

Kenya Internet Exchange Point (KIXP)

Presented
at

1st KIXP Peering Members meeting

Grand-Regency Hotel Nairobi

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By;

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Background

- The KIXP was established in 2000 by the Kenya ISP Association **TESPOK**
- Established as a **non-profit** entity
- Probably the only Regulator **Licensed** IXP in Africa
- Initially had **4 ISPs** exchanging traffic
- Currently there are **23 peering members**

Objectives

- Keeping **Kenyan Internet traffic local**
- Enhance the Internet **experience** of users
- Reduce overall **costs** related to providing Internet services
- Promote and encourage the creation of **local content**
- Create Internet **opportunities**
- Build **technical capacity**

Achievements

- On Valentines day we celebrated **5 years** of operational stability of the KIXP
- Prior to its establishment all local traffic was exchanged in **Europe & USA**
- Reduced the latencies from over 1200ms to less than **100ms** for local content
- Reduced monthly costs for Inter ISP transit from US\$ 3375 to less than **US\$200** for a 64Kbit/s local loop Circuit

Achievements ...(Cont'd)

- **ISPs Savings** resulting from need to upgrade international capacity links - an estimate 30% of ISP traffic was local
- Attracted **Government participation** through the Kenya Revenue Authority Simba System
- Improved connectivity through **Fiber Optic** and high speed wireless (FSO) connectivity

KIXPs Peers ...present

- ccTLD Root Server - **.KE**
- **F, J, .Com & .Net** Root Servers mirror Instances
- GPS based Network **Time Source** Server
- **16 ISP's** Networks
- 3 Internet **Backbone & Gateway** Operators
- **Multi-media** Service providers
- **Government** – Revenue Authority
- Education & Research Network (**NREN**)



coming soon...(Cont'd)

- GSM Operators - GPRS/3G Services
- Academic Networks - E-learning
- Local Loop Operators (LLO's) - Voice/data
- Content hosting providers - e-business
- More of Government - e-government
- Multi-media Service providers -
sms/gaming

