-f
      RewriteCond %{REQUEST_FILENAME} !-d
      RewriteRule ^(.*)$ index.php?q=$1 [L,QSA]
</Directory>
```

Note the differences in RewriteBase

Restart the apache server (apache2ctl or apachectl restart)

Drupal configuration

You will need the following
• A postgres server
• an unpriviliged postgres user, created via the createuser <name>. They should have no priviliges. For this tutorial, we will call her www-db
• a postgres database,say you call it drupal. It is owned by www-db (createdb drupal -O www-db)
• go to the drupal site (localhost/drupal or localhost/) and follow the instruction on how to install the database. Ensure you've selected the postgres engine. You will need to cp a file (in /var/www/drupal/site/default/) and edit its permissions so that they are writable by the apache user. You will also need to create the directory sites/default/files and make it writable by the apache user
• continue with the online instructions. Once the database is installed, you must remove the permissions of the settings.php file so that it only writable by the root user but readable by all. The files/ directory must remain writable by the apache user. Ensure this directory exists and is NOT writable by the apache user /var/www/drupal/site/all/modules/
• You've installed Drupal! Now install the modules by unpacking them into the /var/www/drupal/site/all/modules/ directory so that genes4all.module is /var/www/drupal/site/all/modules/genes4all/genes4all.module etc. Read the README files to get any dependencies (sorry, but you have to fetch them manually, the Drupal CVS server does not allow us to upload third party utilities, even if their licenses allow it...)
• Go to http://localhost/drupal/admin/build/modules/ and you will see a list of modules. Select the relevant checkboxes (you will also need any dependencies modules) and save. That's it, you've installed the modules. Now you need to configure them as per the README files.