HeNN E-libraries in Nepal

Collaboration with KUOSC, DoCSE, KU

"One E-Library Per District"

Overview

- About Help Nepal Network(HeNN)
- ☐ About KUOSC
- ☐ About E-Library Project
- Impact

Help Nepal Network (HeNN)

- The largest charitable network of Nepal, is a global charity run on a fully voluntary basis.
- Founded in 1999
- President: Mr. Arun Singh Basnet
- Works for Health, Education, Disaster Relief
- Country Network: Austria, Canada, Denmark, Ireland, New Zealand, Russia,
 Saudi Arabia, South Korea and Qatar, UK, US, Nepal.

Kthmandu Unviersity Open Source Community (KUOSC)

- An Autonomous wing of Kathmandu University Computer Club, fully responsible for FOSS related activities in Kathmandu University.
- We promote Openness.
- Activities organized: Linux Talks, SFD Eve, Document Freedom Day,
 Localization, Various Trainings and workshops with support of KUCC
 & FOSS NEPAL

Help Nepal Network - Kathmandu University

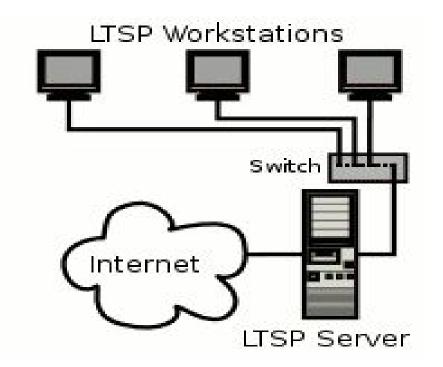
- DoCSE Signed a MoU with Help Nepal Network in 2014.
- MoU states: Technical Assistantship of E-Library Project will be done by students from DoCSE, KU

HeNN E-library Project

- Back in 2007 FOSS community of Institute of Engineering (IOE), deployed in two sites Thakalmath and Dang Deukhuri
- Deployed 35 E-Libraries till 2015
- Surkhet, Salyan, Bardiya, Kailali, Pyuthan, Gulmi, Sindhupalchwok, Sinduoalchowk, Sunsari, Morang, Udayapur, Saptari, Kavre, Parbat, Kaski, Solukhumbu, Kathmandu, Lalitpur, Rautahat...

Linux Terminal Server Project (LTSP)

Most useful feature present in Edubuntu OS is the LTSP environmer



HOW LTSP WORKS

- 1. Thin-clients boot via a protocol called <u>PXE</u> (Pre-eXecution Environment)
- 2. PXE requests an IP address from a local <u>DHCP server</u>.
- The DHCP server passes additional parameters to the thin-client and downloads a Linux initramfs filesystem image via TFTP into a RAM disk on the client itself.
- 4. The thin-client then boots the downloaded Linux initramfs image, detects hardware, and connects to the LTSP server's X session (normally handled by ldm).

Establishment of E-Library

- ☐ Feasibility Analysis

 Reviewed the E-Library site after proposal is received
- Deployment5 Days Deployment(setup & training)
- Monitoring (Three times a year, for 3 years)
- Teachers' Training
 (2 days training, from LAN Cable connection to Edubuntu troubleshooting)
- ☐ Training of Trainee
 (Provided LTSP training to KUOSC Volunteers)

E-Library Contents

- ☐ Tux- Math
- ☐ Tux-Paint
- E-Paath
- Ajimji Premji Foundation(APF)
- ☐ Geo-Brainy
- Wikipedia (Offline)
- ☐ Gharelu Upachar

IMPACT of HeNN E-Library in Nepal

- E-Library established in 35 districts
 - Students from grade 5-10 generally use E-Library
 - Average 25 students in a class, 5000+ students are benefited daily.
- They are no more divided with Technology.
 - E-Library itself is an abundant web store filled with Content



References:

- http://helpnepal.net/story/one-district-one-e-library-campaign
- → http://ku.edu.np/cse/kucc
- → http://wiki.ltsp.org/wiki/Concepts