

O'REILLY

OSCON™

Open Source Convention

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LTS Tutorials: Using Ubuntu in the Enterprise

Christer Edwards (Guru Labs, LC)



Introduction

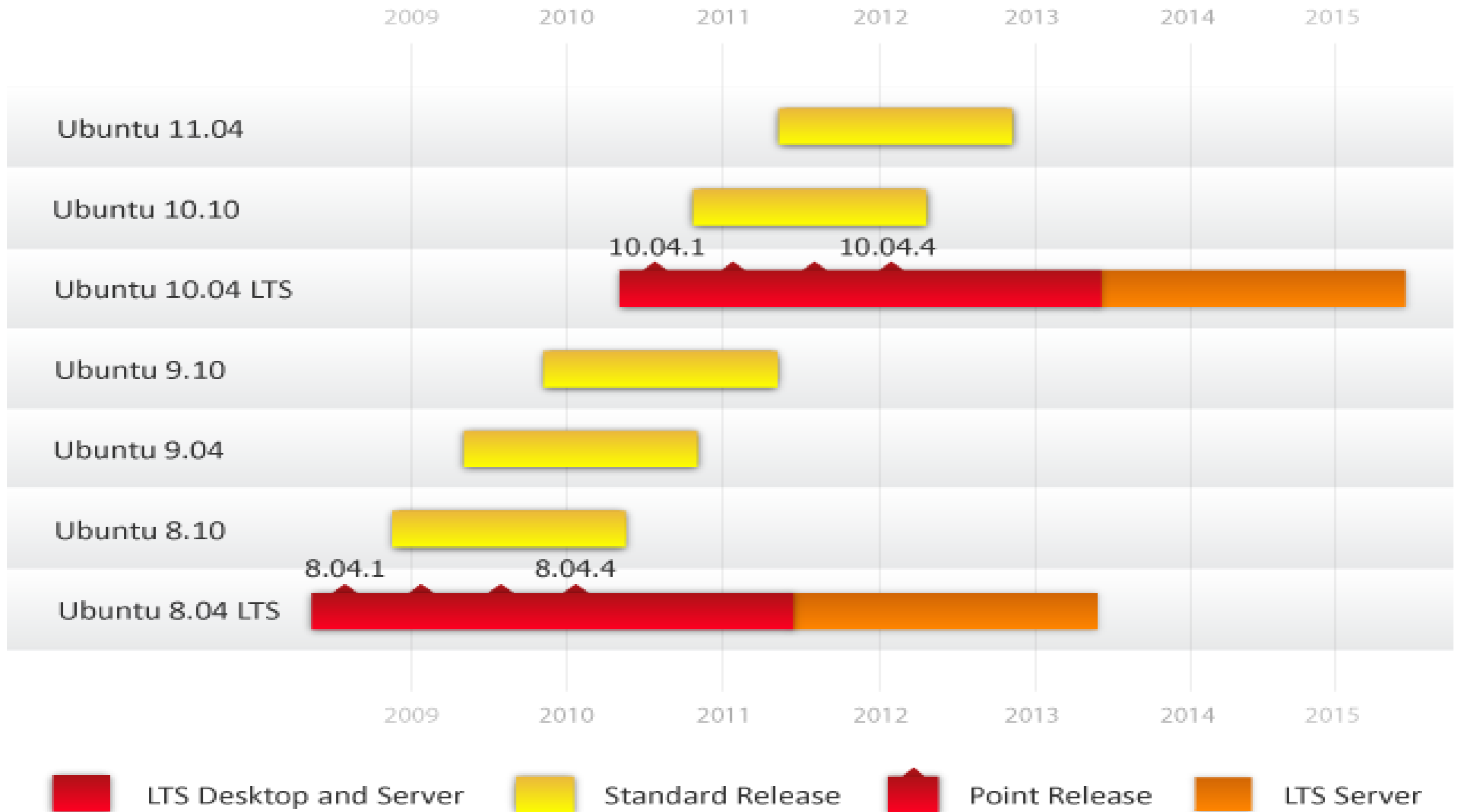
- ▶ Christer Edwards (Zelut)
- ▶ Ubuntu Local Community (LoCo) Pioneer
- ▶ Linux Instructor with Guru Labs, LC.
- ▶ Author, <http://ubuntu-tutorials.com>

Objectives

- ▶ Support
- ▶ Prerequisite Considerations
- ▶ Network Installation Options
- ▶ Installing Network Services
- ▶ Network and Local Security
- ▶ Automated Installation

- ▶ Linux or UNIX Administrators interested in using Ubuntu LTS in an Enterprise environment.

