

Enterprise Linux & UGCC Install Guide

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This guide was written based on Centos 6.3 x64 and mono 2.10.x. The procedure should be very similar for other versions and editions of Enterprise Linux. We are by no means experts so comments and suggestions are welcome.

We will be installing everything into /ugcc; replace that path with whatever you'll be using. 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.

Remember you may have to disable iptables or add rules to allow 80/tcp, 8080/tcp, etc.

Commands are in italics.

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

```
su
```

```
yum groupinstall "Development Tools"
```

```
yum install glib2-devel libpng-devel libgxm-devel libtiff-devel libjpeg-devel giflib-devel libexif-devel
```

```
ln -s /sbin/ifconfig /bin/ifconfig
```

Disable selinux as it causes issues with apache and the panel.

```
nano /etc/selinux/config
```

Change "SELINUX=enforcing" to either "SELINUX=disabled" or "SELINUX=permissive". Ctrl+x, press y, press enter to save. **Reboot.**

If you plan to run 32 bit applications on an x64 install, you have to install the 32 bit compatibility libraries:

```
yum install compat-libstdc*
```

Build and install p7zip

Go to Source Forge and download the latest version (we used http://sourceforge.net/projects/p7zip/files/p7zip/9.20.1/p7zip_9.20.1_src_all.tar.bz2/download).

Upload it to your server. Untar it:

```
tar --bzip2 -xvf p7zip_9.20.1_src_all.tar.bz2
```

```
cd p7zip_9.20.1
```

The following step has you copy a make file that matches your machine type. We'll use amd64 in the example, for 32 bit try makefile.linux_any_cpu.

```
cp makefile.linux_amd64 makefile.machine
```

```
make all_test
```

```
nano install.sh
```

Find 'DEST_HOME' and make its value equal to blank (i.e. DEST_HOME=). Ctrl+x and save.

```
./install.sh
```

Build and install Mono

Get sources for mono, xsp2, libgdiplus, and mod_mono. We'll list the latest stable packages we used, but you should probably get the latest stable versions instead. You can browse the packages at <http://download.mono-project.com/sources>

```
wget http://download.mono-project.com/sources/mono/mono-2.10.9.tar.bz2
```

```
wget http://download.mono-project.com/sources/libgdiplus/libgdiplus-2.10.9.tar.bz2
```

```
wget http://download.mono-project.com/sources/xsp/xsp-2.10.2.tar.bz2
```

```
wget http://download.mono-project.com/sources/mod_mono/mod_mono-2.10.tar.bz2
```

Unpack all archives.

```
tar --bzip2 -xvf mono-2.10.9.tar.bz2
```

```
tar --bzip2 -xvf libgdiplus-2.10.9.tar.bz2
```

```
tar --bzip2 -xvf mod_mono-2.10.tar.bz2
```

```
tar --bzip2 -xvf xsp-2.10.2.tar.bz2
```

Now to build mono.

```
cd mono-2.10.9
```

```
./configure --prefix=/usr
```

```
make && make install
```

Build libgdiplus

```
cd ../libgdiplus-2.10.9
```

```
./configure --prefix=/usr
```

```
make && make install
```

Build xsp

```
cd ../xsp-2.10.2
```

```
PKG_CONFIG_PATH=/usr/lib/pkgconfig ./configure --prefix=/usr
```

```
make && make install
```

We should have built mono, xsp and libgdplus now. Let's check our mono version. It should spit out the version we built.

```
mono -V
```

Update shared library cache.

```
ldconfig
```

Install Panel

```
mkdir /ugcc
```

```
mkdir /ugcc/www
```

```
mkdir /ugcc/mon
```

```
mkdir /ugcc/logs
```

```
mkdir /ugcc/deploy
```

```
cd /ugcc/deploy
```

```
wget http://redirect.brainless.us/ugcc/<latest version #>/Deploy.7z (replace <latest version #> with the latest version number of UGCC, ie 1.56)
```

```
7z x Deploy.7z
```

```
cd Deploy
```

```
cd WWWPanel-Linux
```

```
cp -r * /ugcc/www
```

```
cd ../Monitor/Linux
```

```
cp -r * /ugcc/mon
```

```
cd ../../DB
```

