

AFCOM

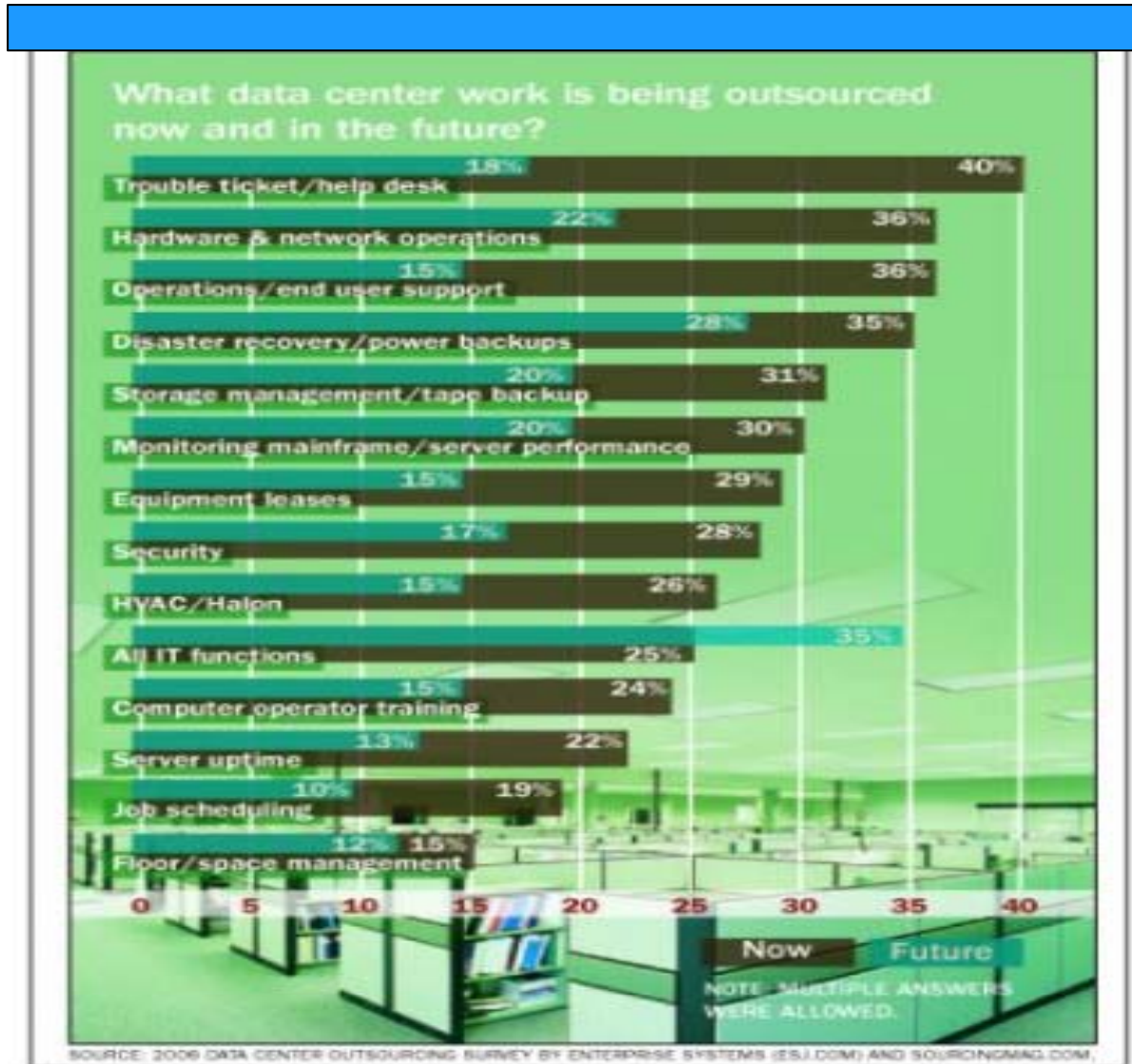
Comcast Business Services

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Data Center Outsourcing Market