Long Term Support (LTS)



Landscape

- ▶ System Management
- ▶ System Monitoring
- ▶ Enhanced Support Experience
- ▶ <http://canonical.com/projects/landscape>

Internal Prerequisites

- ▶ Repository Mirror (apt-mirror, exported CD / DVD Contents)
- ▶ Web Server (apache2, lighttpd, etc)

Repository Mirror - apt-mirror

- ▶ `sudo apt-get install apt-mirror`
- ▶ `/etc/apt/mirror.list`
 - ▶ <http://zelut.org/projects/misc/mirror.list>
- ▶ `/etc/cron.d/apt-mirror`
 - ▶ <http://zelut.org/projects/misc/apt-mirror>
- ▶ `apt-mirror`

Repository Mirror - apt-cacher

- ▶ `sudo apt-get install apt-cacher`
- ▶ `/etc/default/apt-cacher`
- ▶ `AUTOSTART=0` to `AUTOSTART=1`
- ▶ Update clients from:
- ▶ `deb http://us.archive.ubuntu.com/ hardy main restricted`
- ▶ `deb http://internal.ip:3142/us.archive.ubuntu.com/ hardy main restricted`

Exported CD / DVD Contents

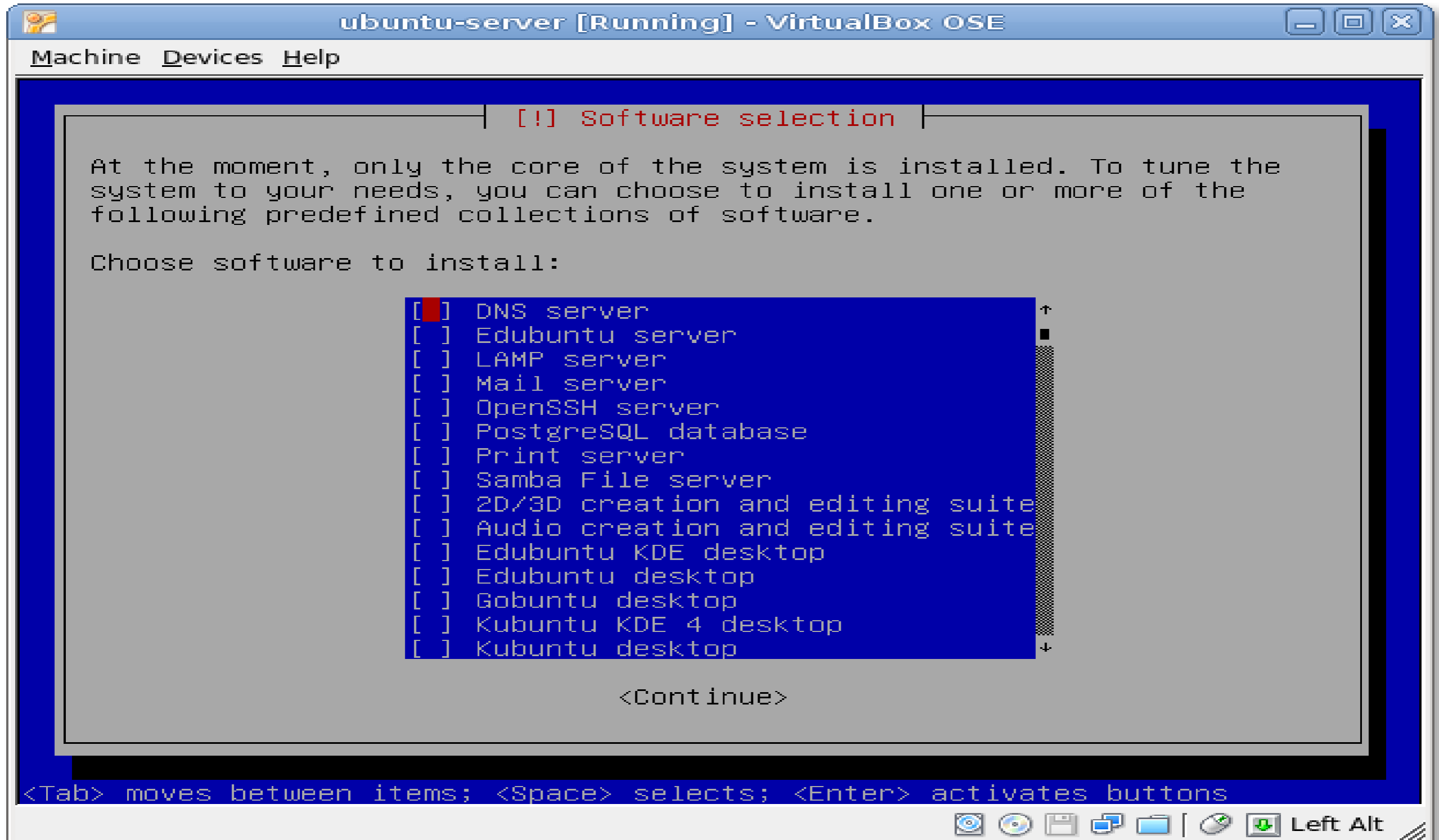
- ▶ `sudo mount -o loop ubuntu-8.04.1-dvd-amd64.iso /mnt/`
- ▶ `sudo mkdir /var/www/ubuntu`
- ▶ `sudo cp -a /mnt/* /var/www/ubuntu/`
- ▶ `/mnt/install/netboot/ubuntu-installer/amd64/{linux, initrd.gz} - PXE`

