YOUR DATA CENTER EVALUATION GUIDE

8 Qualities to Consider When Choosing a Colocation Partner

TELNET
WORLDWIDE

Thinking About Migrating?

There are so many elements to consider.

There's no doubt about it: Whether you're moving your applications to the cloud or switching data centers, selecting the right colocation partner is one of the most important (and potentially overwhelming) decisions you will ever make.

Ultimately, your list of requirements will depend on the scope of your mission, the size of your company and the extent of your budget.

So how do you pick the right data center — the one that'll give you the competitive advantage you're looking for?

No matter what your migration plans look like, there are eight non-negotiables when weighing your options.

8 Critical Qualities to Consider

1. Location
2. Security
3. Connectivity
4. Redundancy
5. Power
6. Scalability
7. Support & Monitoring
8. Disaster Recovery

Location

Do your research.

You can't talk real estate without hearing "location, location, location," and it's no different when looking for a data center. After all, "the cloud" is nothing more than a giant building filled with servers.

Even if your environment is entirely virtualized and you don't have a single physical asset on premise, theactual location of your mission-critical servers is still vitally important.

When it comes to the physical location of your colocation facility, you've got to consider things like climate and accessibility. If you're looking to settle into a location that's frequented by natural disasters, you might want to reconsider. And don't forget to consider population density. Most facilities are located close to metro areas for a reason: An urban area is more likely to have the power and connectivity infrastructure in place to support your needs.

- **Is the facility vulnerable to natural disasters like hurricanes, floods or earthquakes?**
- **How close is it to nearby nuclear facilities and chemical plants?**
- **Is it at risk of grid outages from extreme weather patterns or fracking operations?**
- **How close are the nearest police departments and fire stations?**
- **Is it within driving distance of your organization?**
- **How fast can your team access your equipment?**

Security

Get both virtual and physical protection.

Your mission-critical servers manage everything from network resources and access controls to website hosting and communication support. In other words, your business relies on them. Their safety is of critical importance.

The modern workforce has become increasingly reliant on their digital tools, and a data breach could spell disaster for your business. Make sure your facility can handle end-to-end security.

- **What level of compliance does the data center offer for colocation? SOC? HIPAA?**
- **Are there additional layers of security (like mantraps)?**
- **Is the facility manned 24/7?**
- **Can you access the facility with one step (with a pin or badge) or does someone confirm your credentials?**
- **How good is their Data Center Infrastructure Management (DCIM)?**
- **How extensive is their video surveillance? (And what are the retention policies?)**
- **Can you virtually monitor the feeds yourself?**

Connectivity

Know what's available.

Today's data centers are connectivity hubs, and you need to ensure that you're choosing the facility that can help you optimize your network. Speed and flexibility have become two prominent deciding factors here.

If the facility in question offers a flexible connectivity fabric, you can use a software defined network (SDN) via SD-WAN to drive data and applications. SD-WAN is a game-changer for prioritizing critical applications like VoIP with the same security as MPLS. It's just more flexible.

A data center that offers a wide array of cloud and internet service providers is usually more beneficial than a single-carrier facility. A diverse vendor environment offers you more flexibility and opportunity. Make sure you know what kind of interconnectivity options are offered before you sign on the dotted line.

- **Is the facility carrier neutral?**
- **How many carriers are connected to the facility?**
- **Are cross-connections offered?**
- **What kind of cloud deployments are offered: Public? Private? Hybrid?**

Redundancy

Know your tolerance for downtime.

Downtime tolerance is perhaps the biggest driver in the data center selection process. Virtually every facility will have some level of redundancy, but the devil is in the details here. You need to know exactly the kind of backup you're getting.

Not every organization needs absolute fault tolerance, but you've got to know what you're willing to accept. For many, network redundancy from the switch to the power supply is required. Ultimately, downtime could cost a whole lot more than your colo expenses. How much are you willing to gamble with your servers?

Make sure to get a list of the site's redundancies and then verify each of them on a tour.

- **Is the facility Tier I, II, III or IV?**
- **How much downtime is permitted per year?**
- **What's the level of redundancy coverage? N? N+1? 2N?**
- **Is the power supply redundant to allow for non-impacting maintenance?**

$301,000-$400,000

That's how much it cost 25% of global enterprises for an hour of downtime in 2019.

Statista

Power

Verify your power supply.

