Peering in South Africa

MENOG 3 / Kuwait
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Introduction

- Thank you for the invitation to speak at MENOG.
- Current Network Engineer at Internet Solutions. Member of the JINX Technical Advisory Group

My views are my own!

Agenda

- Not quite peering basics
- Peering in South Africa
- The Johannesburg IX (JINX)

Not Quite Peering Basics

- This is not a peering primer
- You are probably tired of hearing about the benefits of peering.

This is old news

- You already know that all Internet traffic is exchanged via peering of some sort; either at ‘Tier 1’ or elsewhere...

More importantly

- You know you want to peer!

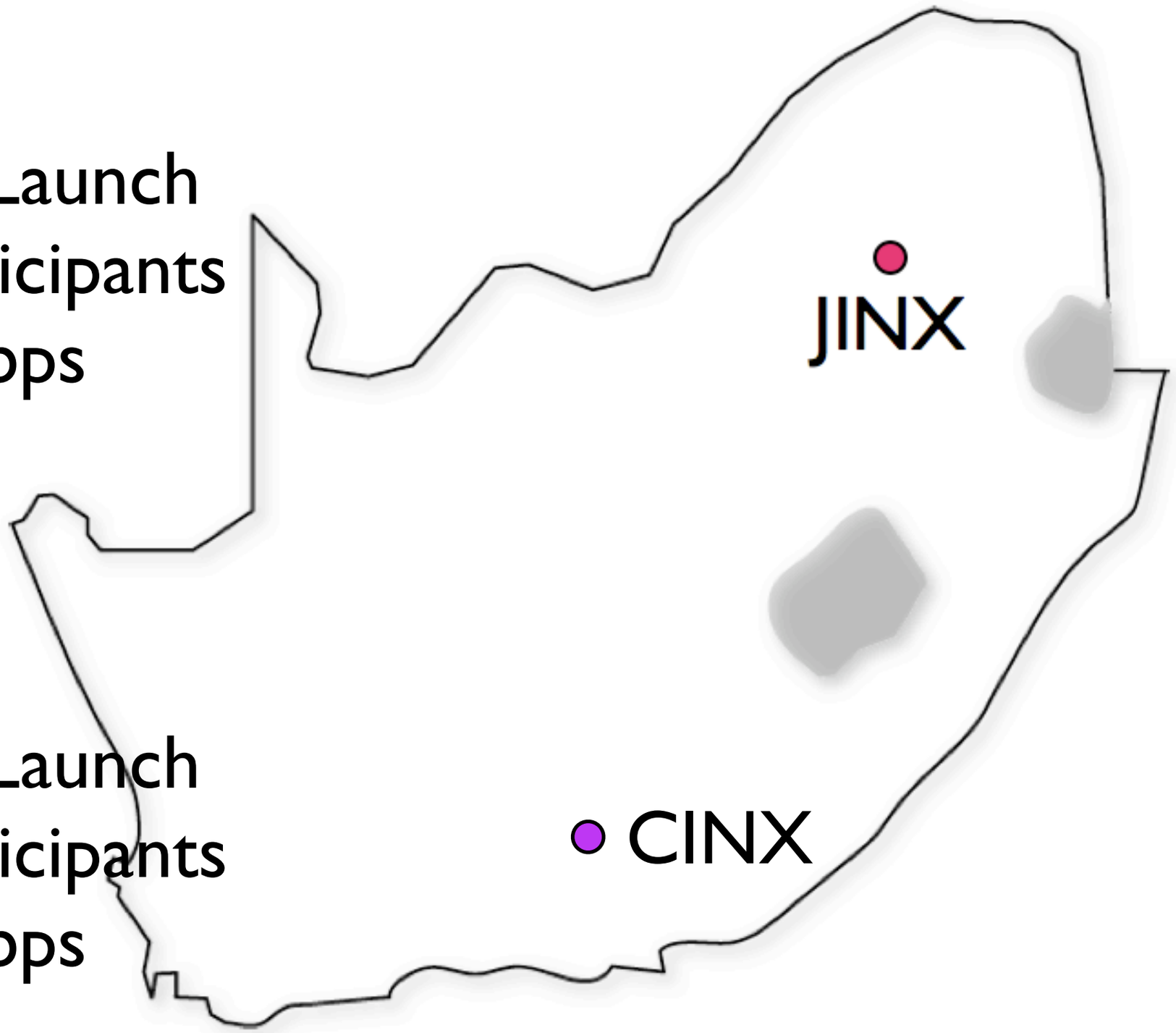
So we won't discuss...