- ▶ `sudo apt-get install apache2`
- ▶ `sudo apt-get install lighttpd`
- ▶ `cd /var/www/`
- ▶ `sudo ln -s /path/to/mirror/archive.ubuntu.com/ubuntu/`

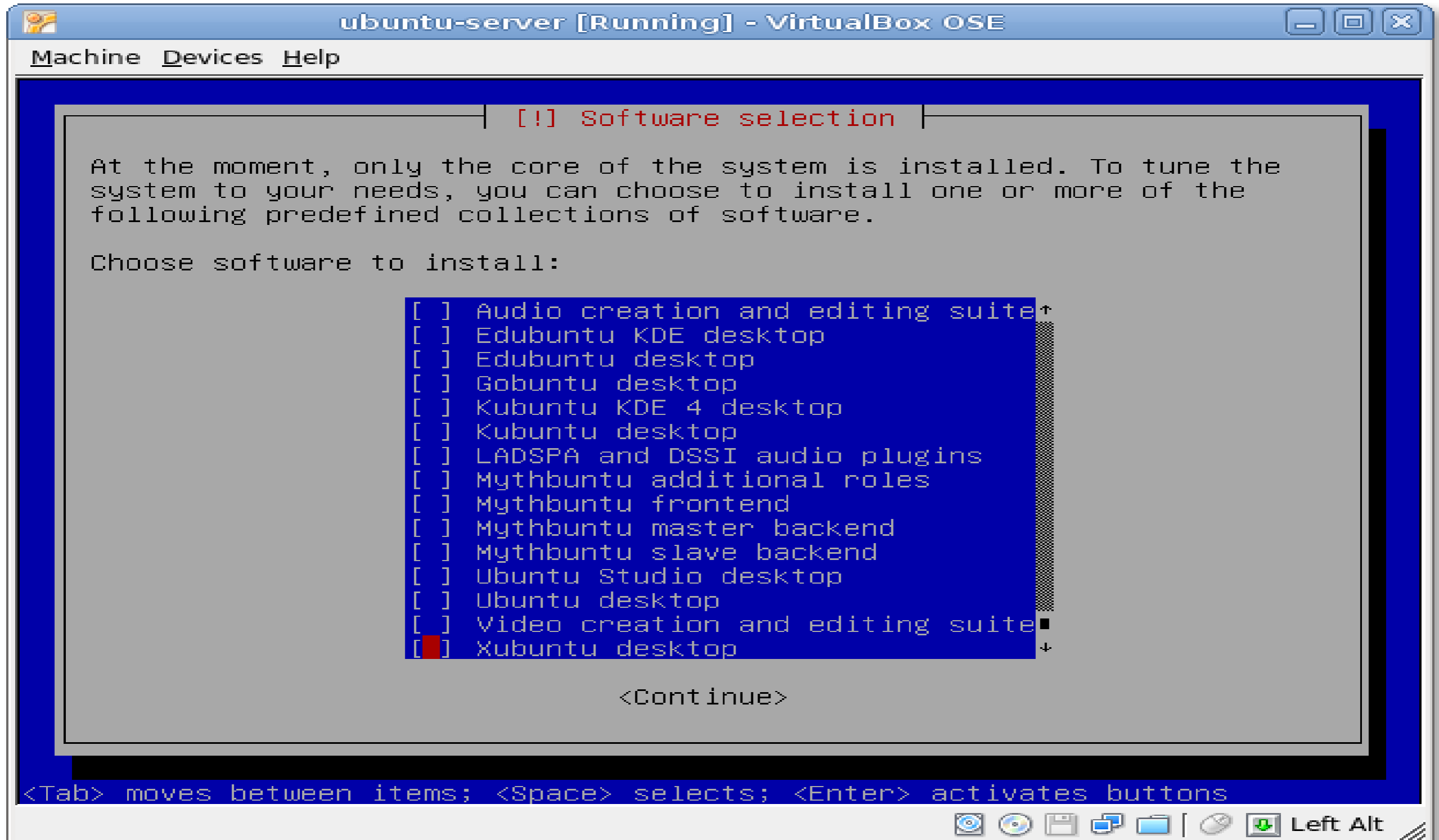
Network Installer

- ▶ Supports http and ftp
- ▶ Benefits:
 - ▶ Faster installation
 - ▶ More flexible boot-options (ie; CD, USB, PXE, etc)
 - ▶ More flexible install-time options (ie; pre-defined install groups)
 - ▶ Security patches applied
- ▶ <http://tinyurl.com/2tpbpf> (i386) <http://tinyurl.com/6qxpls> (amd64)
 - ▶ mini.iso – CD Based Network Installer
 - ▶ boot.img.gz – USB Based Network Installer
 - ▶ linux & initrd.gz – PXE Based Network Installer

Network Installation Options



Network Installation Options



Internal Secure Jabber

- ▶ Control Communication
- ▶ Keep in-house
- ▶ OpenFire
 - ▶ Local, LDAP or AD User Accounts
 - ▶ Supports embedded or external Database
 - ▶ <http://www.igniterealtime.org/projects/openfire/index.jsp>
 - ▶ <http://www.igniterealtime.org/projects/openfire/plugins.jsp>
- ▶ <http://localhost:9090> - Web-based Configuration