- **Data Center Outsourcing Market**
 - TechNavio's analysts forecast that the Global Data Center Outsourcing market will reach \$163 billion in 2014.
 - Key vendors dominating this market space include HP, IBM, Cisco, and Dell.
- **What's Being Outsourced?**
 - The most common data center functions currently being outsourced is trouble ticket/help desk operations, as reported by four out of 10 respondents.
 - The next three most commonly outsourced functions are hardware and network operations, end-user support, and disaster recovery and power backups.
 - A quarter of respondents said they're presently outsourcing all IT functions. However, that's a trend that's showing some pick-up; a third of respondents expect to see all IT functions being outsourced in the next 12 months.
 - The next most likely candidate for outsourcing in the near future is in the area of disaster recovery and backup; 28% of respondents report that their organizations have taken it under consideration.
 - More work is still in-house versus outsourced -- the ratio is 55% to 45%

What work is being outsourced (Sourcingmag.com)



Top factors being considered for Data Center Outsourcing

Factors in Identifying Service Provider Fit	
Commitment to quality	60%
Price	57%
Proven competencies	53%
Technology fit	37%
Flexible contract terms	26%
Geographic location	23%
Cultural fit	21%
Scope of resources	18%
References and/or reputation	12%
Note: Multiple responses allowed.	

Comcast Infrastructure Related Services

- Infrastructure on-ramp to outsourced data center environments
 - Comcast Overview & Network
 - Comcast Ethernet Service
 - Comcast COAX offerings



COMCAST CORPORATION

Comcast Corporation is the nation's leading provider of entertainment, information, and communications products and services, providing service to customers in 39 states and the District of Columbia.

Video Customers	Internet Customers	Digital Voice Customers	Employees
23.6 Million	15.9 Million	7.6 Million	100,000 (in 39 states)

NETWORK OVERVIEW

Comcast Network Infrastructure & Metro Ethernet Markets



April 2010

SCALE

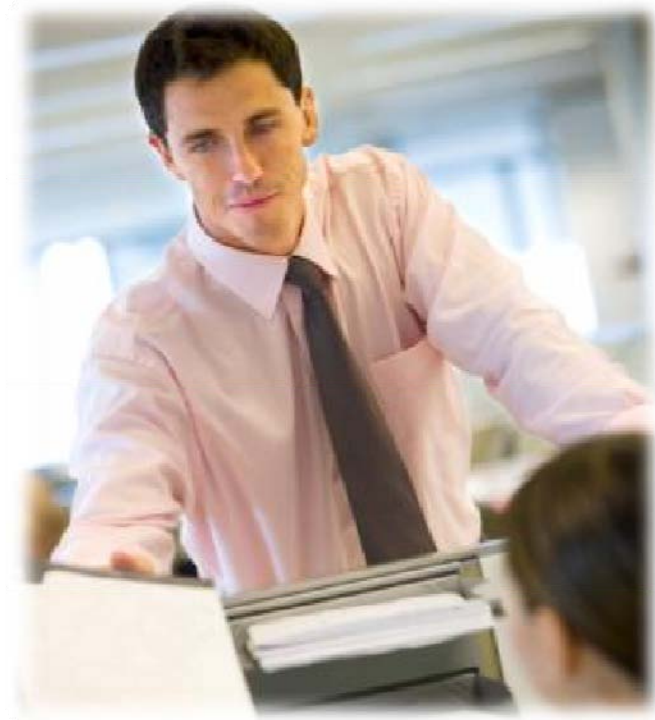
- Plant route miles – 599K
- Fiber route miles – 145K
- Optical nodes – 115K

TECHNOLOGY

- 10G/40GBPS regional networks
- First and largest fully 40G backbone
- First Production Demonstration of 100G
- SIP Scaled Infrastructure
- IPv4 and IPv6 operational
- QoS-based voice, video & data
- Self-healing architecture

COMCAST ETHERNET NETWORK SERVICES PORTFOLIO

- Ethernet Private Line
- Ethernet Virtual Private Line
- Ethernet Network Service
- Ethernet Dedicated Internet