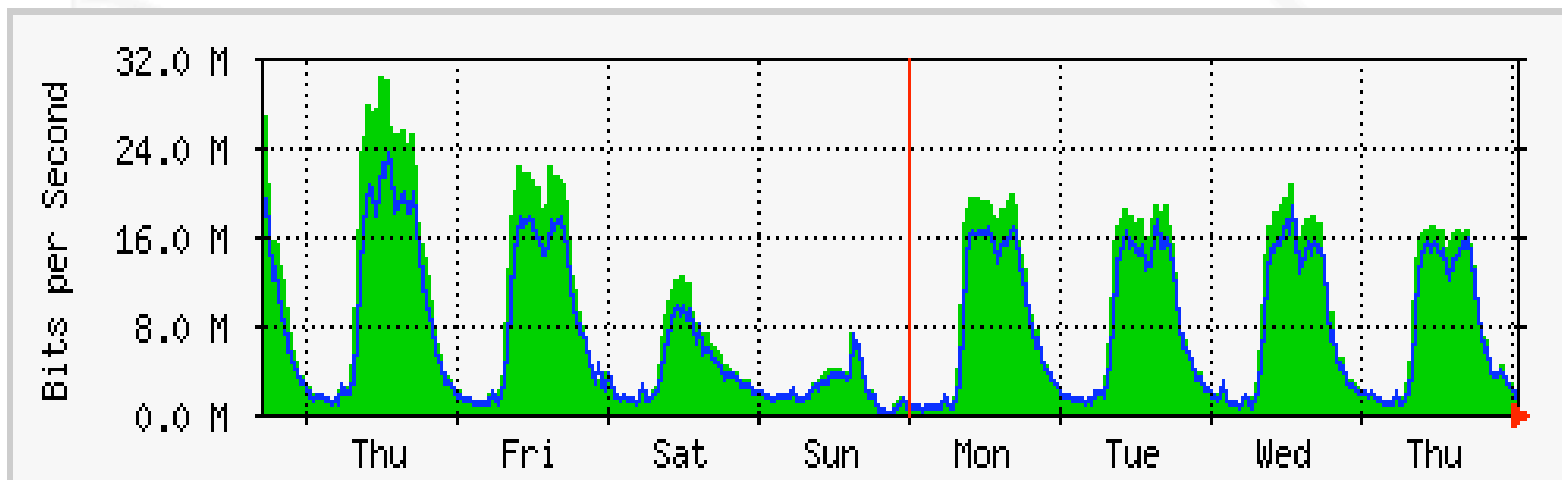
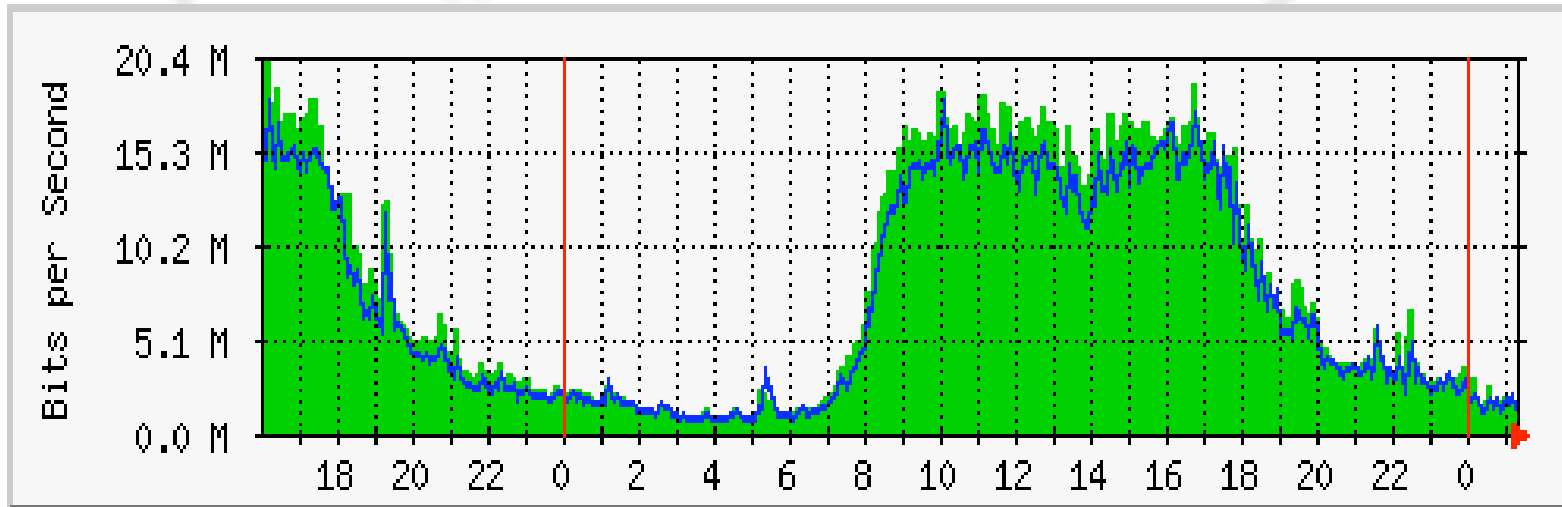