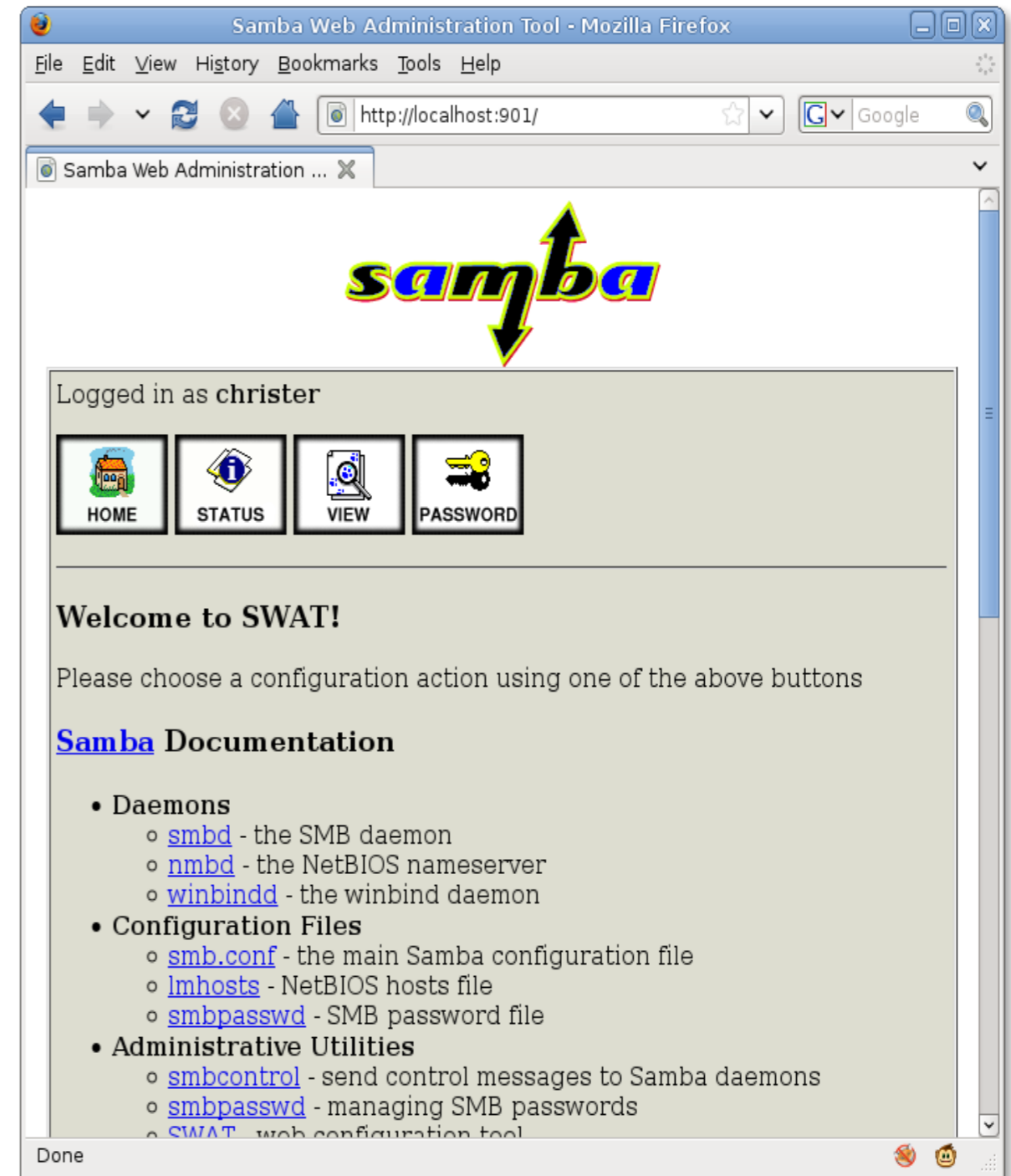