*Services not available in all areas

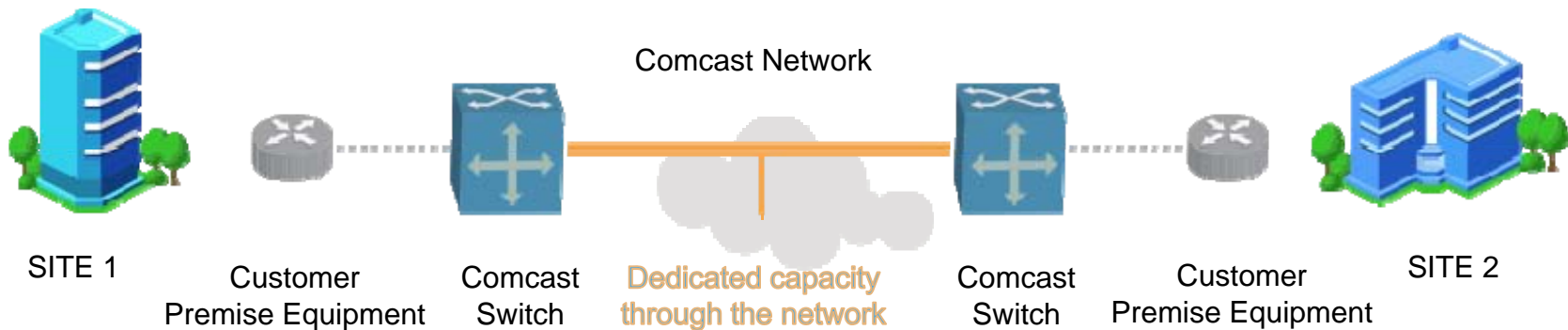
COMCAST ETHERNET NETWORK SERVICES OVERVIEW

Customer Benefits

- MEF (Metro Ethernet Forum) certified
- Online Reporting
- Network Monitoring 24x7x365
- Local Support
- Scalable bandwidth
- Network diversity
- Facilities based network provider

ETHERNET PRIVATE LINE

Meet the demand of bandwidth-intensive applications without disrupting your internal customers' needs with flexible, scalable point-to-point configurations delivering high-capacity fiber connections between two sites.



ETHERNET PRIVATE LINE

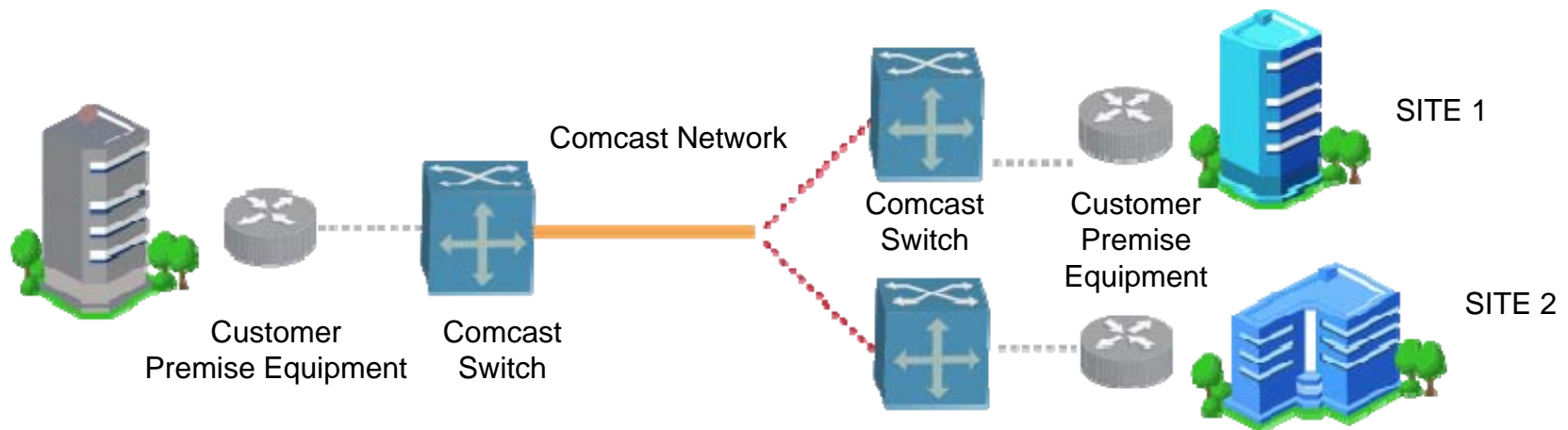


Key Features

- Metro Ethernet Forum (MEF) certified
- Dedicated Connectivity – Dedicated capacity between locations with physical layer data segregation
- Highly Secure – End-to-end physical layer data segregation that means your traffic is not switched or routed with other customer data
- Services are backed by our 24 x 7 Network Operations Center
- Scalable Solution

ETHERNET VIRTUAL PRIVATE LINE

Ethernet Virtual Private Line provides a point-to-point connection that replaces frame relay or ATM services and supports a Service Multiplexed UNI, allowing for a single physical connection to customer premise equipment for multiple virtual connections.