Housekeeping Projects

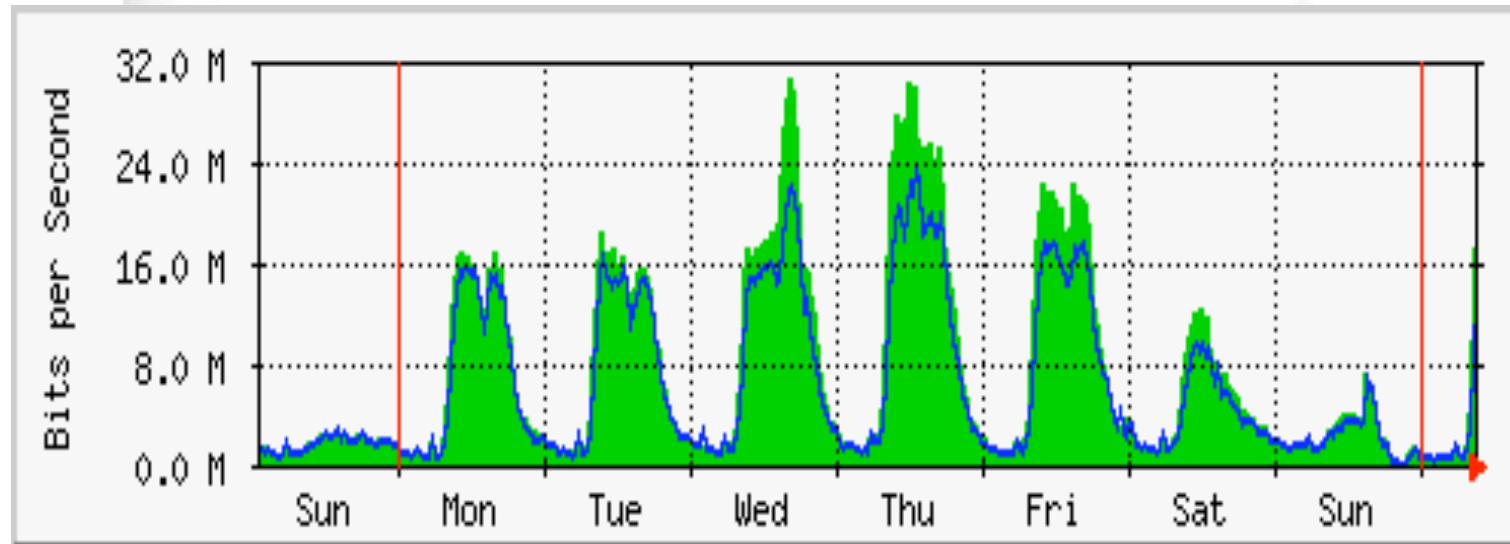
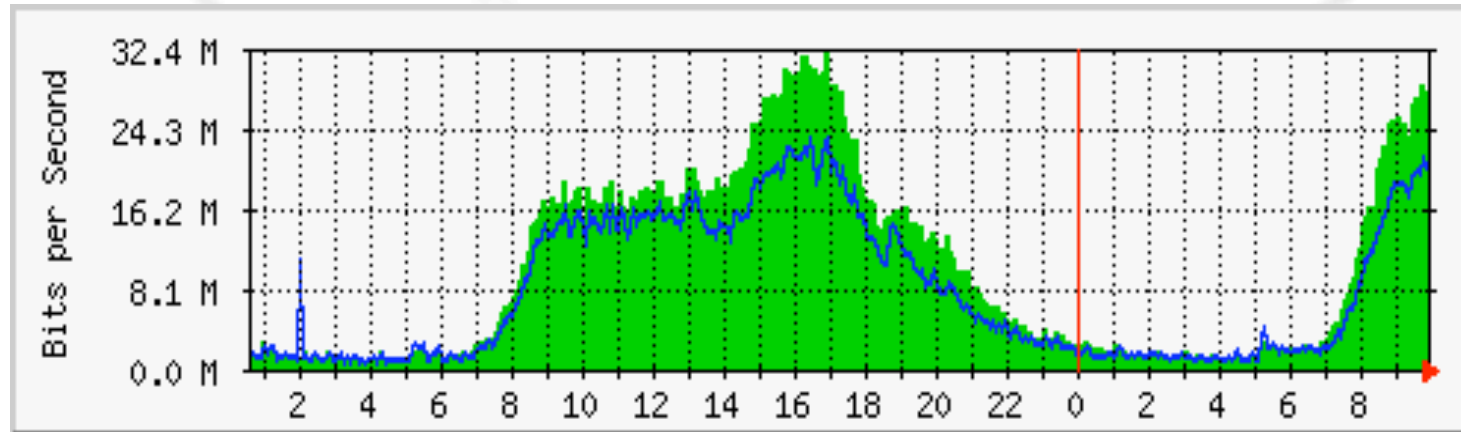
- **Topology Changes** to meet demand and cater for emerging technologies
- Policy Changes to accommodate new **membership groups**
- Policy changes to introduce **collocation services**
- Technical Specification to provision for **transit services**
- Enhancement of policy to **address code of conduct** for IXP members



