

This document describes procedure to install Brihaspati General Accounting System on any Linux machine.

If you install Brihaspati General Accounting System from repository use this installation procedure

A - Installing Brihaspati General Accounting System

Configure Apache and public_html on Ubuntu till 12.04

1. First install php, apache, mysql, svn

```
#sudo apt-get install php mysql-server mysql php-mysql apache2 subversion
```

2. Create a public_html directory in your home directory

```
$ mkdir $HOME/public_html
```

```
$ cd public_html/
```

```
$ svn co http://202.141.40.215/repos/brihaspati/trunk/BGAS
```

3. To enable the mod_userdir we run these commands

```
$ sudo a2enmod userdir
```

```
$ /etc/init.d/apache2 force-reload or sudo service apache2 restart
```

4. Now edit apache.conf pointing to your public_html

```
$ gksudo gedit /etc/apache2/apache2.conf
```

and we add this at the end of the file

```
UserDir /home/*/public_html
```

save and close

5. Apply the proper permissions:

```
# chmod 711 ~<username>
```

```
# chmod 755 -R ~<username>/public_html/
```

6. Now we will configure Apache module userdir by editing userdir.conf file like this:

```
$ gksudo gedit /etc/apache2/mods-enabled/userdir.conf
```

Next you should replace the contents of that configuration file with the following code:

```
<IfModule mod_userdir.c>
```

```
UserDir public_html
```

```
UserDir disabled root
```

```
<Directory /home/*/public_html>
```

```
AllowOverride All
```

```
Options MultiViews Indexes SymLinksIfOwnerMatch
```

```
<Limit GET POST OPTIONS>
Order allow,deny
Allow from all
</Limit>
<LimitExcept GET POST OPTIONS>
Order deny,allow
Deny from all
</LimitExcept>
</Directory>

</IfModule>
```

7. Create database “ login and bgas ” in mysql and grant the permission for that user.
\$mysql -u root

```
mysql>create database login;
mysql>grant all on login.* to dbusername@localhost identified by 'dbpassword';
mysql>grant all on login.* to dbusername@127.0.0.1 identified by 'dbpassword';
```

```
mysql>create database bgas;
mysql>grant all on bgas.* to dbusername@localhost identified by 'dbpassword';
mysql>grant all on bgas.* to dbusername@127.0.0.1 identified by 'dbpassword';
```

8. Change the username and password for access to 'login' database in
\$ vi BGAS/system/application/config/database.php

9. Now we restart Apache
\$ sudo /etc/init.d/apache restart or reboot the PC

10. Browse to <http://localhost/~yourname/> and you will see your stuff.

Configure Apache and public_html on Ubuntu till 13.10

1. First install php, apache, mysql svn
#sudo apt-get install apache2 subversion
#sudo apt-get install mysql-server mysql-common mysql-client
#sudo apt-get install php5-common php5-gd php5-mysql apache2-mpm-prefork libapache2-mod-php5
php5 php5-cli php5-json

2. Create a public_html directory in your home directory
\$ mkdir \$HOME/public_html
\$ cd public_html/
\$ svn co <http://202.141.40.215/repos/brihaspati/trunk/BGAS>

3. To enable the mod_userdir we run these commands
\$ sudo a2enmod userdir

Last modified on 03 September 2015, 15:45 hrs IST

\$ /etc/init.d/apache2 force-reload or sudo service apache2 restart

4. Now edit apache.conf pointing to your public_html

\$ sudo gedit /etc/apache2/apache2.conf

and we add this at the end of the file

UserDir /home/*/public_html

save and close

5. Apply the proper permissions:

chmod 711 ~<username>

chmod 755 -R ~<username>/public_html/

6. Now we will configure Apache module userdir by editing userdir.conf file like this:

\$ sudo gedit /etc/apache2/mods-enabled/userdir.conf

Next you should replace the contents of that configuration file with the following code:

<IfModule mod_userdir.c>

UserDir public_html

UserDir disabled root

<Directory /home/*/public_html>

AllowOverride All

Options MultiViews Indexes SymLinksIfOwnerMatch

<Limit GET POST OPTIONS>

Order allow,deny

Allow from all

</Limit>

<LimitExcept GET POST OPTIONS>

Order deny,allow

Deny from all

</LimitExcept>

</Directory>

</IfModule>

7. \$sudo gedit /etc/apache2/mods-available/php5.conf

comment out a line *php_admin_value engine Off*

Before

...

