UBUNTUNET WORKSHOP 2012

TANZANIA EDUCATION & RESEARCH NETWORK TERNET

Damas A. Makweba Network Engineer / CTO - TERNET damas.makweba@ternet.or.tz

Contents

- Introduction.
- Infrastructure.
- Network overview.
- Challenges.
- TERNET, plans.
- Appreciation.

Introduction

- Tanzania Education and Research Network (TERNET)
 is an autonomous and independent organization
 within framework of the Societies Act, Cap. 337 and
 Regulations made there under and whose Board of
 Trustees is incorporated and registered under the
 Trustees Incorporation Act, Cap. 318.
- TERNET is a National Research Network (NREN) in Tanzania, it is for Tanzania higher learning and research institutions aiming at providing platform for enabling the sharing of education and research resources.

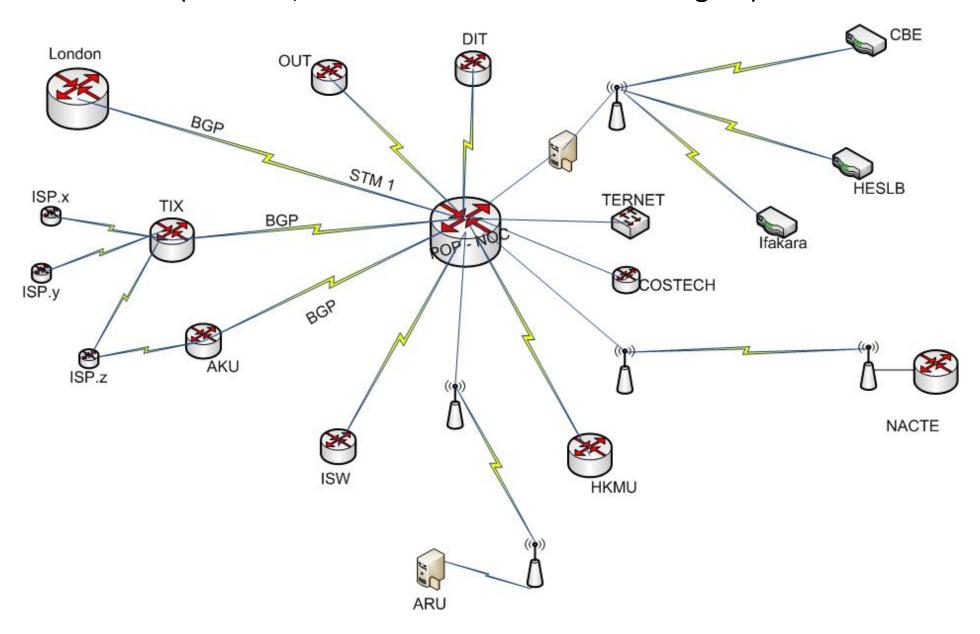
Infrastructure

- No infrastructure to connect members, TERNET.
- Members connected to NOC via ISP.
- ISPs, CTV fiber, Selcom UhurOne P2P wireless, TTCL, UCC.
- The government of Tanzania is running the National ICT Broadband Backbone (fiber) project which is managed and operated by Tanzania Telecommunications Company Limited (TTCL).
- Last Mile Connectivity is another project financed by World Bank is Last Mile Connectivity.
- The infrastructure of these projects will enhance usage of ICT applications.

NETWORK OVERVIEW

- 25 institutions, 12 institutions connected to NOC
- POP router STM1, SEACOM UbuntuNet Router in London.
- 10Mbps leased to member.
- One Point of Presence (POP), hosted at COSTECH.
- POP, leased bandwidth to clients (Higher Learning Institutions).
- ISP, between POP and member.
- POP, point-to-point wireless five institutions, three via Selcom UhuruOne, one via UCC and another own links.
- POP, five members via CTV optical fibre.
- Two UTP, from the POP router:- one to COSTECH router and another to TERNET switch.
- BGP peering with UbuntuNet Router, Tanzania Internet Exchange (TIX) and one client (Aga Khan University).
- Network 41.93.0.0/17, AS 37182
- Members , /29, /26 and /24

TERNET NETWORK OVERVIEW (Covered, some area in Dar es Salaam region)



Challenge

- Infrastructure, how to reach members outside Dar.
- No Point Of Presence in Zanzibar, Dodoma, Morogoro, Arusha, Mwanza, so institutions over there are not conncted.
- No direct link, how can TERNET hook directly with other NRENs.
- Power back up, electricity is an issue in Tanzania.

TERNET, plans

- Five to ten years to come, install 3 POPs (Arusha, Dodoma/Morogoro, Mwanza).
- TERNET, with other NRENs (KENET, etc) find the possibility to hook directly to each other.

Appreciation

 Just to mention some of many, We, TERNET appreciate the support and collaboration we have with UbuntuNet Alliance, NRENs, SNRC, IBM, COSTECH and others not in the list.

Thanks

damas.makweba@ternet.or.tz