



# Gettin' Flash with Linux

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What is Linux &  
why would I want to use it?

Quick tour of my Ubuntu desktop

Setting up Ubuntu for Flash development  
(Eclipse, FDT, MTASC, SWFMill)

Setting up Ubuntu for Flex2 development  
(Eclipse, MXMLC, Flex2Ant)

# What is Linux?



Linux...

“is a free Unix-type operating system originally created by Linus Torvalds with the assistance of developers around the world. Developed under the GNU General Public License, the source code for Linux is freely available to everyone.”

How'd'ya say that?



Li – Nucks

Lie-Nucks

Ley-Nucks

Lie-Noos

who cares?



1969 - UNIX was originally developed at Bell Laboratories as a private research project for use on large timeshared mainframes.

Aims:

- Simple and elegant
- Written in a high level language (C) rather than assembly language
  - Allow re-use of code

# Linux – quick history



August of 1991, a student from Finland begins a post to the comp.os.minix newsgroup...

Hello everybody out there using minix –

I'm doing a [free] operating system [just a hobby, won't be big and professional like gnu] for 386[486] AT clones.

# Linus Torvalds



# Linux comes in a variety of 'Distributions' (distro's)





# Mark Shuttleworth



# Why Linux?



- Free (beer)  
Free to obtain & install.  
Upgrades will always be free.
- Free (speech)  
Source is open & distributable.

# Why Linux?



- True multi user support & security
  - Reliable.
  - Great network capabilities
  - No viruses or Malware/Spyware
- Access to thousands of free programs (Synaptic / Apt)
  - Community support
- Adaptable / customisable / hackable

# Why NOT Linux?



- Lack of vendor support -
  - Hardware...  
e.g. Graphics cards, webcams,  
proprietary laptop hardware etc...
  - Software...  
e.g. Adobe, Microsoft, Apple,  
most new games...



## Ubuntu

Official, stable, no Flash9

<http://www.ubuntu.com/products/GetUbuntu/download#currentrelease>



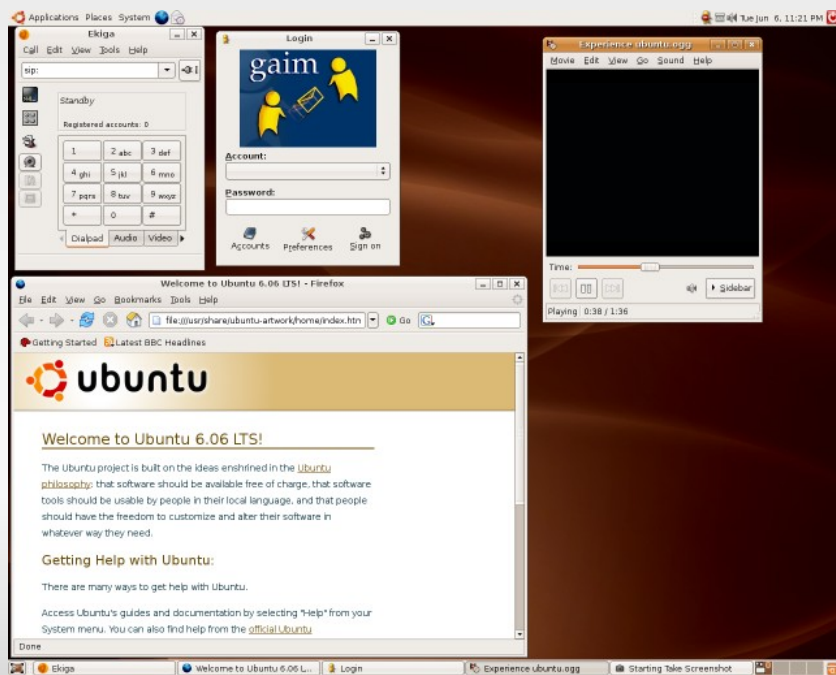
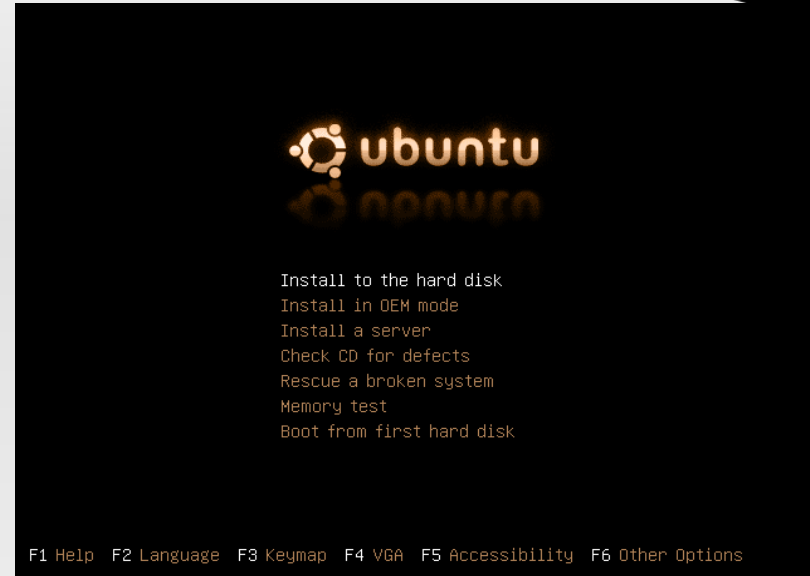
## Mint

