Untethering the Branch

*Enterprise Peering Opportunities*

APRIL 21, 2015

PREPARED BY:
GABE COLE
# Table of Contents

- **Executive Summary**
- **Moving the needle – the CIO Challenge**
- **Traditional enterprise networks**
- **Transformation of enterprise architecture**
- **Future enterprise network**
- **Role of peering**
- **Enterprise challenge/service provider opportunity**
- **Risk Analysis**
- **The payoff**
Executive Summary

The private line and MPLS networks that connected enterprises over the last twenty years are quickly becoming a thing of the past. Enterprises seek to untether their locations and users from these networks, but still allow them easy and secure access to corporate data and applications. In order to achieve this, enterprises increasingly are placing caching and acceleration equipment at multiple locations near the edge of the network. They are also using these locations to provide direct access to cloud solution providers. This creates a significant opportunity for peering providers to support these services and expand well beyond their traditional customer base.
CIOs Have a Lot to Worry About
CIOs Have “Elephants” Looming

- Compliance
- Transformation
- Obsolescence
- Visibility
- Cyber Terror
- Reduce Cost
CIO Initiatives – How many can they pick?

• Satisfy “mission critical” requirements
• Define architecture
• Cut costs
• Increase productivity
• Integrate platforms
• Maximize data value
• Maintain Resilience
• Address Sustainability
• Manage Compliance
• Integrate with organization strategic plan
It All Starts and Ends With The Network
It’s About Access To Everything From Everywhere

- Office
- Remote
- Outsourced
- Global

- Smartphone
- Tablet
- MTM/IOT
- Branch

- Legacy
- Converted
- New

- Traditional
- Mobile
- VOIP
- Virtual

Workspace
Apps & Data
Voice
Mobile
Cloud Breaks the Traditional Model

- Cloud
- Applications
- Computing
- Users
- Network
- Managed Services
- Data
- XaaS
- Big Data
Peering as a Solution... *Peering as a Service?*

- Ultimately, the enterprise would like to deliver everything over a single internet connection, in other words to “Untether” the branch.
- Same challenge as Service Provider – bring the eyeballs and the content together with minimal/consistent latency.
- Need facilities close to the end users to aggregate network, legacy, cloud.
- Provide back-up and security services.
- Expand/distribute the DMZ.
- What else? Distributed storage, application acceleration services.
- How to do it? Data Center vs Network.
Tradeoff Analysis

- Existing Enterprise Customer with two data centers, 8 regional offices, and 2,500 branches

<table>
<thead>
<tr>
<th></th>
<th>Overbuild Existing Data Centers</th>
<th>Peering at Colocation Data Center</th>
<th>Peering over Network Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>High</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Resilience</td>
<td>Moderate</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Scalability</td>
<td>Low</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Timing</td>
<td>~1 year</td>
<td>~1 year</td>
<td>~6 months</td>
</tr>
<tr>
<td>Staff Impact</td>
<td>Add</td>
<td>Neutral</td>
<td>Reduce</td>
</tr>
<tr>
<td>Control</td>
<td>High</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Risk</td>
<td>Moderate</td>
<td>Low</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
RTE Group, Inc.

Strategic Consulting for Mission Critical Infrastructure

56 Woodridge Rd
Wellesley, MA 02482

US +1-617-303-8707
fax +1-781-209-5577

www.rtegroup.com
Twitter: @DataCenterGuru
Blog: http://datacenterguru.blogspot.com/