Peering Jargon

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Presentation Overview

- Brief On Peering Jargon
- Peering & Related Jargon
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• 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
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• 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 "Down streams").
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Thank you!

Q&A

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