ETHERNET VIRTUAL PRIVATE LINE

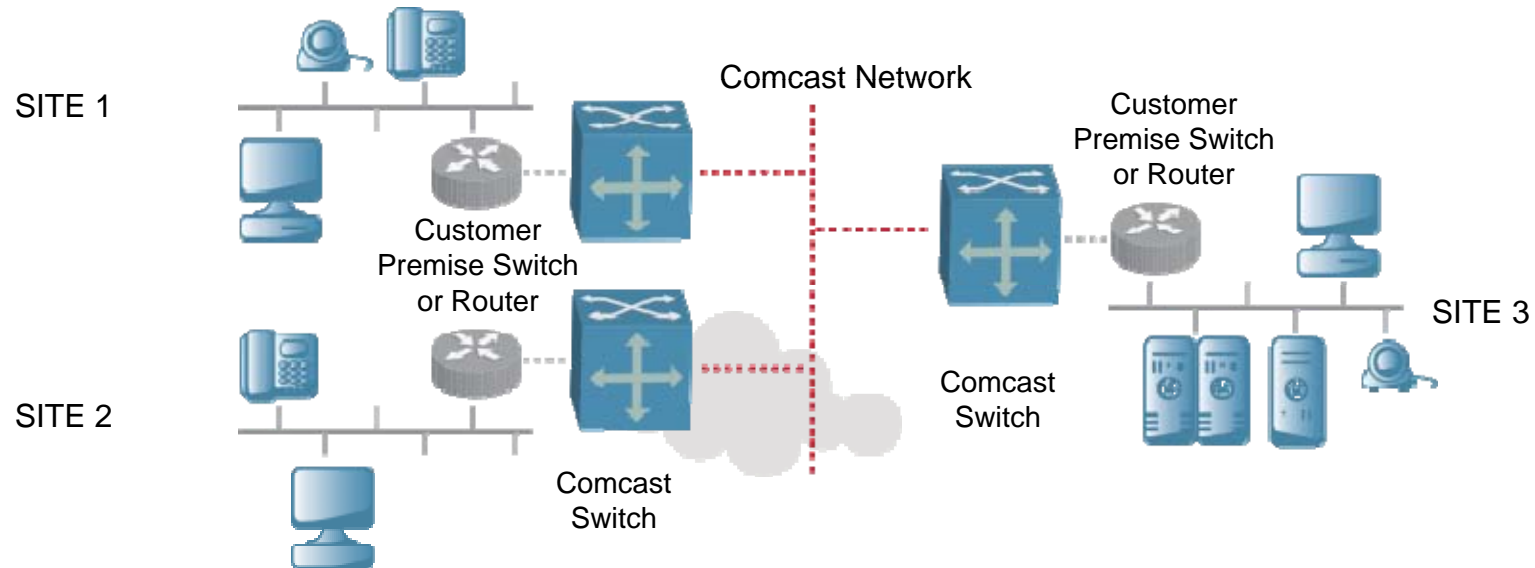


Key Features

- Metro Ethernet Forum (MEF) certified
- Supports Service Multiplexed UNI (i.e. multiple EVCs per UNI)
- Three classes of service (CoS) options – Basic, Priority, and Premium per EVC
- Single physical connection (UNI) to customer premise equipment for one or more virtual connections
- Online reports of historical network traffic information
- 24 X 7 Network monitoring and support
- Bandwidth options: 1-10 Mbps in 1 Mbps increments; 10-100 Mbps in 10 Mbps increments; 100-10,000 Mbps in 100 Mbps increments

ETHERNET NETWORK SERVICE

Perfect for organizations with many locations and high data traffic. Comcast's Ethernet Network Service allows you to seamlessly connect multiple locations together and exchange data at up to 10 gigabit per second.



