Speed: The Next Existential Challenge for Colocation Providers

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Within the data center space, the colocation market may see the most growth. (Photo: CPI)

Ashish Moondra, Senior Product Manager, Power, Electronics & Software, Chatsworth Products, highlights two recommendations for some of the most common questions data center operators and colocation providers ponder today - how fast can the product be delivered, and how soon will the product be operational?

As the transition from the Information Age to the Age of Artificial Intelligence gives way to heightened significance of connectivity, cloud

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10 Reasons to Migrate Your On-Premise Data Center into Colocation or Cloud

Jerry Blair, DataBank Co-Founder and Senior Vice President of Sales, highlights a list of 10 reasons for colocation and explores the following question: Why make the move into colo or cloud?

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service providers and the IT industry work around the clock to ensure the life most of us know today: high-speed Internet, mobile connectivity, self-driving cars and machine-to-machine (M2M) learning. A recent Cisco Annual Internet Report confirms this reality.

By 2023, for example, nearly a third of the global population is expected to have Internet access—that's about 5.3 billion users. Meanwhile, the number of IP networks is projected to be more than three times that number.

Within the data center space, the colocation market may see the most growth, with an estimated CAGR of almost 11% from 2020 to 2025. Faster time to market—in lieu of undertaking an on-premise data center project that may take months to complete—is the primary reason for the attention toward this segment. Needless to say, delays in bringing up a new customer within a multitenant environment directly translates into lost revenue. Therefore, it is no surprise that colocation providers are challenged to scale up with solutions that are quick to deploy, manage and service.

The following are two key points for colocation vendors to consider when looking to quickly get new customers up and running quickly.

1. Vendor Selection

Within colocation environments, end customer requirements generally vary based on budgets, functionality required and the IT equipment that will be housed within the cabinets. Service-level agreements (SLAs) require colocation facilities to be able to quickly provide the infrastructure equipment that meets the needs of their end customer. Partnering with equipment vendors that have local manufacturing capabilities and a build-to-order model provides colocation vendors with the ability to quickly procure products aligned with end customer requirements. In-region manufacturers typically have a wide breadth of standard solutions and the ability to create and deliver custom solutions in a short timeframe.

While evaluating equipment vendors for their ability to deliver products in short lead times, it is critical that data center professionals ask questions related to location of the supply chain as well as their risk mitigation plans. With the booming demand for more things to be connected to the Internet, some electronic components as well as populated, printed circuit board assemblies can have lead times spanning several months.

Equipment manufacturers in North America that rely on in-region sources for long lead time components will have a better ability to scale quickly to meet demands of larger projects.

The common denominator within the data center white space is the equipment cabinet. Dealing with vendors who can preinstall all infrastructure solutions within the cabinet, including power distribution equipment, cable management solutions, access control and environmental monitoring per the end customer's needs will save colocation vendors significant time, effort and money. Additionally, preconfigured solutions that are tested together before

they leave the factory minimizes any surprises that could otherwise delay schedules when multivendor equipment is received separately. Finally, consider that preinstalled solutions require minimal packaging, helping reduce waste and the time required to deal with it.

2. Product Considerations

To allow remote manageability of the off-premises equipment, colocation vendors provide intelligent hardware solutions that allow monitoring and control of power and environmental parameters within the cabinet. Growing regulatory and security demands also require end customers to control physical access to the cabinet and maintain an audit log of all access attempts.

> *Once the PDUs are deployed on the network, the next step that could take a considerable amount of time is the configuration of every monitored device that includes network access, threshold and notification settings.*

While these solutions provide significant advantages to the end customer, the challenge is to deploy them speedily over the network and quickly configure them to be fully operational. Intelligent power distribution units (PDUs) that also integrate environmental monitoring and access control provide a unified solution that require just one single network connection. The speed of deployment can be further enhanced by utilizing intelligent power distribution units with Secure Array● IP Consolidation that allow up to 48 intelligent PDUs to share one primary IP address and an alternate one for failover capability. This setup allows the white space infrastructure for complete rows of cabinets to be managed by one or two ports on a network switch. The alternate and inefficient solution would have been to first install, wire and configure extra network switches purely for infrastructure monitoring; connecting them to every monitored device and then taking a crash cart to each device to perform their IP setup.

Once the PDUs are deployed on the network, the next step that could take a considerable amount of time is the configuration of every monitored device that includes network access, threshold and notification settings. In this scenario, choose PDUs with bulk configuration capabilities over the network, but beware End customers have different preferences for mass configurations.

For example, while the data center operations group may prefer bulk configuration through a data center infrastructure management (DCIM) software solution, network professionals or developers may prefer automated configuration using a Command Line Interface (CLI) or Application Programming Interface (API). This means colocation vendors that deal with a multitude of end customers will be ahead of the competition if they provide a solution that supports most types of bulk configuration methods. All these capabilities not only make initial deployment and configuration easier, but also simplifies ongoing management.

Another important and usually overlooked aspect to consider is the serviceability of the products. The most common maintenance to be performed on intelligent PDUs is timely firmware upgrades. The products chosen should allow for these upgrades to be easily performed over the network or through USB ports on the equipment. A field-replaceable controller on the unit also allows for seamless serviceability and upgradability. These upgrades should be capable of being performed while the units continue to provide basic power distribution to connected equipment. Finally, consider that intelligent products such as PDUs should include warranties with advanced replacement coverage as a norm rather than exception.

With data consumption growing faster than ever, speed of deployment and delivery is the most pressing challenge for colocation providers. The ones who consider the two recommendations above will be able to have a competitive edge that will ultimately allow them to grow their top line revenue faster and be ahead in the race.

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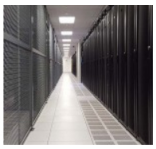

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