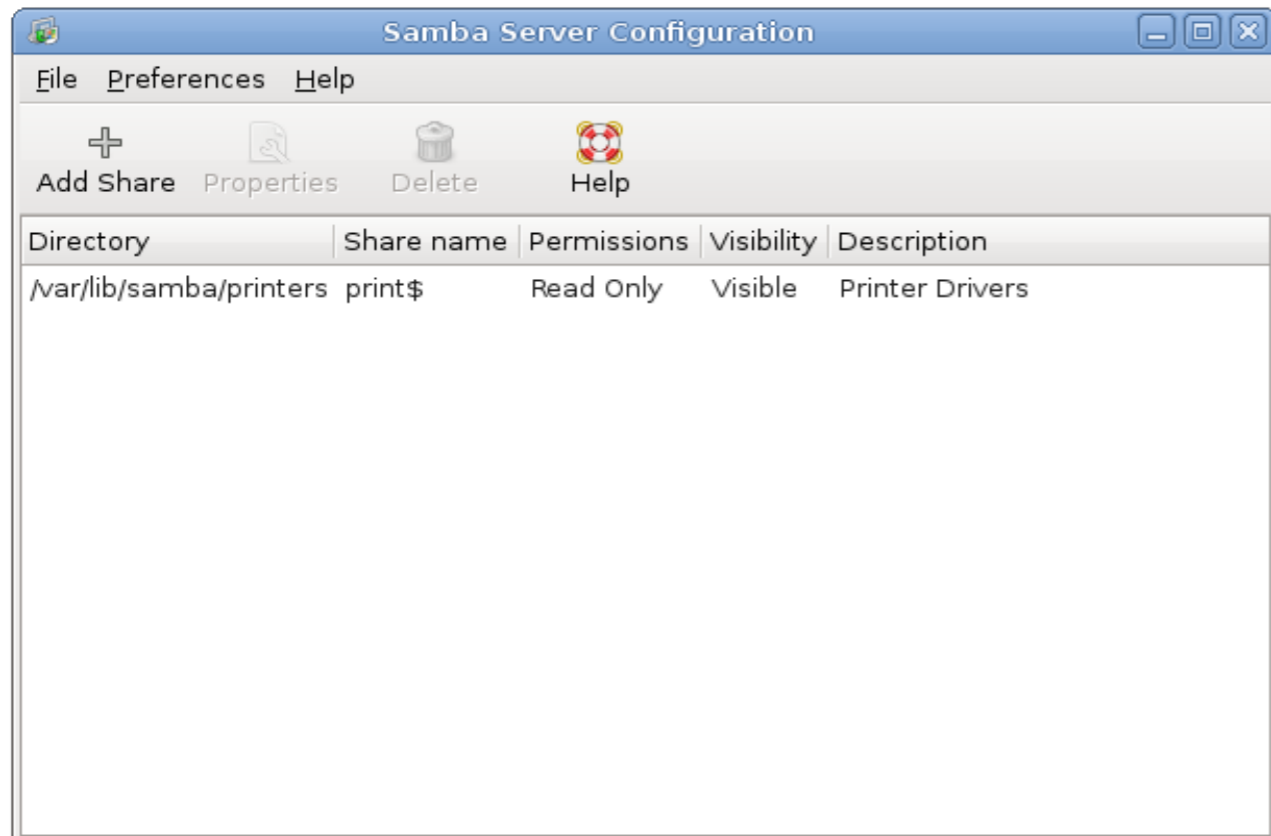
Likewise Open

