Peering Jargon

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Presentation Overview

- Brief On Peering Jargon
- Peering & Related Jargon

Brief On Peering 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

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 "activtate" 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-lateralpeering").*

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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