ETHERNET NETWORK SERVICE

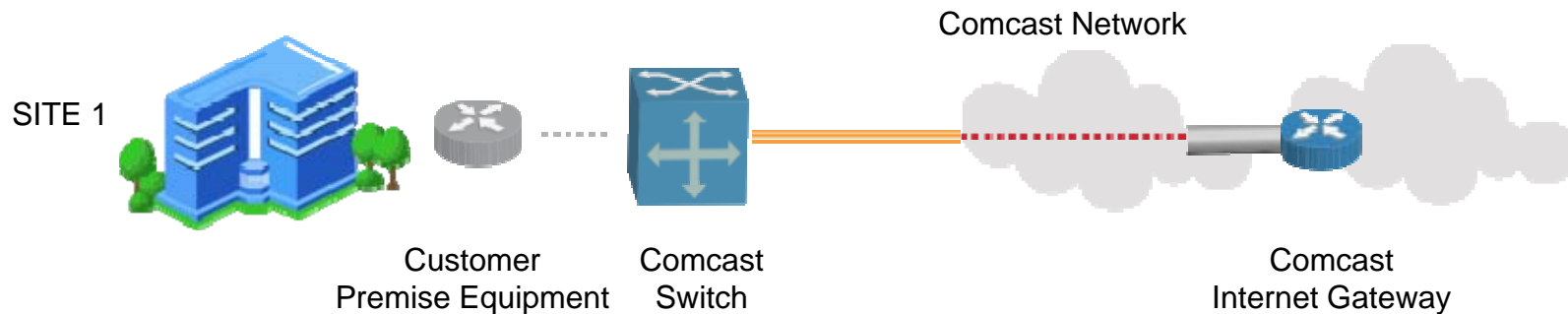


Key Features

- Metro Ethernet Forum (MEF) certified
- Any-to-Any Connectivity – Any site can send traffic to any other site within the network through a single Ethernet interface. (up to 250 MAC addresses per interface port)
- Highly Secure – Reliable data segregation provided by masking the traffic with a unique customer ID on the Comcast network
- Class of Service Aware – Dynamic traffic delivery through the Comcast network with up to three different performance levels – Basic, Priority and Premium
- VLAN Transparency – VLAN configurations can be changed within the network without the need to coordinate with Comcast
- Web-Based Reporting – Connectivity statistics for the previous day, seven-day or thirty-day period can be viewed through a secure web portal

ETHERNET DEDICATED INTERNET

For enterprises that need the most bandwidth and the fastest connection providing a continuous link between their existing LAN and the public Internet, there is no better way to connect. Plus, our Ethernet interface offers true plug-and-play compatibility with your LAN.



ETHERNET DEDICATED INTERNET

Key Features

- Symmetrical Connectivity – Dedicated connectivity to the Internet, provisioned with equivalent upstream and downstream speeds 5 Mbps – 10Gbps
- IP addresses – Static IP addresses assigned based on ARIN guidelines and customer justification
- Domain Name System – Includes primary and secondary DNS service. Comcast will assist customers in transferring existing domain names
- Border Gateway Protocol Routing – Optional BGP setup to facilitate multi-homing between multiple ISP networks
- Web-based Reporting - Connectivity statistics for the previous day, seven-day or thirty-day period can be viewed through our secure web portal

COAX Based Services for Internet

- Downloads up to 100Mbps, uploads up to 10Mbps depending on Internet package
- Static IP addresses available
- Norton™ Business Suite helps protect up to 25 PCs against viruses and spyware
- Protection and back-up for your files and documents
- Available IP gateway provides on-site firewall protection, supports multiple computers and VPN connections for remote users, and features Stateful Packet Inspection (SPI)
- Microsoft Exchange email accounts

Comcast Responsibilities for fiber based service transition

- Comcast is responsible to gain City/County permits as necessary
- Comcast is responsible to contact JULIE to mark public utilities
- Assemble, configure and install all CBC provided equipment
- Test all active fiber connections.
- Verify active data connections.
- Provide 24x7 network monitoring.
- Provide contact list information including escalation procedures.
- Documentation including network drawings.

CONCLUSIONS

Comcast has the resources, products and support to provide you with:

- Speed
- Reliability
- Network Diversity
- Business Class Support
- MEF Carrier Ethernet Certified

