

2.6 Upgrading Ubuntu Releases

The BonsaiFramework recommends that with Servers, staying with LTS versions of Ubuntu and upgrading only when the next LTS version is introduced.

Carefully review the differences in releases. You will often find that most new features are GUI Desktop related and do not provide any value to the Server environment.

In this example the server is running 9.10 and at the time, the next available long term support release at the time is 10.04.

If we were behind multiple [releases](#), for example at 9.04, we would first upgrade to 9.10 and then 10.04 by repeating the upgrade instructions.

Skipping versions is not advised as it may cause damage to your system.

In an Enterprise environment, you may even want to build a new replacement server with a fresh install of the most up to date Ubuntu LTS release and do a cut over.

Determine Version

Before you start you should determine the kernel and release you are currently running. It is helpful to write this information down before starting your release upgrade. Here are the commands with sample data,

```
uname -a # determine kernal version
Linux krypton 2.6.32.9-rscloud #6 SMP Thu Mar 11 14:32:05 UTC 2010 x86_64
GNU/Linux
lsb_release -a # determine release number
No LSB modules are available.
Distributor ID: Ubuntu
Description: Ubuntu 9.10
Release: 9.10
Codename: karmic
```

The most important point here is that the [release](#) is at 9.10 and the next release at the time of this tutorial is 10.04.

A comprehensive and updated [table of Ubuntu releases is on the Wikipedia](#).

Prepare for the Upgrade

First **backup** your system and data. If you are happen to be using visualization take a snapshot. Whatever your backup method is, make sure the **restore** works.

Next, upgrade to the most recent packages,

```
sudo apt-get update
sudo apt-get dist-upgrade
```

Finally stop as many services as possible **especially** those **not** managed by Ubuntu.

As a precaution we also stop even services managed by Ubuntu. Examples include web server deaemons (Apache, nginx, etc), database servers (PostgreSQL, MySQL, etc), and any other important services.

Perform the Upgrade

It is preferable to upgrade from the console. Even in the case of cloud or virtual computing try to get to a console. Most cloud and virtual systems provide a back door console access via the web browser.

Again, if your system is running real applications and stable make sure you can **backup** and **restore** your system before going further.

Install the update-manager-core package if it is not already installed:

```
sudo apt-get install update-manager-core
```

View **/etc/update-manager/release-upgrades** and ensure **Prompt=normal**,

```
sudo ne /etc/update-manager/release-upgrades
```

Perform the release upgrade.

```
do-release-upgrade
```

After the upgrade it will request to restart the system.

Verify the Upgrade

Verify that the version you are running has changed,

```
uname -a
Linux myra 2.6.32.9-rscloud #6 SMP Thu Mar 11 14:32:05 UTC 2010 x86_64
GNU/Linux
lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description: Ubuntu 10.04.2 LTS
Release: 10.04
Codename: lucid
```

Change Release Upgrade Back to LTS

Provided you are happy with the version you are on, you may want to edit the **etc/update-manager/release-upgrades** and set **Prompt=lts** or whatever you were using before,

```
sudo ne /etc/update-manager/release-upgrades
```

Out of Disk Space for /boot

Especially with a GUI version of Ubuntu you may run out of disk space on in your /boot partition. This is likely due to old images. To clear up.

First check your kernel version, so you won't delete the in-use kernel image,

```
uname -r
```

Now run this command for a list of installed kernels,

```
dpkg --get-architecture linux-image*
```

Delete the kernels you don't want/need anymore by running this,

I'm not sure we need this given the subsequent command... look into this more.

```
dpkg --get-architecture linux-image*sudo apt-get remove linux-image-VERSION
```

Replace VERSION with the version of the kernel you want to remove. When you're done removing the older kernels, you can run this to remove ever packages you won't need anymore,

```
sudo apt-get autoremove  
sudo apt autoremove
```

And finally you can run this to update grub kernel list,

```
sudo update-grub
```