- How peering helps make your network more resilient
- How peering improves the reach of your network
- How peering drives down the Operational Cost of your network

Peering in .za

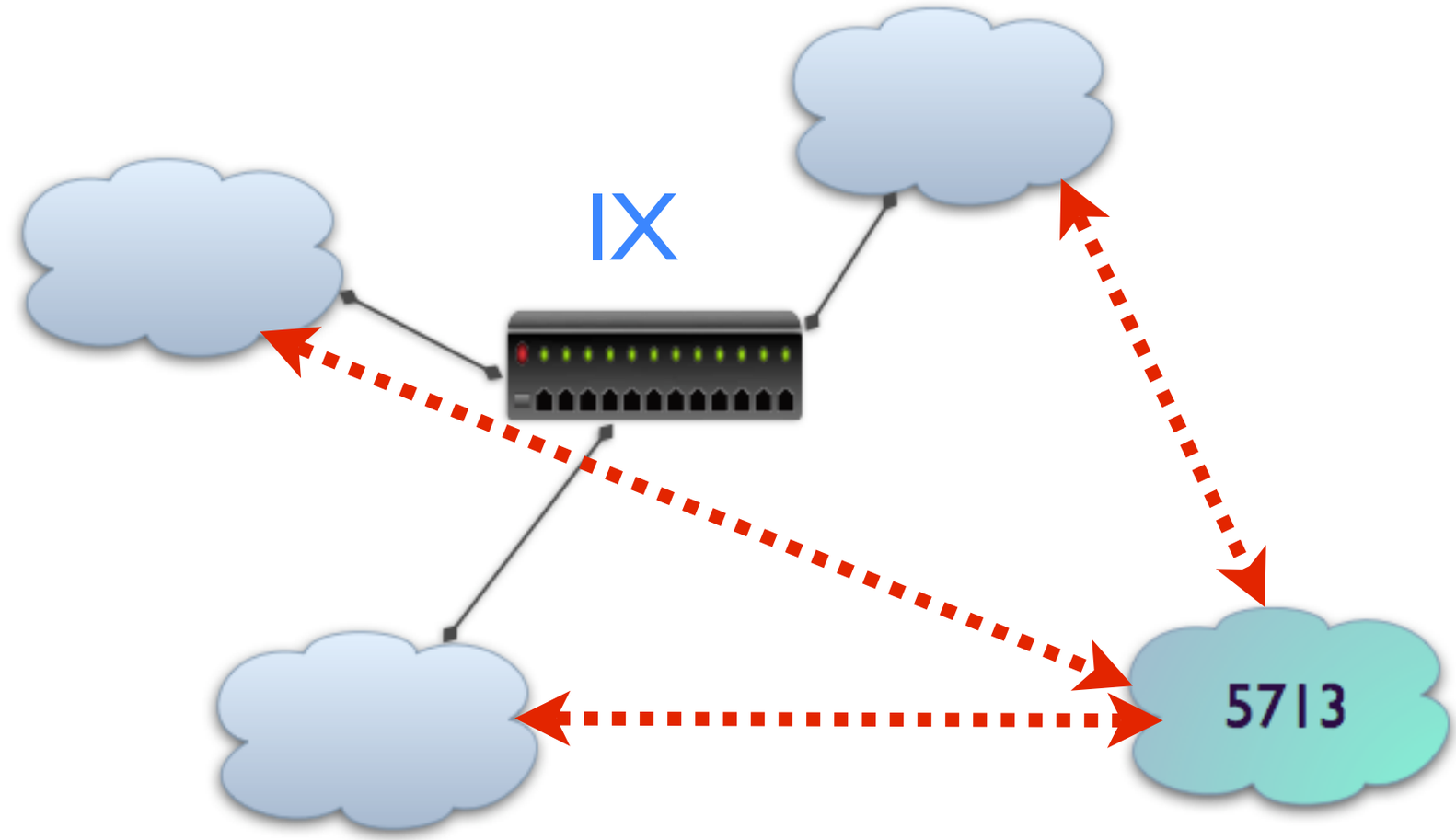
Peering in .za

JINX
- 1996 Launch
- 4 Participants
- 512 kbps



CINX
- 1997 Launch
- 4 Participants
- 256 kbps

Peering in .za



Peering in .za

Press release 9

http://web.archive.org/web/19980626024224/www.ispa.org.za/press/press9.html

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Telkom Refuses to Supply International Bandwidth to South African Internet Service Providers

For immediate release: 11 August 1997

The Internet Service Providers Association (ISPA) learnt recently that Telkom SA had reached a decision that it would no longer supply any new international bandwidth to the South African Internet Service Provider (ISP) community.

