Ubuntu & UGCC Install Guide
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This guide was written based on Ubuntu 16.04 LTS x64 server using a minimal install.   The procedure should be very similar for other versions and editions of Ubuntu.   These steps should work with Debian 9.0 and newer as well.   Our previous install guides used the mono packages included with Ubuntu; but we will now use the mono repo to get the latest version of mono and ensure we get updated mono packages.

We will install everything into /ugcc.   You can choose whether or not to use a different path to install to; make you substitutions where necessary.   We'll also be setting up the panel to use a SQLite Database.   If you'll be using MySQL we'll make notes in the guide when things will need to be done differently for MySQL.   Also keep in mind that the user the panel runs as will need rwx permissions to your game server install paths.

Commands are in italics.

Let's install mono, and other things required by the panel.

sudo -i

apt-get install p7zip-full p7zip-rar zip

If you are running a 64 bit flavor of Ubuntu—you may need to install the 32blit libraries so that 32 bit binaries can run.   *apt-get install lib32gcc1* will accomplish this.

Setup mono's repository, for the latest info see:
http://www.mono-project.com/docs/getting-started/install/linux/#debian-ubuntu-and-derivatives

sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv-keys 3FA7E0328081BFF6A14DA29AA6A19B38D3D831EF

echo "deb http://download.mono-project.com/repo/debian wheezy main" | sudo tee /etc/apt/sources.list.d/mono-xamarin.list

echo "deb http://download.mono-project.com/repo/debian wheezy-apache24-compat main" | sudo tee -a /etc/apt/sources.list.d/mono-xamarin.list

sudo apt-get update

sudo apt-get install mono-complete ca-certificates-mono mono-xsp4

Mono should now be installed, let's check the version.   It should be 4.8 or greater (guide was written with version 4.8.0).

mono -V

ln -s /sbin/ifconfig /bin/ifconfig

<u>Install, Configure, and Test Panel</u>

mkdir -p /ugcc/www

cd /ugcc

mkdir mon logs deploy servers

cd deploy

wget http://redirect.brainless.us/ugcc/<latest version #>/Deploy.7z (replace <latest version #> with the latest version number of UGCC, ie 1.891)

7z x Deploy.7z

cd Deploy/WWWPanel-Linux-Mono4

*cp -r * /ugcc/www*

cd ../Monitor/Linux-Mono4

*cp -r * /ugcc/mon*

cd ../../DB

Here'll we'll be copying the ugcc.db3 file to the logs folder, but if you're using MySQL, use the ugcc.sql file here to import into your MySQL server.

cp ugcc.db3 /ugcc/logs

cd ../Configs/Linux-Mono4

cp Web.config /ugcc/www

cp ugccmon.cfg /ugcc/mon

We should be done copying files; now time to edit configuration files.

cd /ugcc/www

The configuration file for the web panel uses settings similar to "<add key="log' value="/ugcc/logs" />".   To change the setting edit the value in the quotes after value=.   If you are placing everything in the /ugcc folder you do not need to edit the configs.

nano Web.config

Set the log setting to where you placed the logs folder (i.e. /ugcc/logs)

Set the dbtype setting to sqlite (or mysql if using mysql; if using mysql you'll also need to set the sqlsrvr, user, password, and dbname settings)

Set the sqlitelocation setting to the logs folder (i.e. /ugcc/logs)

Save and close (control+x).   Now let's try to run and access the panel.   Make sure you are in the www folder when running this command (/ugcc/www).

xsp4

You should see some output, open a browser and browse to http://ip:port/Check.aspx (usually port 9000; Check.aspx is case sensitive).   If all the values are true, you may login to the panel so that database can be updated.   If one or more values are false attempt to correct them. Feel free to contact us on the forums if you need assistance.

Click the Login menu link to go to the login screen and login with:
User: admin
Password: admin

Once logged in please <u>change the default</u> admin password!

We are done with the web panel now; on to configuring the monitor.   Press enter to exit out of xsp4.

<u>Monitor Setup (Requires a license to run)</u>
If you don't have a license, the monitor will not run!

cd /ugcc/mon

(Again you don't need to modify the ugcmon.cfg file if you are installing everything in /ugcc.)

nano ugccmon.cfg

Set the **[DBEngine]** setting to sqlite (or mysql if using mysql).

Set the **[DBConfig]** setting to Data Source=/ugcc/logs/ugcc.db3 (or use the example MySQL string (see the setting's comment) and customize it for your environment).

Set the **[LogConfig]** and **[License]** settings to /ugcc/logs.

