

Internet eXchange Points

The Problems

The Reality

The Hard Lessons

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Hard Lessons

- Cooperation between Competitors
- Regulatory Barriers and Attacks
- Neutral Turf and Ownership
- Neutral Operation
- Organization
- Funding Model
- Technology
- Rules of Behavior

Cooperation between Competitors

- The Customers get Better Service
- When the Customer Benefits, we all Benefit
- The I SPs who don't play soon Look Foolish
- Trust is the Critical Factor
- Communicating this is Hard, the Ugandan Experience

Regulatory Barriers

- The Kenyan Experience
- Why it is Better for the Country
- Why the PTT actually Benefits in the Long Run

Neutral Turf and Ownership

- Natural Fear of any One ISP or Carrier Owning and Controlling
- Do not be Fooled by the False IX, which is Really a Transit Service by a Commercial Company or PTT
- Neutral Business, Physical, and Technical Control/Ownership is Best
- Neutral Location with Good Circuits
- Ugandan Experience

Organization

- Formal but not so Formal that it is Hard to Get Work Done
- Participatory, but Able to Make Decisions
- Transparent, so Folk Build Trust
- Do Actual Work, Don't Spend Time Continually Re-Making the Same Decisions (avoid deja moo)

Funding Model

- If it does Not Pay for Itself, it will not Survive
- Small Capital Donations for Startup are Appreciated
- It Benefits your Customers, so it is Worth Paying for
- It Saves the ISPs International Transit
- Financial Transparency is Mandatory
- Consensus on Commitments and Expenditures

Technology

- Layer-2, not Layer-3 - Kenyan Lesson
- Route Servers and Reflectors are Complex
- Each I SP will have to do Real Internal Routing
- Small Routers are Available
- International Technical Conversation and History is Available

Rules of Behavior

- Don't Touch My Equipment!
- BGP Peering Policies and Automation
- Can I SPs Sell Transit over the I X?
- Should Non-Transit I SPs be Allowed?