You probably already have an idea of how much power your equipment is going to consume. Now you need to ensure that the facility you move it into is equipped with the capacity to maintain it. The sophistication of your setup isn't going to matter much if there isn't enough energy to keep it running.

Migrating to a data center shouldn't be a nearsighted decision. Don't just think about the kind of power you need today, but also what your requirements might look like five or ten years from now.

- **What power options does the facility offer?**
- **What kind of power distribution do they have?**
- **What are the power per cabinet capabilities?**
- **What's their UPS?**
- **What about backup generators?**

Scalability

Think long-term.

And that brings us to the topic of scalability. Remember adding a 10 MB hard drive to your computer and wondering how you would ever fill that? Times have certainly changed, and the landscape is evolving rapidly.

Flexibility is one of those factors you can't afford to overlook. As your organization grows, pivots and adapts, your cloud infrastructure needs to transform with you.

Expect your requirements to change as time goes on, and identify a partner who can adjust accordingly.

- **Does the data center have the physical space for you to grow?**
- **Does it have the ability to scale its power and utility infrastructure?**
- **Do they offer different power configurations?**
- **Do they have a scalable cooling infrastructure to grow with you?**

Support & Monitoring

Be clear about your support needs.

Your team's ability to do their job is directly correlated to the data center's customer support and internal monitoring processes. A site's DCIM should align with your service needs. Make sure your levels of access to bandwidth usage, storage levels and physical floor space are defined within a secure online environment.

You don't want to lose time while your staff travels to the data center to address an unexpected outage.

- **Does the data center have a ticketing system?**
- **What are the levels of escalation and resolution?**
- **What types of alerts are available?**
- **Does the data center offer a technical help desk to provide Remote Hands in an emergency?**
- **How easy are they to contact and work with?**
- **Are there multiple contact channels (SMS, chat, email, phone) or are they an email-only group?**
- **Will they accept deliveries on your behalf?**

Disaster Recovery

Know the plan of action.

The worst time to develop a plan of action is during the crisis. Make sure your data center has a robust disaster recovery plan in place. But keep in mind, everyone weights the balance between cost efficiency and availability differently when making decisions in the fight against downtime.

Just remember, your data center's reliability is your reliability. Ultimately, your organization's mission will drive the selection process, but at the end of the day, it's your ability to keep business running that will impact your customers' satisfaction, and your subsequent success.

- **If one of the data closets is compromised, can the facility maintain 100% operation?**
- **How many hours of fuel are onsite for generators if utility power is cut?**
- **How soon will refueling trucks be on-station?**
- **Is the disaster recovery plan a part of the compliance and security organization?**
- **How frequently are systems tested for outages (network, power and fire suppression)?**


Colocate With Us

A Facility You Can Rely On

Our purpose-built, secure and redundant facility is strategically located and designed to offer businesses every advantage of rich power, network and carrier diversity, and the lowest possible latency.

We offer flexible options to house, host and manage your mission-critical equipment in Southeast Michigan's premier Tier III data center. Our state-of-the-art, carrier neutral facility is engineered to protect and power your equipment from end to end.

- **Leading-edge data center design, engineered for zero points of failure**
- **Secure physical and virtual environment**
- **Multiple layers of redundancy for critical power, cooling, network and security systems (N+1 to 2N)**
- **Exceptional professional technical services and 24/7/365 support**
- **Business continuity, backup and disaster recovery through nationwide centers**

Don't Take Our Word For It

Getting high quality service with significant cost savings — that was Cloud Mail Store's primary objective when making the switch to TelNet's Tier III Data Center back in 2011.

"The problem we were trying to solve by moving from RackSpace to TelNet was to get quality services at a cost which was lower than RackSpace and which would not dig a hole in our customers' pockets," explains CEO Ankur Jayaswal. "I think we got a good fit with TelNet."

Things have never been busier for this cloud company and managed service provider.

"Right now, everyone's working from home, so the need for IT and cloud IT is [greater] than it ever was before. TelNet has been a solid partner in that and we can all go back and have a sound sleep because we know that things will be up and running."

Cloud Mail Store trusts us with their mission-critical equipment. You can too.

