

African Advanced Institute for Information & Communications Technology

Refurbishment & Open Source Software Electronic Waste Management Conference 2006

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28 November 2006

### **Presentation Outline**

- About Meraka Institute Open Source Centre
- Background to OSS
- Extending life span using OSS
- Different choices for different situations
- Examples of OSS & Refurbished computers
- Getting Started with OSS
- OSS Help & Support







### **Meraka Institute**

#### The African Advanced Institute for ICT:

- Strategic purpose:
  - Increase ICT R&D intensity and beneficial impact
  - SA and African scope
- Meraka = common grazing ground (Sesotho)
  - Shared space for creative productivity
  - Emphasise African nature of scope and needs





### Meraka Open Source Centre

- Open Source Centre is part of the Meraka Institute.
- Currently, there are two offices:
  - CSIR headquarters
  - Soweto
- Set up to amplify the beneficial impact of free software in southern Africa while contributing to similar efforts in Africa and the rest of the developing world



## **OS Centre Objectives**

- Stimulate awareness of OSS and benefits in Southern Africa
- Increase understanding of OSS in Southern Africa
- Create an enabling environment for the adoption of OSS in Southern Africa.
- Act as a catalyst for open source initiatives in Southern Africa.
- Build on and compliment similar initiatives internationally.



# 4 Rs in E-Waste Management: Reduce, Refurbish, ReUse, Recycle

Reduce: do you really need that new computer?

Refurbish: fix and refurbish old computers

ReUse: give your computer a new lease on life

Recycle: find a local recycling facility



## **Background to OSS**

What is open source software (OSS)?

How Open Source started

• What is Linux?

Impact of Open Source on South Africa





## Extending life span using OSS

- OSS provides flexibility to allow programs to be stripped down so they use less memory and less processing power
- Pick and mix approach of Linux allows use of outdated hardware to use new formats
- GNU/Linux allows old computers to be used in thin client networks.





# Different choices for different scenarios

- Different OSS solutions for different situations, individuals and organisations:
  - Installing OSS applications on existing older windows versions
  - Installing OSS applications and GNU/Linux (or others) versions
- Different versions of Linux for different versions of hardware



# OSS Applications on existing Desktop Operating System

Internet browsers – Mozilla Firefox

- Office applications AbiWord
- Graphics Gimp

Email – Thunderbird, Evolution



### Which Linux for which machine

- Linux Distributions for old computers
  - Xubuntu
  - Damn Small Linux
  - DeLi Linux
  - Puppy Linux
- Thin Client
  - LTSP (Linux Terminal Server Project)





# Linux Applications for Old computers

- Linux LiveCD Router
- FreeS/WAN
- Print Server





# **Examples of OSS use on Refurbished computers**

Open Source Centre – Soweto

TuxLabs Program

SchoolNet Namibia - OpenLab



## **Getting started with OSS**

#### How to get Open Source Software

- On the internet
- Through local distributions
- Shops
- Freedom Toaster
- Libraries and community centres
- From friends
- Computer Magazines



## **OSS Help & Support**

- Informal support
  - Bulletin boards
  - Mailing Lists
  - Linux User Groups
- Commercial organisations
  - Impi Linux
  - Inkululeko Technologies
  - Ubuntu Linux



## The Car Analogy

- Mechanics of old cars
  - can tinker with engine
  - not tied to manufacturer or authorised dealer
  - just keeps going







## Thank you