Here 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
```

```
cp Web.config /ugcc/www
```

```
cp ugccmon.cfg /ugcc/mon
```

We should be done copying files; now it's time to edit configuration files. Note: If you've followed placing the panel in /ugcc/www, the monitor in /ugcc/mon and the database in /ugcc/logs; you won't need to edit the config files, unless you are using MySQL.

```
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=.

```
nano Web.config
```

Set the log setting to /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 to /ugcc/logs

Save and close. Now let's try to run and access the panel.

```
xsp2
```

You should see some output, open a browser and browse to http://ip:port/Check.aspx (usually port 8080). If all the values are true, you may login to the panel so that database can be updated to the latest revision, and now would be a good time to change the default admin password. Click the main image to go to the login screen and login with user: admin and password: admin. We are done with the web panel now; on to configuring the monitor. Press enter to exit out of xsp2.

Monitor Setup (Requires a license to run)

```
cd /ugcc/mon
```

```
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 and customize it to your settings)

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.

```
chmod +x start.sh
```

```
chmod +x stop.sh
```

To start the monitor type

```
./start.sh
```

View the output of the monitor's log file to see what it says—probably 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
```

If you have a demo license and/or intend on purchasing a license, you may want to setup your monitor to work in remote mode. Since the monitor and web panel will more than likely run as two different users managing permissions can become a pain to manage/troubleshoot. Enabling remote mode will allow all game server processes to be started and stopped by the monitor. To enable remote mode, please see <http://brainless.us/forum/viewtopic.php?f=21&t=137> to setup remote mode. Once setup, change the server definition of your existing and future game servers to this definition in the server's management page on the general tab and update the permissions of your game install directories.

Setup Monitor to start on boot

Copy the `ugccmon` file in the `Tools/Linux/init.d/CentOS` folder of the deploy package to `/etc/init.d`. Edit the variables in the script to match you environment. If you've followed this guide you won't have to edit the variables. Set the script to be executable:

```
cd /etc/init.d
```

```
chmod +x ugccmon
```

You can test that the script works by running it directly with an argument of start or stop.

```
./ugccmon start
```

```
./ugccmon status
```

```
./ugccmon stop
```

Once it's working, run the following to add it to the various runlevels:

```
chkconfig ugccmon --add
```

Now you can control it with the service command.

```
service ugccmon start
service ugccmon stop
```

Setup Apache with mono auto hosting

If you're content with using xsp2 you don't have to worry about the rest, but it's worthwhile to get the panel running under apache.

```
yum install httpd httpd-devel
```

Go back to where you extracted the source of mod-mono, and let's build it.

```
./configure --prefix=/usr
```

```
make && make install
```

Now let's copy the panel's files to Apache's Document root

```
cd /var/www/html
```

```
cp -r /ugcc/www/* .
```

```
cd ..
```

```
chown -R apache html
```

```
chmod -R g+rw html
```

Enable mono auto hosting

```
cd /etc/httpd/conf.d
```

```
ln -s ../conf/mod_mono.conf mod_mono.conf
```

Now to fix some permissions. My version of CentOS runs apache as apache, so that user will need read/write access to the logs/license and any game server folders.

```
cd /ugcc
```

```
chgrp -R apache logs
```

```
chmod -R g+w logs
```

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

```
cd /
```

```
chgrp -R apache servers
```

```
chmod -R g+rw servers
```

Start apache

```
apachectl start
```

Now try to access the Check.aspx page of the panel to make sure everything is working.

To enable apache to start on boot, run the following as root.

```
chkconfig --level 35 httpd on
```

Everything should be working now. 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.