Peering Strategies for Network Operators

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Peering Strategies for Network Operators

• The 2013 Internet Peering Playbook (kindle, ipad only)
• Ch15: International Peering Strategies
• Ch14: Remote Peering*

→ Peering Strategy is All About the Blend
→ Remote Peering changes everything
What it is, how it works, benefits, use cases

REMOTE PEERING
Traditional Peering Model

Fixed Cost Circuits

Traditional Peering
Router CapEx
Colocation Fees
Deployment/Install Fees
Paperwork for each IXP
Weeks or Months to turn up
Remote Peering Model

Remote Peering VLAN(s) delivered to the router

Remote Peering Provider Equipment

Remote Peering
- No Router CapEx
- No Colocation Fees
- No Deployment/Install Fees
- Paperwork Reduction for IXP
- Near instant turn up
Remote Peering Service Delivery Model

Single physical port delivered to customer router

10Gbps Remote Peering Service

With potential many VLANs (one per exchange point) delivered to the customer router
Peering Strategy

WHY REMOTE PEERING CHANGES EVERYTHING
The New Business Case for Peering

Traditional Peering vs. Remote Peering vs. Internet Transit

...This economic benefit changes everything

...Enables more IXPs
Remote Peering ➔ Build into More IXPs
Extend strong regional IXPs to customer
Peering Strategy is all about The Blend

Blend
1) Transit
2) Peering
3) Remote Peering
4) CDN
5) Full POP Deployment

All about the Blend

Content Provider
Server Farms, Back-end Networks and Systems

Transit Provider X
Transit Provider Y

Default path...

...then optimize

Popular Static Web Objects

Content Delivery Network (CDN)
Remote Peer Locations
Traditional Peering Deployments

Dynamic Web Object Distribution

So why peer?...Peering for Security
Peering improves Security

Benefit of peering
1) Cost Savings
2) Performance Benefits
3) Security
Remote Peering Transition to Full POP Deployment

Within Weeks
- Remote Peer IXP 1

Migration over time

Within Months
- Remote Peer IXP 3
- Remote Peer IXP 4
- Full POP @ IXP 1
- Full POP @ IXP 2
Remote Peering Extends the Life of IXP

Value of the IXP

IXPs with Remote Peering sell more peering ports even when colocation center is out of space or power

IXPs may not be able to add value (traffic and routes) when colocation center is full
Breath of Fresh Air to Peering Community

Peering Break-Even Point
easy to reach,
Long runway

Peering Break-Even Point
harder to reach,
Short runway

Peering Break-Even Point
unreachable,
No Runway
Summary: Peering Strategies are all about The Blend

1. Internet Transit
2. Internet Peering
3. Remote Peering <- Trending Now
4. CDN
5. Full POP Deployment

Weighting depends on the network profile