This decision to refuse to supply basic telecommunications infrastructure runs contrary to the interim ruling made in a recent press release by the South African Telecommunications Regulatory Authority (SATRA). In their statement, noted that until it had completed its inquiry, Telkom must desist from claiming that it be given exclusivity on the provision of Internet access.

The ISPA has laid an urgent complaint with SATRA against Telkom's actions.

The ISPA is concerned that refusal to supply additional international bandwidth to ISPs will retard the future growth and development of the Internet in South Africa.

For further information please contact:
David Frankel, (011) 447-5566
Mark Todes, (011) 235-6500

>10 years later

- 5713 is still absent from the JINX
- CINX has collapsed

The JINX Today

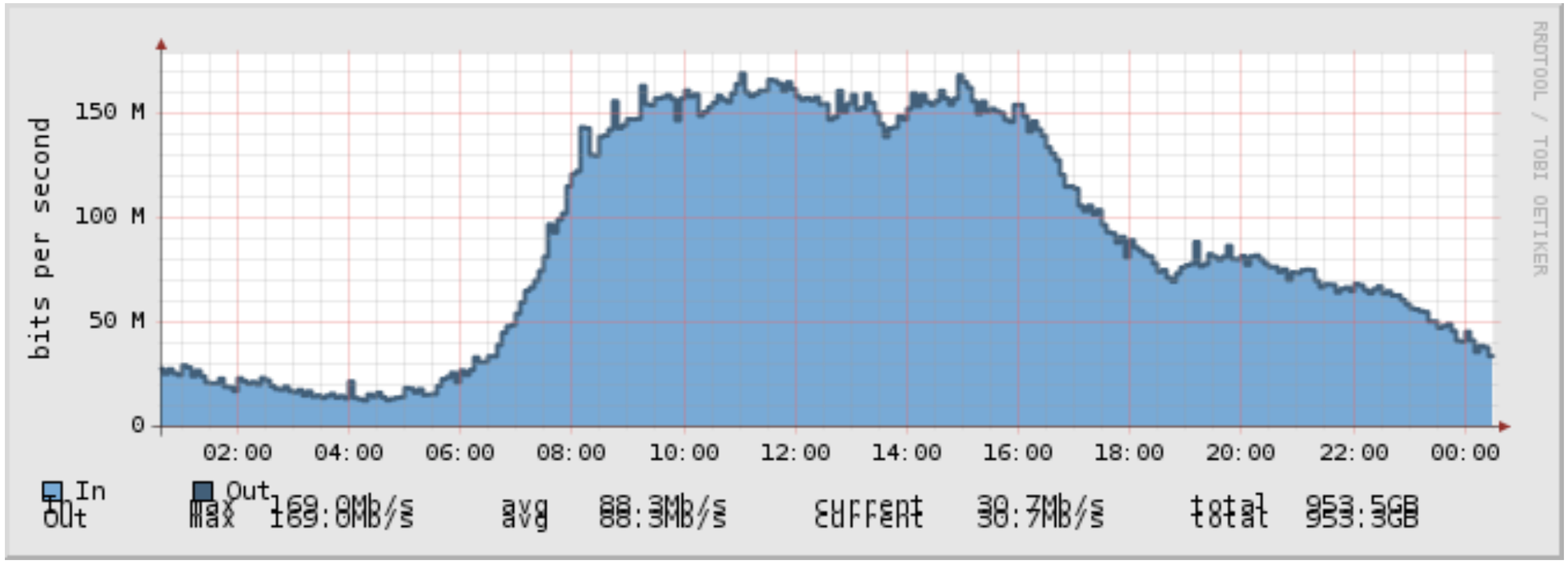
Current Workings

- Currently housed in a Data Centre at AS3741.
- Open to all ISPA members; ISPA membership is open to any ISP in the Southern African region.
- No charge for IX connections (but there are ISPA membership fees, and ELCs!)
- No stipulated interconnection policy.

Vitalstatistix

- 22 individual peers
- 2 DNS Root-Servers
- TLD/SLD services
- Supports IPv6 and VoIP

The mandatory..

