

# WMLUG September/October 2007 Meeting Notes

## Ubuntu 7.10 (Gutsy Gibbon) Release Party – October 18th

This is the latest release of Ubuntu. In addition to updated packages, some notable features are:

- Compiz Fusion enabled by default for 3D effects
- Integrated desktop searching
- NTFS file system writing support
- Enhanced X configuration utilities
- Automatic printer detection and setup

## Intro to bash scripting – Part 1

### Background

The shell is a command interpreter and a script is a shell program. Bash is the most common shell in use on Linux. It's a wordplay of "Bourne-Again shell" because it is based on another shell called Bourne.

A script can consist of just a file listing commands that you could issue at the command line.

```
simplescript.sh
```

```
cd /var/log  
ls *.log
```

You can flag the file as executable using `chmod +x simplescript.sh`. If it is not flagged as executable, it has to be run as `sh simplescript.sh`.

If you use actual bash commands, then the file needs to be setup with the first line containing `#!/bin/bash`. This indicates that this file is a script and that it should be fed into the bash shell.

## Creating Scripts

### Using comments

The `#` is used to indicate comments and any text following it on that line is ignored. However, even though the `#!/bin/bash` line begins with `#`, it is not a comment.

```
# Pound signs indicate comment lines and are ignored by the  
# script processor
```

### Create output using echo

You can use the `echo` command to write text to the terminal window. Enclose the text in double-quotes. To create a blank line, you can have an `echo` command with no text.

```
echo "Hello" # this writes Hello  
echo # this line writes a blank line
```

## Variables

Variables are used to hold information. They can contain text or numbers.

```
echo "Hello, $USER"
```

This outputs the text "Hello, " followed by the name of the current user, using a system variable named `USER`.

Useful system variables:

<code>HOME</code>	Current user's home directory
<code>HOSTNAME</code>	Hostname of the computer running the script
<code>USER</code>	Current user
<code>PWD</code>	Current directory

You can create your own variables and use them in scripts. On the left, specify the name of your variable, follow it with an equals sign and give the value. There can be no spaces before or after the equals sign. When you create a variable, you don't prefix it with the `$` but when you go to use it, you need to add the `$`.

```
# creating custom variables

# a text/string variable
MyVar="Some text"

# a numeric variable
aNum=17
```

Using your variables in a script:

```
# using custom variables

echo $MyVar
# prints: Some text

echo "Variable aNum = $aNum"
# prints: Variable aNum = 17
```

## User input

You can read input from the user using the `read` command.

```
echo "What is your favorite color?"
read $favcolor
```

The above commands ask the user what their favorite color is and stores it in the `favcolor` variable.

## An advanced script

```
#!/bin/bash

# Script 1

# lines starting with a # are comments and are ignored by the script processor

# clear the terminal window
clear

# demonstrate using system variables with echo output
echo "The system variable, \USER, holds the current user name."
echo "So, \USER=$USER"
echo
echo "Hello, $USER"

echo "Your current directory is $PWD"
echo
```

```
echo "The files in $PWD, are:"
ls -l $PWD

# demonstrate reading in user input
echo
echo
echo -n "What text are you looking for? "
read srchtext
echo
echo "You are searching for \"${srchtext}\"."
echo

# demonstrate using the inputted text in a command
echo "Conducting search in the current directory..."
echo
grep $srchtext $PWD/*.*
echo
echo Search complete.  There were `grep $srchtext $PWD/*.* | wc -l` occurrences found.
```

For more information, see the Advanced Bash-Scripting Guide at <http://tldp.org/LDP/abs/html/index.html>.

## Linux Game DVD

The people at linux-gamers.net have put together a bootable live DVD containing 15 games. It is totally self-contained and includes everything needed to play the games, including nVidia and ATI drivers.

You can find it at <http://live.linux-gamers.net/>.

Included games:

- Blobby2
- BzFLag
- Foobilliard
- gl-117
- Glest
- Neverball
- Nexuiz
- Sauerbraten
- Torcs
- Tremulous
- Ufo:ai
- Wesnoth
- Warsow
- Warzone2100
- World of Padman

## Other Games

Alien Arena is a sci-fi themed deathmatch FPS in the style of UT and Quake III.

The latest version is 6.10 and can be found at <http://red.planetarena.org/>.

## openSUSE 10.3

openSUSE 10.3 was released on October 4<sup>th</sup>. I installed it on my home computer and it is working good so far. The software update mechanism is much better than the one in 10.2.