How I Stopped Worrying About the Economy and

Learned To Love MythTV

Love

Existing TiVo – Why Change?

- Flurry of ***Repeated*** / ***Frequent*** Repairs
  - **Inconvenience - Cost - Time**

- **Build**-It-Yourself / **Repair**-It-Yourself
  - **More Control**
  - **Faster - Easier - Cheaper**

- **Old Hardware** Put To Good Use

- Possible **Future Expansion** (U-verse like)

- Annoying TiVo Messages (advertisements)

- It Should Be **Fun**!

Why MythTV over TiVo?

- **Watch** / **Record** TV and HDTV
- **Pause** / **Skip** / **Rewind** Live TV shows
- Automatic **Commercial Detection** / **Skip**
- **Schedule** TV
- **Watch** / **Archive** DVDs
- **Listen** / **Archive** Music Collection
- **View** TV from Multiple Front-Ends

- **Games** / **News** / **Phone** / **Weather**

Other Options to TiVo
Why *Build* Anything?

Pre-built Systems

Fox Media Systems

An up and coming home entertainment and media system builder. Fox Media Systems will be using Mythbuntu to provide pre-built, fully functional Personal Video Recorders (PVR). Fox Media Systems is also a proud supporter of Mythbuntu.

Monolithic MC

An up and coming home entertainment and media system builder. Monolithic MC will be using Mythbuntu to provide pre-built, fully functional Personal Video Recorders (PVR). Monolithic MC is also a proud supporter of Mythbuntu.

Hardware Requirements

Minimum

1.0 GHz x86 or x86_64 Processor - **192 MB** of system memory (RAM)

2 GB of disk space (Front-End Role) - **20 GB** of disk space (Back-end Role)

Graphics Card -1024x768 - Supported TV Tuner Card (Backend Role)

Recommended

3.0 GHz x86 or x86_64 Processor - **1020 MB** of system memory (RAM)
    (best for HD)

10 GB of disk space (Front-End Role) - **80 GB+** of disk space (Back-end Role)

nVidia 128MB Graphics Card - Supported TV Tuner Card (Backend Role)
    w/ TV-Out or equivalent

Why MythBuntu over MythTV?

- **Familiarity with Ubuntu**

- Readily Available **MythBuntu Disk** (8.04)

- **Easier** Options / Decisions

- **MythBuntu**

  ○ Web Page "Cleaner"

  ○ Automated: Equals *Easy* **Installation**
    More "GUI" less "SCRUI"