New, untrusted,

includes 'dirty' software

<http://lt.k1011.nutime.de/download.html>

# Ubuntu Live CD



ubuntu

# Quick tour...



Synaptic / Apt

Open Office

Gimp / Inkscape

Wine / VMWare

Beryl

# Getting Flash 9 Beta



<http://labs.adobe.com/technologies/flashplayer9/>

install standalone player -

```
sudo cp gflashplayer /usr/local/bin/  
sudo chmod u+x /usr/local/bin/gflashplayer
```

install plugin -

```
sudo mkdir /usr/lib/flashplugin  
sudo cp libflashplayer.so /usr/lib/flashplugin/  
sudo ln -s  
    /usr/lib/flashplugin/libflashplayer.so  
    /usr/lib/mozilla-firefox/plugins/libflashplayer.so
```



# Setting up the tools



## Eclipse

Make sure you have 'Universe' repository enabled, then use Synaptic or...

```
sudo apt-get install eclipse
```

...or download from...

<http://www.eclipse.org/downloads/>  
and extract somewhere under  
your home folder

# Setting up the tools



## MTASC

Download linux binary from  
<http://www.mtasc.org/>

```
sudo mkdir /usr/local/lib/mtasc  
cd /usr/local/lib/mtasc  
sudo wget http://www.mtasc.org/zip/  
mtasc-1.12-linux.tgz  
sudo tar -xvf mtasc-1.12-linux.tgz  
sudo ln -s mtasc /usr/local/bin/mtasc
```

# Setting up the tools



## SWFMill

<http://www.swfmill.org/>

```
sudo apt-get install autoconf automake1.9  
libtool make g++ libxml2-dev libxslt1-dev  
libfreetype6-dev libpng12-dev libcrypt11-dev
```

```
wget http://swfmill.org/releases/  
swfmill-0.2.11.tar.gz  
tar -xvf swfmill-0.2.11.tar.gz  
cd swfmill-0.2.11  
./configure  
make  
sudo make install
```

# Setting up the tools



FDT

<http://fdt/powerflasher.com/update>

...or...

ASDT

<http://aseclipseplugin.sf.net/updates>

Install either using Eclipse's built in tools.  
I use FDT myself, but it's not free.

# Setup FDT & MTASC



1. Windows -> Preferences -> FDT  
Add 'core' F7 library...  
`/usr/local/lib/mtasc/std`

2. Add F8 linked library  
`/usr/local/lib/mtasc/std8`

3. Add linked MX Class library from Win  
(optional)

```
sudo ln -s /path/to/mounted/flash/mx  
/usr/local/lib/mtasc/mx
```



Check MTASC (7, 8 & MX)  
Check SWFMILL

If things go wrong...

- Remember to create 'src' & 'build' folders!
  - Link MX classes if using Tween etc
- Remember to add version 8 switches to MTASC / SWFMill if using filters etc
  - Use MTASC -v to check classpaths

# Logging with ZeroImpact



No Debug output yet :(

<http://osflash.org/zeroi>  
Simply add to Ant..

```
<!-- Logging -->  
<arg value="-cp"/><arg value="/usr/local/lib/Zeroi"/>  
<arg value="-trace"/>  
<arg value="org.osflash.zeroi.logging.LoggerClass.log"/>  
<arg value="org/osflash/zeroi/logging/LoggerClass"/>  
  
<arg value="org/osflash/zeroi/logging/publisher/  
LuminicPublisher"/>
```

...then 'trace' away!



<http://www.flex2ant.org/>

Download and follow the instructions, gives workable MXML code complete & Ant build.

Not really useable yet, but pretty cool to see working :)

Possibly also SciTe?