- ▶ Seamless Connection with AD
- ▶ Available in Ubuntu 8.04.1
 - ▶ apt-get install likewise-open
 - ▶ apt-get install likewise-open-gui

The screenshot shows a window titled "Likewise AD Settings" with a close button in the top right corner. The window content is as follows:

- Active Directory Membership** (with a server icon)
- Name and Domain**
 - Please select the Active Directory domain to join.*
 - Each computer joined to a domain must have a unique computer name. You may specify a new name for this computer before joining.*
 - Computer name:
 - Domain:
- Organizational Unit**
 - Please select the OU to which this computer should be joined. Nested OUs should be separated by a forward-slash.*
 - Default container (*Computers*)
 - Specific OU path:
- Advanced**
 - Modify hosts file (/etc/hosts)
- At the bottom left is the **Likewise** logo.
- At the bottom right are two buttons: **Close** (with a close icon) and **Join Domain** (with a right-pointing arrow icon).

- ▶ File and Printer Sharing
- ▶ system-config-samba
- ▶ swat



Other File Sharing Tools

- ▶ NFS
 - ▶ `sudo apt-get install nfs-user-server`
- ▶ FTP
 - ▶ `sudo apt-get install vsftpd`
- ▶ SSH Access
 - ▶ `sudo apt-get install sshfs`

- ▶ Network Security
 - ▶ ufw (Uncomplicated Firewall)
 - ▶ `sudo ufw default deny`
 - ▶ `sudo ufw allow http`
 - ▶ `sudo ufw allow ssh`
 - ▶ `sudo ufw enable`
 - ▶ `sudo ufw status`
- ▶ Local Security
 - ▶ AppArmor
 - ▶ SELinux (`apt-get install selinux`)

Automated Installation

- ▶ Support for preseed
- ▶ Support for kickstart
- ▶ Support for hybrid preseed/kickstart
- ▶ DEMO
- ▶ <http://zelut.org/projects/misc/oscon.cfg>

Find Out More...

- ▶ Ubuntu Server Technologies – Wed, 1:45 session
- ▶ Ubuntu Deployment for your Enterprise – Wed, 2:35 session
- ▶ Landscape: Managing Ubuntu Deployments – Wed, 4:30 session

Christer Edwards

<http://ubuntu-tutorials.com>