<IfModule mod_userdir.c>

<Directory /home/*/public_html>

php_admin_value engine Off

</Directory>

</IfModule>

After

...

Last modified on 03 September 2015, 15:45 hrs IST

```
<IfModule mod_userdir.c>
<Directory /home/*/public_html>
# php_admin_value engine Off
</Directory>
</IfModule>
```

\$sudo /etc/init.d/apache2 reload

:wq

8. Edit your php.ini config file (for apache):

sudo vi /etc/php5/apache2/php.ini

and **change:**

short_open_tag = Off

to:

short_open_tag = On

9. Create database “ login and bgas ” in mysql and grant the permission for that user.

\$mysql -u root

mysql>create database login;

mysql>grant all on login.* to [dbusername@localhost](#) identified by 'dbpassword';

mysql>grant all on login.* to [dbusername@127.0.0.1](#) identified by 'dbpassword';

mysql>create database bgas;

mysql>grant all on bgas.* to [dbusername@localhost](#) identified by 'dbpassword';

mysql>grant all on bgas.* to [dbusername@127.0.0.1](#) identified by 'dbpassword';

10. Change the username and password for access to 'login' database in

\$ vi BGAS/system/application/config/database.php

11. Now we restart Apache

\$ sudo /etc/init.d/apache restart or sudo service apache2 restart or reboot the PC

12. Browse to <http://localhost/~yourname/> and you will see your stuff.

Configure Apache and public_html on Ubuntu 14.04

1. First install php, apache, mysql svn

#sudo apt-get install apache2 subversion

#sudo apt-get install mysql-server mysql-common mysql-client

#sudo apt-get install php5-common php5-gd php5-mysql apache2-mpm-prefork libapache2-mod-php5
php5 php5-cli php5-json

2. Create a public_html directory in your home directory

\$ mkdir \$HOME/public_html

\$ cd public_html/

Last modified on 03 September 2015, 15:45 hrs IST

\$ svn co <http://202.141.40.215/repos/brihaspati/trunk/BGAS>

3. To enable the mod_userdir we run these commands

\$ sudo a2enmod userdir

\$ /etc/init.d/apache2 force-reload or sudo service apache2 restart

4. Now edit apache.conf pointing to your public_html

\$ sudo gedit /etc/apache2/apache2.conf

and we add this at the end of the file

UserDir /home/*/public_html

save and close

5. Apply the proper permissions:

chmod 711 ~<username>

chmod 755 -R ~<username>/public_html/

6. Now we will configure Apache module userdir by editing userdir.conf file like this:

\$ sudo gedit /etc/apache2/mods-enabled/userdir.conf

Next you should replace the contents of that configuration file with the following code:

```
<IfModule mod_userdir.c>
    UserDir public_html
    UserDir disabled root

    <Directory /home/*/public_html>
        AllowOverride FileInfo AuthConfig Limit Indexes
        Options MultiViews Indexes SymLinksIfOwnerMatch IncludesNoExec
        <Limit GET POST OPTIONS>
            Require all granted
        </Limit>
        <LimitExcept GET POST OPTIONS>
            Require all denied
        </LimitExcept>
    </Directory>
</IfModule>
```

7. \$sudo gedit /etc/apache2/mods-available/php5.conf

comment out a line *php_admin_value engine Off*

Before

...

```
<IfModule mod_userdir.c>
<Directory /home/*/public_html>
php_admin_value engine Off
```

Last modified on 03 September 2015, 15:45 hrs IST

```
</Directory>
</IfModule>
```

After

...

```
<IfModule mod_userdir.c>
<Directory /home/*/public_html>
# php_admin_value engine Off
</Directory>
</IfModule>
```

```
$sudo /etc/init.d/apache2 reload
:wq
```

8. Edit your php.ini config file (for apache):

```
sudo vi /etc/php5/apache2/php.ini
```

and **change:**

short_open_tag = Off

to:

short_open_tag = On

9. Create database “ login and bgas ” in mysql and grant the permission for that user.

```
$mysql -u root
```

```
mysql>create database login;
```

```
mysql>grant all on login.* to dbusername@localhost identified by 'dbpassword';
```

```
mysql>grant all on login.* to dbusername@127.0.0.1 identified by 'dbpassword';
```

```
mysql>create database bgas;
```

```
mysql>grant all on bgas.* to dbusername@localhost identified by 'dbpassword';
```

```
mysql>grant all on bgas.* to dbusername@127.0.0.1 identified by 'dbpassword';
```

