Peering Jargon

Presented by Mark Tinka
Chief Network Architect
Global Transit
TIME dotCOM
Kuala Lumpur, Malaysia
Presentation Overview

- Brief On Peering Jargon
- Peering & Related Jargon
Brief On Peering Jargon
Brief On Peering Jargon

- A lot of terminologies used in the peering game.
- We shall look at the more common ones.
- Will be directly related to peering, as well as ancillary non-peering functions that support peering.
Peering & Related Jargon
Peering & Related Jargon

- Bi-lateral (peering):
  - Peering relationships setup “directly” between two networks (see “Multi-lateral [peering]”).

- Carrier-neutral (data centre):
  - A facility where customers can purchase network services from “any” other networks within the facility.

- Cold-potato routing:
  - A situation where a network retains traffic on its network for as long as possible (see “Hot-potato routing”).

- Co-lo (co-location):
  - Typically a data centre where customers can house their network/service infrastructure.
Peering & Related Jargon

- **Dark fibre:**
  - Fibre pairs offered by the owner, normally on a lease basis, without any equipment at each end of it to “activate” it (see “Lit fibre”).

- **Data centre:**
  - A purpose-built facility that provides space, power, cooling and network facilities to customers.

- **Demarc (Demarcation):**
  - Typically information about a co-lo customer, e.g., rack number, patch panel and port numbers, e.t.c.
Peering & Related Jargon

- **DFZ (Default Free Zone):**
  - A situation where networks run their routers with the full Internet BGP routing table and no default route.

- **De-peer:**
  - A situation where a network terminates a peering relationship with another (see “peer”).

- **Downstreams:**
  - Typically a network’s customers (see “Upstreams”).

- **Eye-balls:**
  - End-users of a network that are typically requesting content off online resources.
Peering & Related Jargon

- **Facility:**
  - May be synonymous with a data centre or co-lo site where networks house their infrastructure.

- **Full circuit:**
  - A link provided by a network operator as an end-to-end connection between two points of interest to the customer (see “half circuit”).

- **Half circuit:**
  - One end of an end-to-end circuit that is provided half-way the distance, before it is picked up by another network operator for completion (see “Full circuit”).
Peering & Related Jargon

- **Hot-potato routing:**
  - The ability of a network to hand traffic off to other networks at earliest possible moment (see “Cold-potato routing”).

- **Interconnect charges:**
  - Monies paid by peering parties for them to interconnect, e.g., cost of cabling.

- **IPLC:**
  - International Private Leased Circuit – a leased line that spans two or more countries.

- **Looking glass:**
  - A device/resource that permits anybody that is interested to analyze a network’s view of the Internet.
Peering & Related Jargon

- **Lit fibre:**
  - Fibre pairs owned by network operator who has attached equipment at either end to generate bandwidth from them (see “Dark fibre”).

- **Mandatory (peering):**
  - A situation where members at an exchange point are “forced” to peer with one another.

- **MMR (Meet Me Room):**
  - A centralized passive, cable switching panel in a data centre where interconnects between networks occur.

- **Multi-lateral (peering):**
  - Peering with a group of networks through a single negotiated policy (see “Bi-lateral peering”).
Peering & Related Jargon

- **No (peering policy):**
  - A network implementing this general policy is not interested in peering with any other network (see "Open, Selective, Restrictive [peering policies]").

- **Off-net (traffic):**
  - Traffic that is handed off to another network at some point in its flight.

- **On-net (traffic):**
  - Traffic under the control of the same network, i.e., the origination and termination of traffic remains occurs on the same network.
Peering & Related Jargon

- **Open (peering policy):**
  - A network implementing this general policy is happy to peer with any other network without restriction (see “No, Selective, Restrictive [peering policies]”).

- **Paid peering:**
  - Is similar to Transit where one network pays another for access to its backbone, but here, the network being paid provides connectivity only to its customers, and not the whole Internet.

- **Peer:**
  - A network with whom you exchange traffic.

- **Peering:**
  - The act of exchanging traffic with a peer.
Peering & Related Jargon

- Peering co-ordinator:
  - An individual within an organization that handles all peering-related matters for that network.

- Peering policy:
  - A set of guidelines by which network operators will peer with external networks.

- PoI (Point of Interconnect):
  - A location, mutually agreed on by peering parties, where peering will occur.

- Private peering:
  - Peering that does not typically involve any public exchange points, i.e., back-to-back agreements (see “Public peering”).
Peering & Related Jargon

- Public peering:
  - Peering typically done across a public exchange point (see "Private Peering").

- Restrictive (peering policy):
  - A network implementing this general policy is normally not interested in peering with any other networks (see "No, Open, Selective [peering policies]").

- Route registry:
  - A centralized database that contains routing information, e.g., prefixes, AS_PATH’s, ASN’s, e.t.c.
Peering & Related Jargon

- **Route server:**
  - A centralized router at a public peering exchange point that is able to serve all member routes via a multi-lateral peering strategy.

- **Selective (peering policy):**
  - A network implementing this general policy is normally happy to peer provided a minimum set of criteria are met (see “No, Open, Restrictive [peering policies]”).

- **Settlement-free peering (a.k.a SFI):**
  - Neither party pays the other for the exchange of traffic.

- **Settlement-based peering:**
  - One of the networks pays the other for the exchange of traffic (see “Transit”).
Peering & Related Jargon

- **Traffic ratio:**
  - The balance between how much traffic a network sends to its peers vs. what it receives from them.

- **Transit:**
  - A service where a network pays another for access to the global Internet.

- **Transit-free:**
  - A situation where a network does not purchase any Transit from any other network, and yet “usually” has a full view of the global Internet.

- **Upstreams:**
  - Typically networks to whom you hand-off traffic and pay a fee, e.g., Transit providers (see “Downstreams”).
Thank you!

Q&A

mtinka@globaltransit.net
mtinka@time.com.my