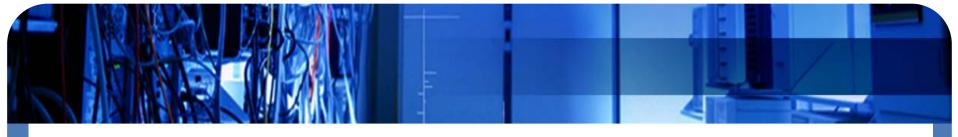
Colocation Workshop

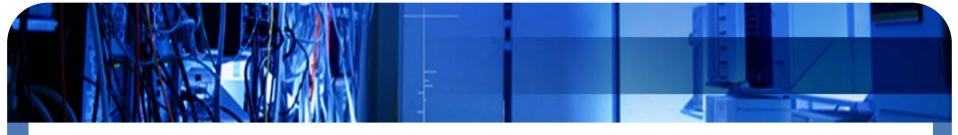


Changing the Peering Landscape?



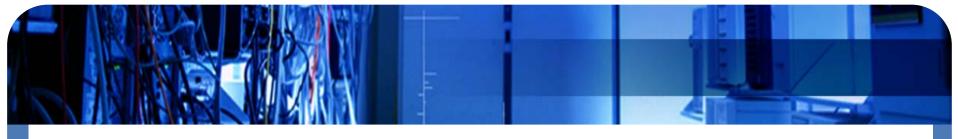
Peering is an opportunity to save on transit

- If peering is more expensive than transit, few people will bother
- In the past, colocation was not considered a significant cost in peering equations, that has changed
- Many providers are finding their colocation cost is higher than their transport costs, especially in tight markets



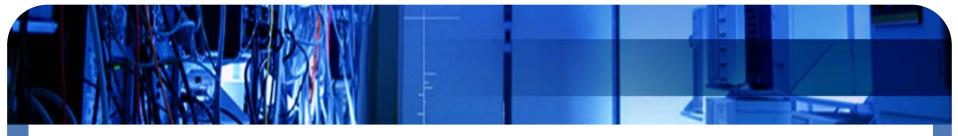
Power is the real problem

- While people say "colocation is expensive", in most cases power is the limiting factor
- Power costs are rising disproportionately to the market price of power outside the colocation market
- Many peers are having to purchase empty racks to supply their power needs
- If the colo facility will even sell you empty racks



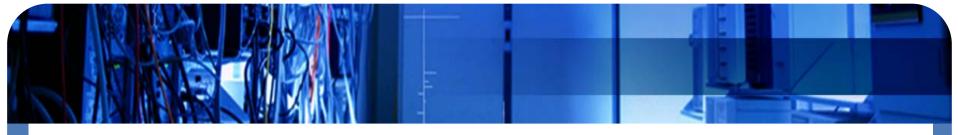
* Consequences

- Because people cannot find colo, they use Pseudowire to attach to the IXes
- This may cause additional instability in peering sessions, or even the entire platform
- It also limits the ability of networks to fulfill market potential
 - Customer connections
 - Private peering
 - Redundancy



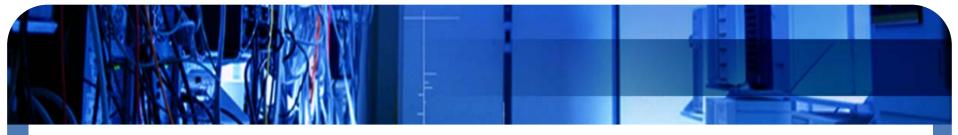
Questions

- Are transit providers reaping the benefit because networks are using transit instead of peering?
- Are colocation providers charging extra because they have a scarce resource and a captive market?
- Or are they losing possible revenue because they do not have the power to meet the demand?
- Are users suffering because networks are not as richly connected?



Questions

- Are smaller providers hurt more because of their lower margins?
- Or are they better able to survive because they are more nimble, have smaller requirements, etc.?
- Are fiber / layer 1 providers benefiting?
- Is peering in general hurt because networks are slow to upgrade, causing congestion?



Questions

- Does colocation consolidation help or hurt?
- What effect has "enterprise" companies leasing colocation had on network providers?
- What effect has streaming, VoIP, IPTV, etc. had?
- Can we build fast enough to keep up? If not, what happens?
- Additional questions from the audience