10. Change the username and password for access to 'login' database in

```
$ vi BGAS/system/application/config/database.php
```

11. Now we restart Apache

```
$ sudo /etc/init.d/apache restart or sudo service apache2 restart or reboot the PC
```

12. Browse to <http://localhost/~yourname/> and you will see your stuff.

Enabling apache UserDir (public_html) with and without SELinux enabled on Fedora

1. First install php, apache, mysql, svn

```
#yum install php mysql-server mysql php-mysql httpd subversion
```

Last modified on 03 September 2015, 15:45 hrs IST

2. Create a public_html directory in your home directory
\$ mkdir \$HOME/public_html
\$ cd public_html/
\$ svn co http://202.141.40.215/repos/brihaspati/trunk/BGAS

3. Edit the /etc/httpd/conf/httpd.conf file.
Change the 'UserDir disabled' line to 'UserDir enabled <username>'.
Uncomment the 'UserDir public_html' line.
Also uncomment the whole '<Directory /home/*/public_html>' section until the '</Directory>'.

4. Apply the proper permissions:
chmod 711 ~<username>
chmod 755 -R ~<username>/public_html/

5. Create database “ login and bgas ” in mysql and grant the permission for that user.
\$mysql -u root

```
mysql>create database login;  
mysql>grant all on login.* to dbusername@localhost identified by 'dbpassword';  
mysql>grant all on login.* to dbusername@127.0.0.1 identified by 'dbpassword';
```

```
mysql>create database bgas;  
mysql>grant all on bgas.* to dbusername@localhost identified by 'dbpassword';  
mysql>grant all on bgas.* to dbusername@127.0.0.1 identified by 'dbpassword';
```

6. Run the following commands so SELinux wouldn't bother you:

If you want to disable SELINUX then you follow these steps-
#vi /etc/sysconfig/selinux
and set the SELINUX to disabled as

```
# This file controls the state of SELinux on the system.  
# SELINUX= can take one of these three values:  
#     enforcing - SELinux security policy is enforced.  
#     permissive - SELinux prints warnings instead of enforcing.  
#     disabled - SELinux is fully disabled.  
SELINUX=disabled  
# SELINUXTYPE= type of policy in use. Possible values are:  
#     targeted - Only targeted network daemons are protected.  
#     strict - Full SELinux protection.  
SELINUXTYPE=targeted
```

Now reboot the system

If you work with SELINUX enabled the you follow these steps

```
# setsebool httpd_enable_homedirs true  
or
```

Last modified on 03 September 2015, 15:45 hrs IST

```
# setsebool -P httpd_enable_homedirs true
or
# setsebool -P httpd_enable_homedirs on
or
# setsebool -P httpd_read_user_content 1
# setsebool -P httpd_enable_homedirs 1
```

```
If u are using /var/www/html/ as a app home dir
# chmod 755 /var/www/html/
# chown -R apache.apache /var/www/html/
# chcon -R -t httpd_sys_content_t /var/www/html/
```

```
7. Set the selinux type label for public_html
# chcon -t httpd_sys_content_t public_html
# chcon -t httpd_user_content_t public_html
```

8. Change the username and password for access to 'login' database in
\$ vi BGAS/system/application/config/database.php

9. Service httpd restart or reboot the PC

10. Browse to <http://localhost/~yourname/> and you will see your stuff.

Installation of (Brihaspati General Accounting System) BGAS on Windows (WAMP)

1. First install wamp and tortoise svn

2. Go to c:\wamp\www
right click and select svn checkout
put the url of repository (<http://202.141.40.215/repos/brihaspati/trunk/BGAS>) and press ok

3. open phpmyadmin
Create login and bgas database in mysql and grant the permissions with local host and 127.0.0.1

4. Go to c:\wamp\www\BGAS\system\application\config open database.php file and change the user name and password

5. put wamp server online

6. Go to inside BGAS and open .htaccess file and remove the content.

7. restart wamp server

8. Browse to <http://localhost/BGAS> and you will see your stuff.

Last modified on 03 September 2015, 15:45 hrs IST

Problem-

1. If php not working given the rewrite engine problem

Sol:

Run the command given below
sudo a2enmod rewrite
to enable it. Restart apache using
sudo service apache2 restart

2. If php not working given the blank page

Sol:

Open the /etc/apache2/mods-available/php5.conf file and find the code
<Directory /home/*/public_html>
 php_admin_value engine Off
</Directory>
either comment these three line or Off replaced by On
Restart apache using
sudo service apache2 restart

