



CONSOLIDATING DATA CENTER SUPPORT:

Choosing one global provider for multiple
markets and applications

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Overview:

This paper explores issues that arise when an enterprise that leverages colocated data-center support requires substantial growth in information technology infrastructure.

Although most global enterprises today have multiple IT providers, it is worthwhile for large organizations to consider consolidating data center support processes under just one multinational provider. A single line of command and control can often provide more consistent security, scalability, administrative simplicity, performance and resilience across multiple locations.

Target audience:

Executives, managers, directors, technical staff and others interested in learning about the relative merits of using one global colocation provider vs. dividing contract support based on regional or technological considerations.

Background information:

An enterprise that is weighing the relative merits of using one global data center provider vs. multiple specialized sources has already chosen colocation, most likely for reasons related to scalability, reliability and simplicity. A well-run colocation facility provides a flexible – and therefore, inherently scalable – data center whose available

computational capability can be modified quickly in response to demand without additional capital expenditure (CAPEX). Other advantages of colocation include redundancy, efficiency and security. For organizations with a global presence, the decision is not whether to employ colocation, but rather whether to use a single worldwide colocation provider or a set of regional colocation providers.

Factors to consider:

Table 1 lists factors that affect the weighting of the relative merits of using a single vs. multiple colocation providers.

Standardized reporting, simplified partner structure and the uniform compliance profile of a single colocation provider might be the most heavily weighted factor for highly regulated organizations (e.g., government, healthcare). Enterprises requiring maximized uptime might choose a sole colocation provider to simplify problem escalation and avoid problematic interfaces between multiple providers. For organizations wishing to reduce cost, the ability to negotiate with a single provider for economies of scale might be the most important factor. On the other hand, those organizations that have services that must vary substantially by region (for example, encrypted tunnels or gambling services that are limited or prohibited in certain locales) may lean toward selecting multiple colocation providers.

TABLE 1

Factors impacting choice of one global provider vs. specialized provider

Organization Type	<ul style="list-style-type: none">• Government/ Defense• Non-profit• Private Enterprise/Industrial• Healthcare• Consumer services• Education, science and engineering
Business Practices, Processes and Controls	<ul style="list-style-type: none">• Account management• Security audits• Financial reporting• Contract negotiations• Staffing
Desired Technological Services	<ul style="list-style-type: none">• Virtualized servers• Cloud-based systems• Bandwidth/quality-of-service (QOS)• Data and physical security• Uptime, resilience and redundancy
Localized Cultural Factors	<ul style="list-style-type: none">• Laws• Customs• Language• Political/economic stability

Three Basic Options:

Given the complexities outlined above, there is no “one size fits all” colocation solution. After careful consideration, many CIOs and IT managers tend to gravitate toward a hybrid, vendor-flexible solution that includes at least *partial* consolidation with respect to service providers and hardware providers. This is a key factor for enabling contract portability for sourcing contracts and hardware refreshes. Regardless of the exact approach, the goal is simplification of both network management and long-range IT expense forecasting.

Typically, data center contract support requirements will fall under one of the following scenarios:

OPTION 1 – One global provider for all markets, all applications

Advantages of this approach include:

- Simplified contract management (e.g., negotiations, billing, financial reporting)
- Consolidated network management
- Concurrent implementation of new technology at all sites
- Hardware and software compatibility
- Worldwide scalability
- Leveraging a data center provider with multiple independent cloud operators as customers (this eases bridging into the cloud)

This approach is usually most effective for smaller, less complex enterprises

OPTION 2 – Hybrid solution – one U.S. provider, multiple service providers for other nations

Advantages of this approach include:

- Regulatory compliance procedures tailored to national laws
- Simplified traversal of language barriers
- Ability to outsource maintenance to local providers
- Easier cost comparisons between sites
- A single domestic data-center platform provider can simplify domestic activities while easing entry into other countries

This approach works best where U.S. operations are 90% or more of total enterprise.

OPTION 3 – Multiple providers, sorted by technology requirements

Advantages of this approach include:

- Streamlined implementation of new technology
- Easier to tailor high-end security systems (e.g., firewalls, encryption)
- Ability to outsource maintenance to specialized providers
- Leveraging the single data center provider platform to select source up the service stack in a neutral data center environment. Allows for plug and play of a multitude of sourcing options, yet provides the contract security to avoid having to move hardware if the service provider is not performing to managed service SLA's.

This approach works best for U.S. companies involved in diverse enterprises (e.g., manufacturing, service industry, research and development).

Looking toward the future – building and maintaining cloud environments:

Data Center Knowledge (DCK) conducts an annual survey to identify IT infrastructure management challenges faced by its clients. The top three challenges listed below are drawn from DCK's August 2011 results, based on more than 200 respondents in a broad range of public and private sector enterprises. Most of these respondents were keenly interested in outsourcing data storage and software operations.

CyrusOne is a full-service global enterprise colocation provider offering more than 700,000 ft² of floor space in top-tier data centers across the nation. CyrusOne provides

facilities in various centers of business including Houston, Dallas, Austin, Cincinnati, Chicago and London. CyrusOne's ancillary strategy is to have a Point of Presence (PoP) latency of 10 milliseconds or less in every major U.S. metropolitan area. CyrusOne supports enterprise clients in diverse industries, including energy, oil and gas, medical, technology, finance, and consumer goods and services. CyrusOne has several flexible billing models but most frequently bills by the kilowatt (kW). This billing system, in combination with CyrusOne's expertise in high-density environments, promotes efficiency and productivity in clients' environments by emphasizing computational performance per watt.

Summary: Leverage advantages of cloud computing by choosing a global colocation provider

Intersecting trends toward data center colocation and cloud computing have obvious implications for CIOs and IT managers. Cloud computing is rapidly transforming and expanding the capabilities of colocated data centers. Simple colocation minimizes capital expenditures (CAPEX), allowing an enterprise to focus on its core business processes. In addition, many colocation providers offer “no-downtime” platforms to cloud providers. For this reason, finding a data center partner who is vendor and cloud neutral yet houses several clouds will enable competitiveness and greater flexibility as the cloud is adopted. If the data center partner is home to several cloud options, house fiber can be utilized to connect to private or public cloud operators in the same facility. This also will ensure continuity of SLA’s between the end customer, the data center provider and the cloud operator.

For most organizations, using one global enterprise colocation provider in multiple markets or for multiple applications is both strategic and efficient. If an enterprise needs to grow its data storage or computing capabilities, the necessary infrastructure is immediately available. A quality global colocation provider such as CyrusOne makes data center consolidation familiar, timely, and cost-effective.

Enterprises interested in establishing a relationship with a global colocation provider should consider speaking with current customers to get an inside point of view. CyrusOne will provide POCs upon request. Please contact Nicole Aguiard, marketing director, 713-235-8707.