

## Enterprise Linux 7 & UGCC Install Guide

Brainless Technologies Ltd.

www.brainless.us

This guide was written based on a Centos 7.1 x64 minimal install and mono 4.0.2. 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. You can use /ugcc/server for your servers.

Remember you may have to disable iptables or add rules to allow 80/tcp, 8080/tcp, 443/tcp, etc.

Commands are in italics.

### **Setup the EPEL repository**

Let's get the EPEL repository setup to install 7zip. On Centos simply run the following, otherwise visit <http://fedoraproject.org/wiki/EPEL> for instructions for setting it up.

```
yum install epel-release nano yum-utils net-tools
```

### **Setup Mono**

Visit <http://www.mono-project.com/docs/getting-started/install/linux/#centos-7-fedora-19-and-derivatives> for the instructions on setting up the Mono repository. After completing these steps run the following commands.

```
yum update  
yum install mono-complete xsp
```

### **Let us setup other things required by the panel.**

```
yum install p7zip p7zip-plugins  
ln -s /sbin/ifconfig /bin/ifconfig
```

Disable selinux as it causes issues with apache, game servers, and the panel. If you don't want to disable SELINUX you can create your own SELINUX modules, but this is outside the scope of this guide.

```
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 (steamcmd and most servers are 32 bit):

```
yum install glibc.i686 libstdc++.i686
```

## **Install Panel**

```
mkdir -p /ugcc/www
mkdir /ugcc/mon
mkdir /ugcc/logs
mkdir /ugcc/deploy
mkdir /ugcc/servers
cd /ugcc/deploy
curl http://redirect.brainless.us/ugcc/<version>/Deploy.7z -o Deploy.7z (replace <version> with
the latest version number of UGCC, ie 1.801)
7za x Deploy.7z
cd Deploy
cd WWWPanel-Linux-Mono4
cp -r * /ugcc/www
cd ../Monitor/Linux-Mono4
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-Mono4
cp Web.config /ugcc/www
cp ugccmon.cfg /ugcc/mon
cd /ugcc/www
```

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.

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 (ctrl+x, y). Now let's try to run and access the panel.

```
xsp4
```

You should see some output, open a browser and browse to `http://ip:port/Check.aspx` (usually port 9000). 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. 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 xsp4. Setting up the panel with apache is discussed further down.

### **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. Make the start/stop scripts executable:

```
chmod +x st*.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 (recommended)**

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

Copy the `ugccmon.service` file in the `Tools/Linux/Systemd/CentOS7` folder of the deploy package to `/usr/lib/systemd/system`. Edit the paths of the `ExecStart` line, 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 /usr/lib/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**

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 apache2-mod_mono
```

Enable apache to start on boot.

```
systemctl enable httpd
```

Add a port to the firewall for apache if you haven't disabled it.

```
firewall-cmd --add-port 80/tcp --permanent
```

Modify the `mod_mono` configuration file to use the correct framework.

```
nano /etc/httpd/conf.d/mod_mono.conf
```

At the end of the file add a new line that contains: `MonoServerPath /usr/bin/mod-mono-server4`

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

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

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

```
cd ../
```

*Fix permissions*

```
chown -R apache html
```

Allow apache permission to /ugcc and subfolders. You can replace apache with any additional usernames who need access.

```
setfacl -Rdm apache:rwX /ugcc
```

```
setfacl -Rm apache:rwX /ugcc
```

Start apache

```
systemctl start httpd
```

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

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.