3. A PHP Error was encountered

Severity: Warning

Message: mktime(): It is not safe to rely on the system's timezone settings. You are *required* to use the date.timezone setting or the date_default_timezone_set() function. In case you used any of those methods and you are still getting this warning, you most likely misspelled the timezone identifier. We selected 'Asia/Calcutta' for 'IST/5.0/no DST' instead

Filename: helpers/date_helper.php

Line Number: 487

Sol:

Open the php.ini (/etc/php.ini) file and find the string "date.timezone" if exist then set as
date.timezone = "Asia/Kolkata"
if not then write below line under module section in date block
date.timezone = "Asia/Kolkata"

4. If php encryption is not working and given blank page or message that mCrypt is required

Sol:

sudo apt-get install php5-mcrypt

sudo ln -s /etc/php5/conf.d/mcrypt.ini /etc/php5/mods-available/

Last modified on 03 September 2015, 15:45 hrs IST

```
if ubuntu 14.04 then
sudo ln -s /etc/php5/apache2/conf.d/mcrypt.ini /etc/php5/mods-available/
sudo php5enmod mcrypt
Restart apache using
# sudo service apache2 restart
```

5. The problem is on PHP pages it seems like there is no PHP and it's all html because lots of PHP lines are printed in textbox's like : <? echo \$row['details']; ?>

Sol:

Edit your php.ini config file (for apache):

```
sudo vi /etc/php5/apache2/php.ini
```

and **change:**

short_open_tag = Off

to:

short_open_tag = On

6. If u can access BGAS from browser and it gives the blank page and error in apache error log is [authz_core:error] AH01630: client denied by server configuration:

Sol:

This error comes if your apache version is 2.4+ (If you have an Alias directive or a symlink that goes outside the main DocumentRoot you need to allow access to there.)

```
sudo gedit /etc/apache2/mods-enabled/userdir.conf
```

Next you should replace these two line from configuration file

Order allow,deny

Allow from all

with

Options All

Require all granted

7. If php working and given the blank page

Sol:

Check the login database and database connectivity. Check all the tables are exist in login database. If these things are correct then check php-mysql are installed or not. If not then install it.

8. If u can access BGAS from browser and it gives the error Forbidden

You don't have permission to access /~brihaspati/BGAS on this server.

Sol.

This problem occurs when permissions are set incorrectly for either the .htaccess file or the public_html directory:

Last modified on 03 September 2015, 15:45 hrs IST

- The file permissions for the .htaccess file should be set to **644** (read and write permissions for the user, and read permissions for the group and world).
- The permissions for the public_html directory should be set to **755** (read, write, and execute permissions for the user, and read and execute permissions for the group and world). When the “403 Forbidden” error occurs, this often indicates that the permissions for the public_html directory are set incorrectly to **644**.

To set the correct file permissions for the .htaccess file, type the following command at the command line:

```
chmod 644 ~/public_html/.htaccess
```

To set the correct file permissions for the public_html directory, type the following command at the command line:

```
chmod 755 ~/public_html
```

Or

ensure the folder permission is 755 while file is 644. For short cut, you can run the command as below

```
find . -type f -print0 | xargs -0 chmod 644; find . -type d -print0 | xargs -0 chmod 755
```

B – Start using Brihaspati General Accounting System

1. Logging as admin (initial user name and password is admin)
2. Change the password
3. Set the MySQL administrator password for creation of database automatically. For this Go to administrator ->MySQL Admin Setting -> Write the administrator user name and password (if exist)
4. Go To administrator and create account for your institute. For this Go to administrator ->Create Account-> Fill all information
5. Create “uploads/logo” dir under BGAS and set the permission to webserver for write
6. Go to setting – Email Setting -set the mail related stuff
7. Go to Accounts – Check and verify account heads, if not fulfill requirement then add group and ledger account heads
8. Go to Budgets – Add the budget and allocate the amount.
9. Now start making entry.
10. For creating user account – go to administrator – manage user
11. For creating new account – go to administrator – manage account
12. Before carry forward the account – go to setting -> account setting -set the type of chart of account and ledger name where profit and loss amount is transferred.

C - Updating Brihaspati General Accounting System

1. Go to BGAS dir
2. type
\$ svn update (Machine should be on internet)
3. Look the update/new files list, If any sql file is coming then execute the sql file to update the database and restart webserver.