You can customize the rest of the settings to your liking.   Pay attention to the notes of each setting.   Save and close.   Next make your start and stop scripts executable:

chmod +x st.sh*

To start the monitor type

./start.sh

View the output of the monitor's log file; you'll probably see a license error; if any other type of error; please correct it before moving on.   To stop the monitor in case you have a license, simply run ./stop.sh.

tail /ugcc/logs/ugccmon.log

We recommend setting up the monitor as a service so that it starts on boot and runs as the same user as the web panel.   See the systemd configuration later in the document.

Setup Monitor to Start at Boot with Systemd

Setup the monitor to start on boot and to restart if it crashes.

Copy the ugccmon.service file in the Tools/Linux/Systemd/Ubuntu16.04 folder of the deploy package to /etc/systemd/system folder.   Edit the paths of the ExecStart line (if necessary), making sure the –d: setting is the path to where the monitor was installed.   If you've followed this guide you shouldn't have to edit the paths.   Set the script to be executable:

cd /etc/systemd/system
chmod +x ugccmon.service
systemctl daemon-reload
systemctl enable ugccmon

You can test that it works by starting it then checking the status:

systemctl start ugccmon
systemctl status ugccmon

Now you can control it with the service command.

systemctl start ugccmon
systemctl stop ugccmon

Setup Apache with mono auto hosting

We recommend hosting the panel with apache, here we'll setup apache and the panel to work with apache.

apt-get install apache2 libapache2-mod-mono mono-apache-server mono-apache-server4

cd /var/www/html

rm index.html

cp -r /ugcc/www/ .*

cd ..

chown -R www-data html

chmod -R g+rw html

Enable mono auto hosting (might already be enabled so ignore any message if it's already enabled).

/usr/sbin/a2enmod mod_mono_auto

Enable apache in systemd to start at boot

Systemctl enable apache2

Systemctl stop apache2

Systemctl start apache2

Fix some file permissions.   My version of Ubuntu runs apache as www-data, so that user will need read/write access to the logs/license and any game server folders.

cd /ugcc

chgrp -R www-data logs

chmod -R g+w logs

Set permissions on game server installs.   We'll pretend they're installed in /servers, replace with the path to your game server(s).

cd /

chgrp -R www-data servers

chmod -R g+rw servers

This sets the acl so all new files get the correct permissions.   You can replace www-data with any additional users whom need access.

setfacl -Rm www-data:rwX /ugcc

setfacl -Rdm www-data:rwX /ugcc

Now try to access the Check.aspx page of the panel to make sure everything is working.   You may continue to use the free edition of the panel, but to fully evaluate all the features you may want to purchase a license or request a demo license from our forums.

Let's link /ugcc/www to /var/www.   Helps to find it in the future and helps makes things less complicated when it's time to upgrade.

cd /ugcc

rm -rf www

ln -s /var/www/html www

Set Monitor to Run As Same User As Apache via Systemd

If you plan on using the panel with apache, change the monitor to run as the same user as apache by uncommenting the user and group directives in the ugccmon service file.

nano /etc/systemd/system/ugccmon.service

- Remove the '#' from the user and group lines

- Change the setting HOME=/root to /var/www on the Environment line.

- Save and exit

Create the /var/www/.local folder and fix permissions.

mkdir /var/www/.local

chown -R www-data /var/www/.local

Now reload and start the monitor service

systemctl daemon-reload

systemctl start ugccmon

systemctl status ugccmon

Verify in the log tool or the monitor's log file that the monitor reports it is running as the www-data user.

You will have to change your FTP port setting in ugccmon.cfg to a value higher than 1024.

Licensing

The panel uses a license file to activate the monitor and other advanced features of the panel. You can generate a license request file in the panel (via the Settitngs menu→About UGCC->Generate license request file button) or by running the monitor once without a license. The panel creates a <hostname>.licr file and the monitor creates a <hostname>.licrm file. Either file can be used.

Login to your customer portal account at https://www.brainless.us/Customers.   Click the request link next the pool you want to use to license this host.   Now upload the license request file, or copy/paste the contents of the request file into the text box.   Click the submit button.

You'll be taken back to the main page and in the Licenses table (the one below the list of license pools) you should see a new entry with your hostname.   Click the View/Download link.   From this page you can download the license or copy the contents of your license file.   Save the downloaded file (should be in the format <hostname>.lic) in the logs folder of the panel.   If you want to create the license file and paste the information, create a new file in the format of

<hostname>.lic and paste the contents into this file.

Restart apache (systemctl restart apache2) to have panel load the license.   You can verify the license is working by going back to the Settings Menu→About UGCC page.

You should also be able to start the monitor now.   Review the monitor's log or the panels log tool to verify it started.