Building the Box Ordering the stuff

Components – **in kit form**

3.10 GHz AMD Athlon X2 Processor (for HD)

4096 MB DDR-2800 memory (RAM)

320 GB SATA2 Hard Disk (Front & Backend Role)

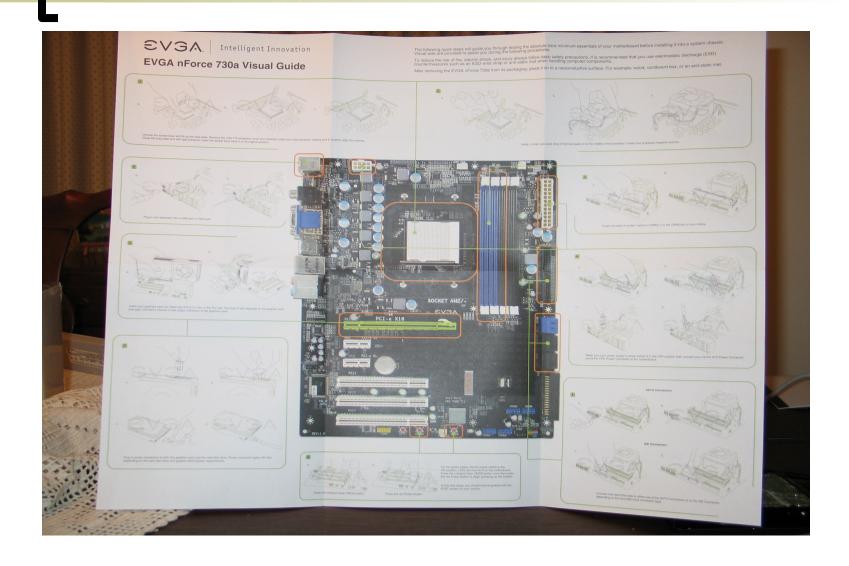**nVidia 9500** Graphics Card

500 Watt Power Supply

ATX Mid-Tower

Miscellaneous

10/100 Mbps PCI Ethernet Card

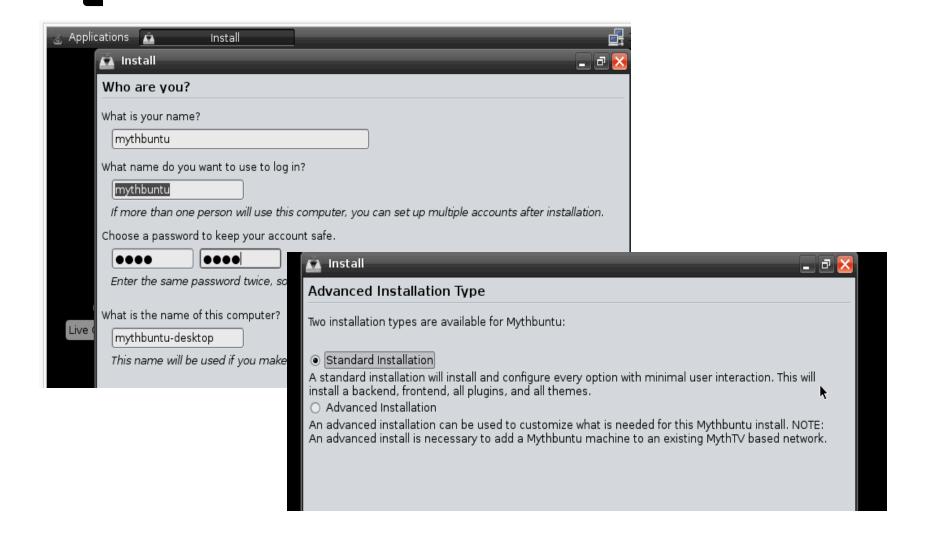HDHomeRun Dual-Tuner Unit

Building the Box

Software Setup, Setup and more Setup

- Load **MythBuntu** from Live CD
  - Ubuntu Installation Initially moves to…
  - MythBuntuTV – standard for 1st time
    - General "Type" to More-specific Configurations
  - Back-End Configuration – via GUI Screens

- MythBuntu Control Center

    After-the-fact Configurations

MythBuntu Initial Configuration

Back-End Initial Configuration

- **General** - General Setup
- **Capture Cards** – HDHomeRun Dual Tuner
- **Video Sources** – **Schedule Direct**
- **Input Connections** – **tie 2 and 3 together**
- **Channel Editor** – **Modify Channels After-The-Fact**
- **Storage Directions** – **Where to Store Files**

What Shall We Watch and When?
TV Guide-Type Data in Electronic Form

Schedules Direct is a non-profit organization whose mission is to educate the public about the benefits of Open Source Software and other free software, provide support functions for such software, and provide funding for research that facilitates the improvement or creation of Open Source Software and other free software for the benefit of the public at large. www.schedulesdirect.org

The cost of membership is **currently US$20/year**, with a 7 day free trial.
A 2 month membership is also available for US$5 for those who do not wish to commit to an entire year.

MythBuntu High-Level Controls

- **Watch TV** – Live TV

- **Media Library** – Recorded Shows

- **Manage Recordings** – Adjust Schedule / Delete

- **Information Center**

- **Optical Disks Storage**

- **Utilities Setup** – **to Back-End Configuration, etc.**

On What Will We View MythTV?

- **Change of Scope** (again)
  - ○ **Monitor** with Speakers / separate volume control
  - ○ **HDTV** New
  - ○ **Existing TV** – Retrofit
    - Purchase RF Modulator with S-Video

In Retrospect –
What Would I Do Differently?

- Combine **Existing Hardware** with **New**

- **Review** the Documentation More

If This is a Work In Process What's Next?

- **Install** a Remote Control

- **Refining** Some of the MythTV Features

- **Add** External Storage

- **Modify** Internet Connection

  Firestarter Restrictions Interfere with HD Tuner

  Internet Connection add time-restrictions

Referenced Websites

MythTV
  http://www.mythtv.org/
  http://www.mythtv.org/wiki/   (Good Place to Start)

User Manual for MythTV
  http://www.mythtv.org/wiki/User_Manual:Index
  http://www.mythtv.org/wiki/User_Manual:Detailed_configuration_Backend
  http://www.mythtv.org/wiki/User_Manual:Detailed_configuration_Frontend
----
MythBuntu
  http://www.mythbuntu.org/
  http://www.mythbuntu.org/installation_manual

  http://www.mythbuntu.org/merchandise (pre-built)

  http://www.mythtvbook.com/wiki/Main_Page (project underway)
  http://www.mythtvbook.com/wiki/The_Easy_Way:_Installing_MythBuntu
        (completed)
      Step-By-Step Guide to Software Installation with Screenshots!

  Back-end Setup Screen Replicas
    http://www.mythbuntu.org/image/tid/10

Hardware:
Most of the Hardware from Tiger Direct
  http://www.tigerdirect.com/

Video Card
  http://www.nvidia.com/object/product_geforce_9500gt_us.html

Some From Radio Shack
  http://www.radioshack.com/home/index.jsp

HDHomeRun Home Netwroked DigitalTuner
  http://www.silicondust.com/products/hdhomerun

Schedules Direct
www.schedulesdirect.org

Summary Table of Typical Results
http://pvrhw.goldfish.org/tiki-pvrhwdb.php