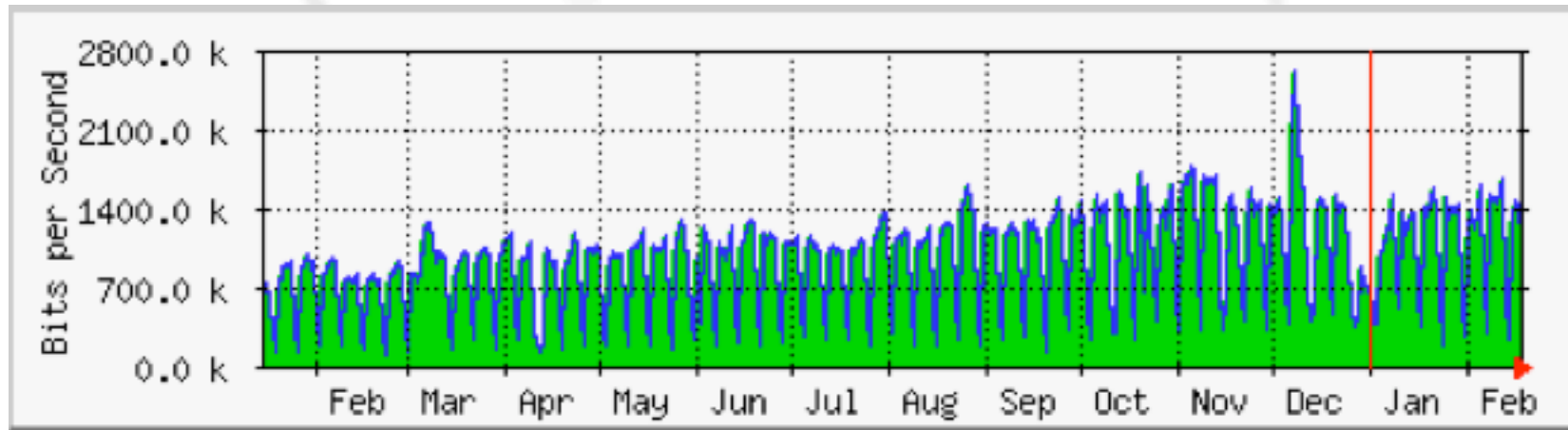
Normal Traffic Stats



Unusual traffic days

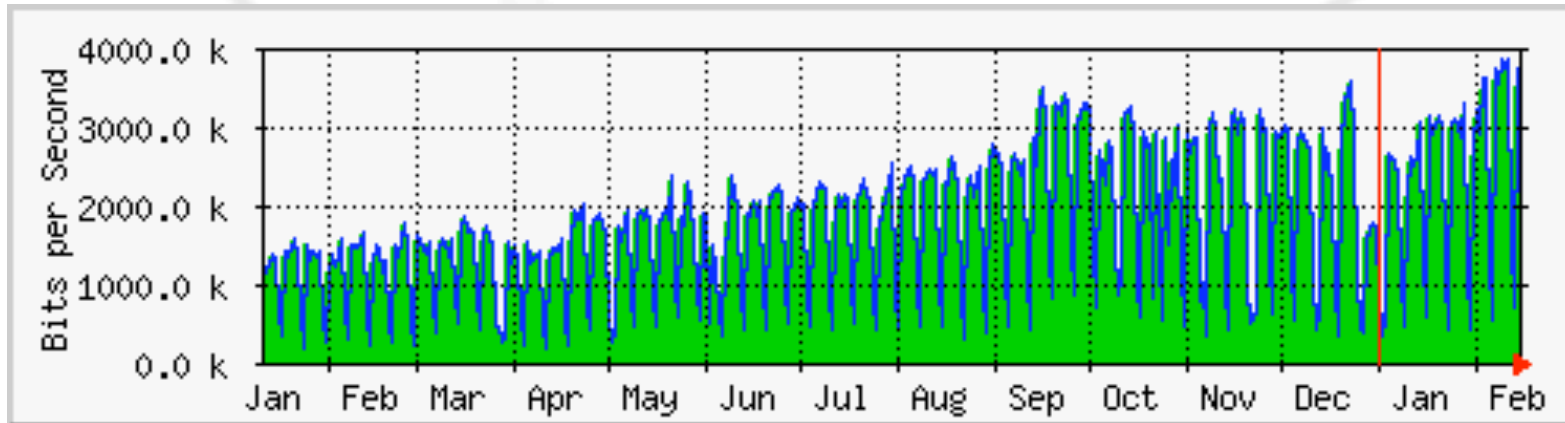


Annual Growth 2004 - 2005



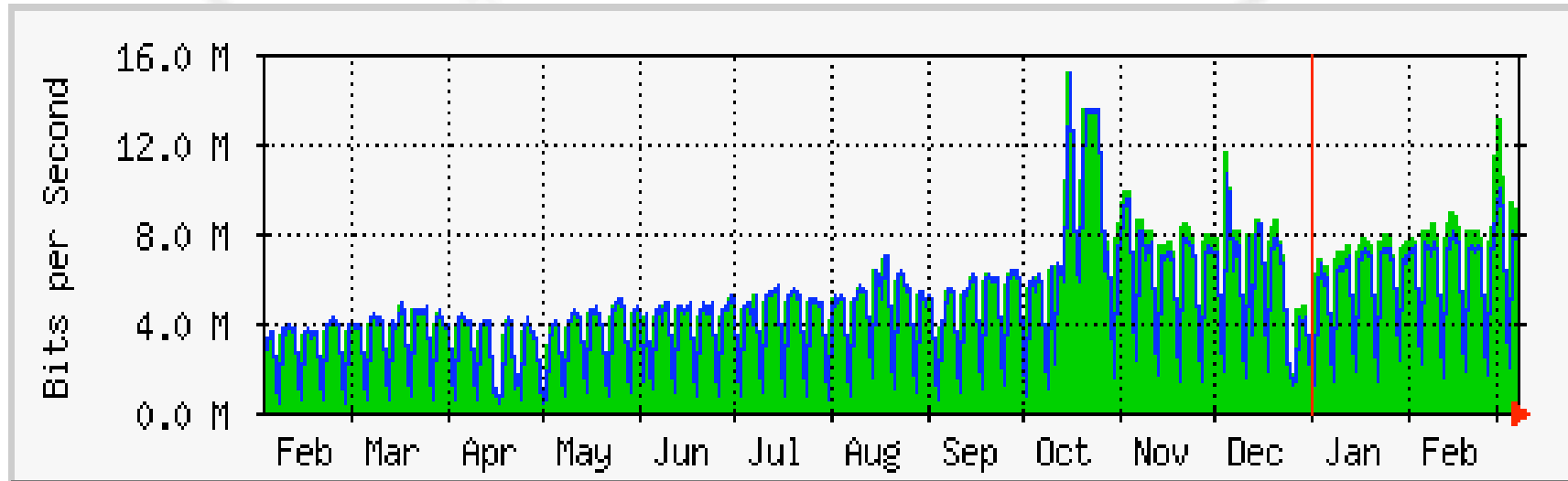
- Feb 2004: **900 Kbps**
- Feb 2005: **1,600 Kbps**
- Annual growth rate: **77.8%**

Annual Growth 2005 - 2006



- Feb 2005: 1,600 kbps
- Feb 2006: 3,800 Kbps
- Annual growth rate: 137.6%

Annual Growth 2006 - 2007



- Feb 2006: 3,800 kbps
- Feb 2007: 8,000 Kbps
- Annual growth rate: 110.5%

Growth Catalysts

- Increased awareness in ICTs
- Regulatory changes in the license structures/regime
 - VoIP licensing to Service Providers
 - 3 tier licensing structure
- Governments' adoption of e-governance a tool to enhance service delivery
- Vibrant Private sector
- Availability of technical capacity

IXP's in Africa



Our Goals

- Attract both local and international **Content providers & distributors** to the KIXP
- Seek **transit** for our members via well established IXP's like LINX, AMSIX, etc
- Interconnect **East African IXPs** through the EARPTO initiative
- Interconnect with the rest of **African IXP's** through the ongoing AfriSPA project

Why the KIXP?

- **Affordable Connectivity** - 10 Mbs for Kshs. 50,000 Per Month
- **3rd Largest** and fastest growing IXP in Africa
- Access to E.A Countries i.e **UG, TZ and RW**
- Stable and robust **local Infrastructure**
- Multiple International **VSAT providers**
- Political Support & Stability

Conclusion

- There lies a huge potential for **e-business** to be tapped in Africa and...
- KIXP presents that opportunity to join in the Internet revolution in Africa
- Opportunity to contribute in the **development of ICT's** in the continent.
- Get to experience, export the **rich African Culture and Content** online
- This will lead to a **balance in traffic patterns** between Africa and the West

**KIXP
Facility**





Thank you!