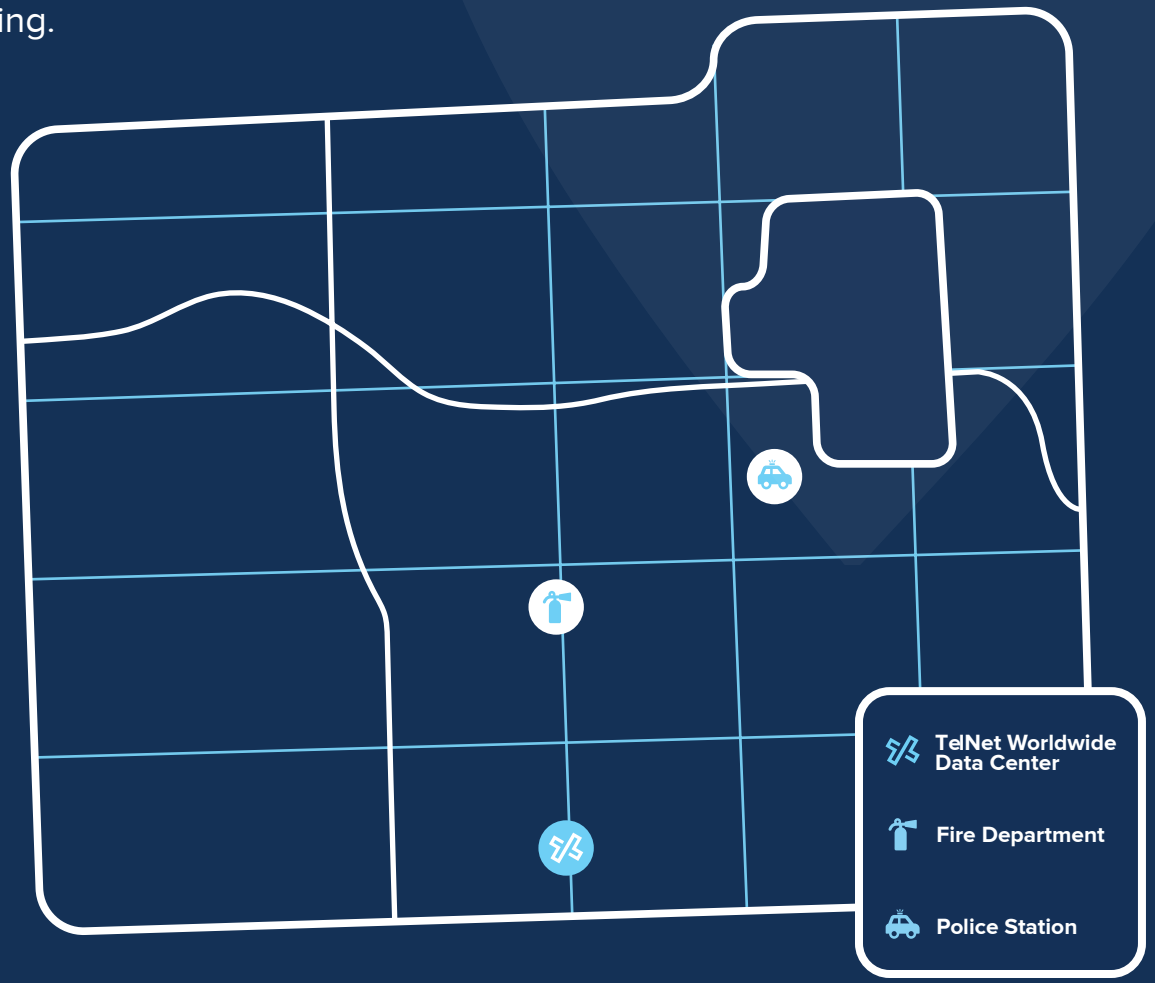
The Cloud Mail Store
We do IT for you

See How We Stack Up

We've talked about the top 8 qualities you need to consider when choosing a colocation partner. Check out how we measure against them.

Location

Advantageously located in Southeast Michigan, our Tier III Data Center experiences an optimal climate and faces little in the way of natural hazards. With temperatures below the national average, colocation customers benefit from spending less on cooling.



Security

We take security and business continuity very seriously at TelNet Worldwide. From servers to hosted data assets to cloud-based services, you expect them to be secure and functioning at all times. We have the technology, people and practices in place to keep your data protected.

