UbuntuNet Alliance Updates
www.ubuntunet.net

Implementing CORENA:
Phase 1 Output and Phase 2 Plans

FEAST meeting - Kampala
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Our thesis..
- “Improved and affordable regional and international connectivity will enable African researchers to generate a proportionate amount of intellectual property goods to achieve parity with the rest of the world”
- Hence CORENA: Consolidating Research and Education Networking in Africa

CORENA
- Overall goal: Enable an environment… African Education and Research Institutions can exploit their full potential… contributing to national and international human development… increasing contribution to, and share in intellectual property output… effective national, regional and international collaboration.
- Principle Objective: Integration of African institutions into the global research and education community through provision of intra-African connectivity and enabling access to sufficient and affordable bandwidth.

Part 1:
CORENA Phase 1 Outputs and Outcomes
CORENA Phase 1 Outputs (1): Visit www.ubuntunet.net for soft versions

- Regional Situational Analysis (Policy, Regulation, Fibre opportunities, NREN readiness, Training Needs)
- Policy and Master Plan: Statement of key principles; Institutional arrangements; Definition and implementation plans for cross-border connectivity, regional overlays, and international connectivity; (ctd)

CORENA Phase 1 Outputs (2): Visit www.ubuntunet.net for soft versions

- Policy and Master Plan (ctd): Definition of Network Operations Centres for the East and South Cluster (KENET and TENET contracted to host them); A full definition of the engineering and backhaul requirements to enable connectivity to the UbuntuNet router in London (via fibre of VSAT); Business Plan and Financial projections.

Other Phase 1 Outcomes/Outputs

- Formulation of a new strategic plan, informed by the detailed situational analysis.
- Creating awareness, leading to growing support and formation of new NRENs
- Creating awareness of the Alliance among stakeholders within Africa / around the world through presentations, direct contact, and NUANCE - the monthly e-bulletin
- Capacity building for NRENs
- Operationalising UbuntuNet at the infrastructure level

Part 2: UbuntuNet Alliance Now
Visit also www.ubuntunet.net
Governance

Council of Members (VC/Rector and DVC Level), All member NRENs → Board of Director (9); Chairman Identified by AAU → CEO → Member NREN CEOs

The Current Board

- Prof Zimani Kadzamira, VC, University of Malawi – Chairperson
- Mr Albert Nsengiyumva (from Rwanda) – Vice Chairperson
- Dr Iman Abuel Maaly Abdelrahman (from Sudan)
- Mrs Margaret Ngwira (from Malawi)
- Dr Duncan Martin (from South Africa)
- Mr Steve Song (Shuttleworth Foundation)
- Prof John Kondoro (From Tanzania)
- Prof Meoli Kashorda (From Kenya)
- Eng Dr F F Tusubira (CEO – Ex officio member)

UbuntuNet Alliance Membership Status

Some category transitions over last 12 months:

- Formal REN, advanced network and sufficient bandwidth: South Africa
- Formal REN and underlying operational infrastructure: Kenya, Sudan, Malawi
- Formal REN but not operational: Rwanda, Tanzania, Zambia, DRC, Uganda, Mozambique, Ethiopia, Somalia
- REN in formation: Botswana, Swaziland, Lesotho, Namibia, Burundi, Angola, Mauritius, Djibouti
Note the African Indian Ocean Wave (AI-Wave)

UbuntuNet Current Operations

- UbuntuNet, London
- VSAT connection
- Tunnel to UbuntuNet
- (Switching to SEACOM Fibre)
- RENET
- Swaziland
- Botswana
- MoRENet
- UbuntuNet, Johannesburg
- Lesotho
- Namibia
- TENET/SANReN
- UbuntuNet, London
- UbuntuNet router in London
- VSAT connection
- Tunnel to UbuntuNet
- (Switching to SEACOM Fibre)

UbuntuNet Current Operations (2) – SA Detail

- Internet
- UbuntuNet router in London
- UbuntuNet router in Johannesburg
- Peering with local ISPs (7 so far)
- STM-1 circuits on SAT-3 submarine cable
- Transit from Telia Sonera and DataHop
- Local transit links
- Internet Solutions
- JINX
- Reehend JHB
- SA Internet
- Breehead CPT
- International Connectivity (1) - SEACOM and TEAMS landed and operational

Map: Thanks to Steve Song. www.manypossibilities.net
International Connectivity (2)

- South Africa: 10Gbps on SEACOM at $20m for 20-year IRUs (less than $10/Mbps per month)
- KENET: 155Mbps on SEACOM; Donated 600Mbps on TEAMS (but with high related costs)
- RwEdNet: 155Mbps donation from government on SEACOM to London
- RENU: Working on 10Gbps connectivity on SEACOM with USAID and IIEAF
- Offers on the table from SEACOM to TERNET; MoRENet, and UbuntuNet Alliance

Regional Connectivity (1)

- Underlying challenge: different sources of funding have disabled aggregation at this point in time.
- Solution: Fall upwards -
  – CEOs have agreed to commit some of their bandwidth (starting with a thread of 10Mbps, to expand with traffic) to the Alliance for regional transit and cross-border connectivity
- Current active engagement with FEAST, EU, and Dante about Africa-Connect

Operations

- TENET contracted to operate assets in London and South Africa and Southern Cluster NOC;
- KENET contracted to operate NOC in Eastern Cluster;
- Experienced NRENs providing engineering support;
- NRENs to manage under contract in-country connectivity and POP.
- Distributed secretariat;
- Ongoing engagement with FEAST; Dante; EU about Africa Connect operational arrangements

Part 3:

CORENA Phase 2 Plans: looking ahead
Strategic Priorities (2009 – 2013)

- NRENs development in Africa;
- Sufficiency and affordability of bandwidth;
- Institutional sustainability of UbuntuNet;
- Improved national policy and regulatory environments that enable REN activities.
- Increased interconnections among NRENs within Africa and to the rest of the world.
- Increased and effective support for regional content (including research) networks.

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- PHEA; Carnegie Corporation; Sida

Conclusion: We are creating the future of research and education networking.

- “We know that we have it in ourselves as Africans, to change all this [the challenges we face]. We must assert our will to do so. We must say there is no obstacle big enough to stop us from bringing about an African renaissance.”
  – Nelson Mandela

- Thank you