VoIP Peering…

…and what it hasn't got to do with you

Mike Hughes

What *is* VoIP Peering?

- Who thinks it's something to do with the transport
  - Like enabling QoS/.1p on your network?
  - That it has something to do with BGP?
  - Like a bunch of VoIP providers running IP networks just for voice?

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- IT IS *NONE* OF THESE THINGS

“Peering” overload?

“So, part of this entire debacle is terminology. We need to kill the use of the heavily overloaded word Peer…”

- Vijay Gill

So, VoIP interconnect then?

- Well, yes. Probably for signalling traffic
  - e.g. SIP
- Interconnecting different network's SIP registries together in some way to advertise reachability to users and resources
- The inter-provider VoIP world is still growing, so things may yet change
- But, it still *doesn't* touch the transport

LINX

VoIP for Dummies

- There are two main elements of a phone call
  - Call setup
  - The voice channel itself
- They are two separate items
- In the VoIP world
  - SIP does call setup via a SIP proxy/registry
  - The call goes direct between the “handsets”
  - Signalling path and transport path are different!

So, where does that leave us?

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  - Shouldn't cause problems for VoIP
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"*It's got nothing to do with us*"

…or so I thought

So what could exchanges do?

- I asked around if there was a role for an IXP
- For the neutral IXPs, there could be a role in resolving trust issues
  - Most neutral IXs were set up for this reason
- Possible areas:
  - Independent verification of call routeability
  - Verification of route quality?

Hang on…

- “Here’s one we’ve made earlier”
- The RIPE NCC TTM project
  - Provides all important measurements for VoIP
  - One-way delay, packet loss, jitter
  - Can detect path changes
- The RIPE RIS project
  - Can detect changes in the global routing table

Conclusions

- Let’s not misfire, but instead monitor developments
  - Actually see what our participants want us to do
- Don’t try and re-invent various wheels
- In some sense what we are doing right now is good enough for VoIP today
  - But we need to keep an eye on tomorrow