- **Multi-stage security system includes mantraps, PIN and dual factor authentication**
- **DCIM provides 24/7 video feed**
- **CCTV video surveillance includes 90-day video storage**
- **Mechanical, utility and carrier whitespace isolation**

Connectivity

- Diverse fiber building entrance points
- Secure fiber vaults in close proximity for convenient customer access
- Carrier-neutral facility with ready access to local and national providers
- Dual ethernet feeds available
- Layer 2 and Layer 3 connectivity
- Redundant fiber paths
- 10 mb / 100 mb / 1 gb / 10 gb / 40 gb port speed
- Fiber providers include: AT&T, Comcast, Everstream, Level 3 Metro / Long Haul, Lightower, TelNet Worldwide, US Signal, WOW
- Upstream internet providers include: AT&T, Level 3, Telia Sonera, Wow

Redundancy

- Redundant Meet-Me-Rooms
- Redundant Fiber entrance points sealed in concrete
- Redundant Firewalls
- Redundant Switches
- Redundant Routers
- All systems are 2N or N+1 from power, cooling, generator, UPS, infrastructure, network gear and even the loading dock

Power

Expect the power you need to keep your mission-critical processes running smoothly. Our facility's 2N UPS design comes with A, B, C and D systems powering all cabinets with active-active feeds. Load densities of 60-600 watts per square foot are standard, with customer options for more.

- **Power options include: 110V, 208V, 208V three phase**
- **Leading 2N power design with A, B, C and D power feeds and redundant PDU distribution**
- **Capable of +20 kW power per cabinet**
- **Capable of 600+ watts per square foot power density**
- **Fully redundant UPS AC power with bypass switch and surge protection**
- **Four 500 kW PF 1.0 UPS with 2,000 kW capacity and N+1 redundancy**
- **Harmonic filters**
- **VRLA batteries**
- **Concurrently maintainable generators with onsite fuel reserves and preferred fueling contracts**
- **Four diesel 600 kW PF 0.08 generators with 2,400 kW capacity and N+1 redundancy**
- **Remotely monitored**
- **Flexible configurations and power options are standard**

Scalability

No matter what your business needs, we've got the space, power and service capacity to support you. Expanding? Need to cover overflow? Preparing for disaster recovery? We can help you build it out.

- **40,000 square foot facility with 20,000 square feet of white space**
- **30-inch raised floor space for tenant racks and cages**
- **Secure storage, two carrier-neutral Meet-Me rooms and innovative product demo room**

Support & Monitoring

- 24/7/365 complete environmental monitoring and reporting systems
- Local and national network operation centers (NOC)
- Highly certified technicians provide prompt resolution and problem escalation
- DCIM system enables a single view into our infrastructure to provide 24/7 customer visibility into their space, power and connectivity
- DCIM boosts the effectiveness of alarms, monitoring and ticketing
- Network Management System (NMS) provides network and capacity management metrics

Disaster Recovery

We know how important it is to keep things up and running. That's why our partnership with EdgeConneX is so important; their worldwide network of data center facilities provides the ultimate business continuity and disaster recovery assurance for all our colocation customers.

Not to mention the steps we go through to ensure we're prepared in the event of an emergency:

- **Business continuity and disaster recovery plans are in place to guide personnel and are updated at least annually**
- **Business continuity plan testing and training activities are managed and organized by designated department coordinators and are conducted at least annually**
- **Policy and procedural documents are updated periodically**

Take the Next Step

Take a Tour
Join us in Southfield and see what our Tier III facility has to offer.

Secure Your Servers
Migrate your mission-critical equipment and colocate with us to secure your cloud-based future.

Consult with Our Experts
Work with our Technical Solution Engineers to determine the perfect fit for your business.

Migrating your data center is quite an undertaking, but working with us isn't.

Get to Know TelNet Worldwide

Ineffective communication technology is a pain. When your tech doesn't work like you need it to, your productivity, security and sanity suffers.

At TelNet Worldwide, we provide simple and effective cloud-based solutions that are engineered to support your organization and guide your digital success.

Join us in our Tier III Data Center today!

Let's Chat

Take a Virtual Tour

www.telnetww.com/data-center/#virtual-tour

Schedule a Live Tour

(800) 974-4800

Special Offer While Space Lasts

Get a cabinet with 3 phase power, 208V 30A (10.8 kW) for $1,450 per month.
Plus, you'll get a free 1G uplink for the first 3 months!