

## **How Datacenter Colocation Works**

**By Mike Lata**

There are a lot of options for companies today that are looking for affordable ways to leverage cloud services. Many companies may not have the funds or reasons to build their own datacenters and utilize the private or hybrid cloud to the fullest. They may also want to use specific server hardware or routers instead of relying on public cloud services and virtual machines. In those cases, colocation centers (or colocation centers) may offer a great solution for their needs.

Businesses that invested in their own hardware already may not need the elasticity of the cloud. They can rent facility space and bandwidth for their needs while utilizing their own hardware (in some cases they can also lease equipment) along with specified software.

These facilities are often shared between competitors of the same industry -- like telecommunications for instance. Businesses can gain the benefit of using this facility and the services of the provider. These services may include physical and server security; power generation; redundancy; cooling; cross-connectivity between companies sharing the colocation center where they can exchange ideas; and state-of-the-art equipment like fibre-optic connectivity.

Sometimes colocation centers are used for other purposes by companies that are already leveraging the cloud and may even host their own centers. This may include using the colocation centers as fail-safe or disaster recovery solutions in case their own centers have an outage (basically as a backup system). Because of N+1 redundancy, the servers hosted in colocation centers can take on the workload from malfunctioning servers.

### **Location, Location, Location...**

Colocation centers allow companies to share space with other companies using services from a single datacenter in a specific region. Service providers of colocation facilities are often located in major metropolitan areas so clients can have close proximity and access to its resources.

An example of a good location for a colocation center is the Internap Northern California colocation center. It is located on Mission College Boulevard in Santa Clara, CA – the heart of Silicon Valley. This it provides easy access to companies all over Silicon valley from San Jose to Cupertino and Palo Alto. The location is also in close proximity with the San Jose International Airport so clients from all over the world have quick access to the facility.

According to [Internap](#), the datacenter offers 24/7 technical support and security staff on-site; a 3MW generator for back-up power; interconnection; support services; and maximum uptime because of the high-power density in Silicon valley.

When it comes to interconnection or online access, Internap offers a latency solution for businesses using its colocation centers. It relies on a router called the “Managed Internet Route Optimizer” (MIRO) that is propriety to Internap and its customers. It will stabilize the connection or Internet traffic across the network during downtimes or dips by routing tables with the best performing

ones available. You can read more about it [here](#).

### **Other Variables to Consider When Choosing a Location**

When choosing a good colocation center location, companies need to look at several factors. According to [DataCenterKnowledge](#), geography is important because some locations can have irregular weather patterns – like hurricanes or earthquakes – that can interrupt bandwidth or workloads. Other factors that companies need to consider include the colocation center's local IT support; outsourced IT support; proximity from application developers and data base administrators; the local power grid up-time as well as infrastructure; and proximity from CIOs and the C-suite. It is also wise to find colocation companies that operate their facilities and not just act as operators.

DataCenterKnowledge explained that the physical proximity to an IT response team from the company leasing the colocation center should be considered and not just how far it is from the company offices or headquarters. These response teams need to have a way to reach the site in case maintenance or operational support needs to be done. This is done in conjunction with maintaining an on-site staff member or two at the site. Outsourced IT support is also important because it will allow the company to have a “remote hands” service from the colocation provider to help with any workload or IT needs.

Colocation is a great option for many businesses, but as you can see there are variables that need to be considered before picking a provider and a location. Geography should definitely be considered, but also the on-site IT support and factors such as proximity to communication centers. It is important for different teams and executives to have access to the center before it is too late in case of an outage.