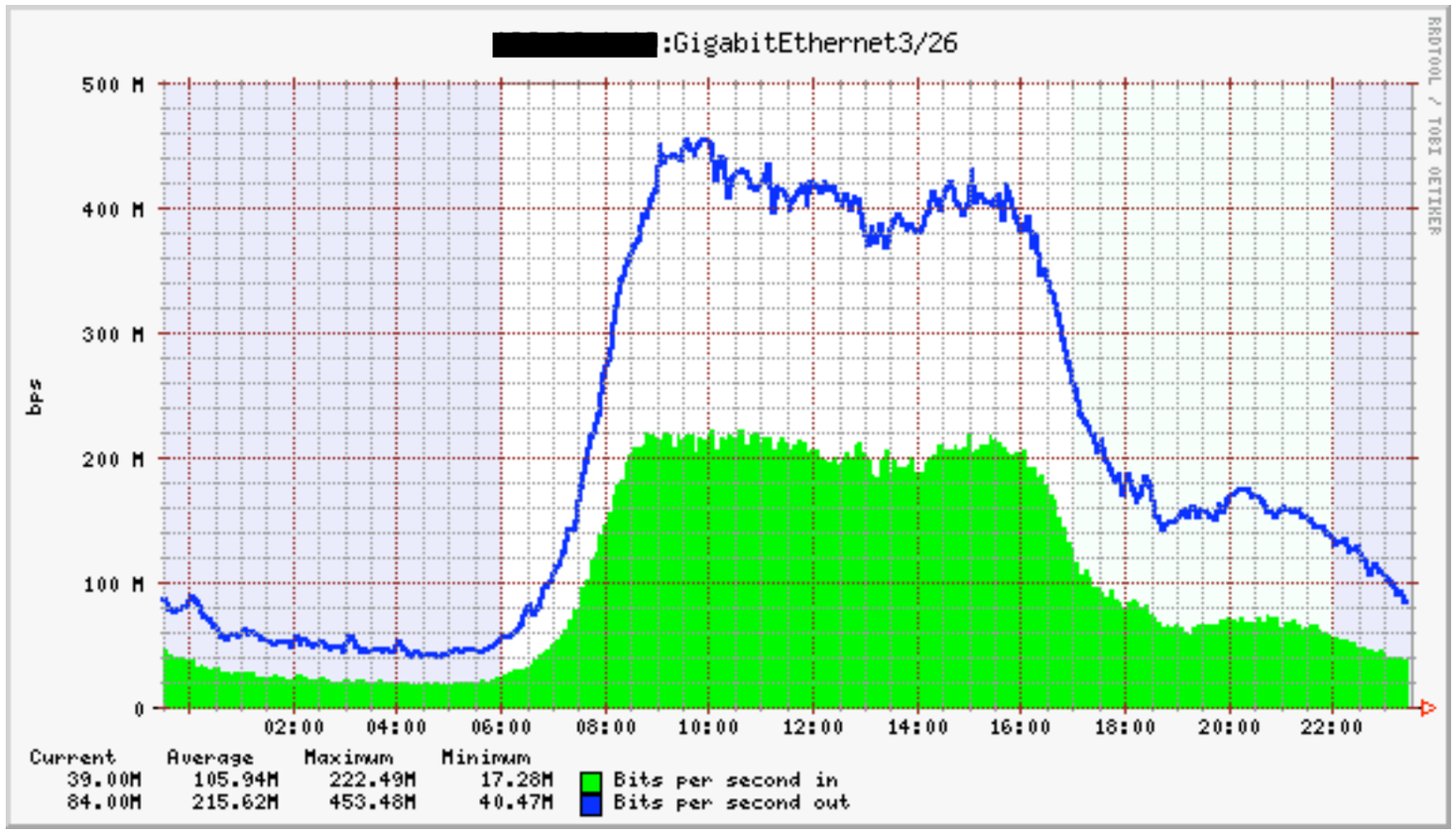


..but misguiding

Problem 1

- Peers meet at the IX, and are free to negotiate their own interconnects; often bypassing the switch fabric, resulting in a loss of traffic visibility.

Problem I



Sample stats for just one peer to AS3741 that doesn't peer across the IX fabric

Problem I

- PNI service not available :-)
- Equivalent line charges (ELCs) encourage private peering.
- Line costs (Telco) are still very expensive.

Problem II

- Purchasing a dedicated peering circuit isn't necessarily cheaper than transit. Most smaller peers haven't seen growth on their peering links, and it's often easier and more cost effective to put in a transit link.

Problem II

- Self-styled ‘tier 1’ providers impose restrictive peering policies reducing the potential available peers at the IX; this potentially increases peering traffic (private or otherwise), but doesn’t help the number of IX participants grow.

Problem III

- DSL has been a disruptive market force; available DSL provisioning mechanisms have spelt doom for most small ISPs, whilst existing ones now outsource these services to the few providers that can deliver them (eg. SAIX, IS).

Things we'd like to see change

- Cheaper telco circuits...
- Offer peers additional services (like PNIs).
- Offer a distributed switching environment.
- Remove the ISPA class distinctions for connection to the IX.
- Find a equitable solution to ELCs.

Thank you!

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