Six IT Infrastructure Considerations for a Successful Data Center Move



Complex moves require proper planning and an experienced IT relocation service provider.

Changing market conditions, technology advances and space requirements are driving many organizations in our area to move or relocate.

If your commercial real estate footprint consists of a data center or includes complex information technology (IT) infrastructure, you're going to need a mover whose office moving experience transcends the relatively simple movement of crates and furniture. An experienced IT relocation service provider will help you plan for success, by ensuring these important details are considered during your relocation planning process:

Location, location – Location is one of the most important factors when selecting a home for your data center. In addition to considerations like reliability, security, scalability, capacity and uptime, location is arguably the key consideration when choosing a data center. The location you choose will have an impact on the quality of service you are able to provide, and should deliver an optimized infrastructure and application environment capable of reaching your customers.

Why is proximity important? With distance comes greater cost for your company, including transport fees, latency, packet loss, limited redundant carrier options and peering points. You'll also want to ensure the data center is easily accessible to support staff. If your IT staff needs to perform maintenance or upgrades, a closer and more accessible location can help reduce downtime and unproductive travel time.

Reliability – A cost effective, readily accessible alternate source of power is essential to preserving data center reliability and uptime. When planning your move or relocation, consider the availability of backup power options for unexpected power outages, emergencies or scheduled load reductions on the commercial power grid. Medium to large data centers typically use a centralized uninterruptible power system (UPS) for emergency power. These battery strings, or rotary power UPS systems, automatically assume the critical power load when the primary power source is cut and will support the current load before the generators are activated. Back-up generators should be positioned on site and available to pick up critical load within seconds when needed.



Security – A proper security system is critical to the continuity of operations of your data center. Your move or relocation planning should consider the security measures you'll need in your new location, including requirements for maintaining your current SSAE 18, HIPAA and other standards and certifications. You will also want to consider cybersecurity insurance, along with the physical practices and virtual technologies you'll need to protect your data center from external threats and attacks. Physical security practices should include proper locks, CCTV, mantrap security doors, biometrics, proximity card readers, security personnel and access logs.

Additionally, your planning considerations should include fire suppression capabilities at the new location. Check to ensure the facility has proper systems in place, such as a dry pipe dual-stage, zone-controlled or gaseous fire suppression system to reduce damage in the unlikely event of a fire. Smoke detectors should be positioned above and under the floor in a raised floor environment. Preventing a fire before it even starts will save money and reduce downtime.

Scalability – If changing market conditions are driving explosive demand for your organization's products or services, your relocation planning should consider the implementation of scalable network solutions, along with critical infrastructure needs like power and cooling that may be required to accommodate future growth in processing power and storage.

Capacity – Planning for a move or relocation should also include considerations for achieving the efficient use of physical infrastructure and space in your new location, while providing your organization with an agile approach for responding to increased demand. Capacity planning should include rack space, rack power, UPS power, upstream breaker or panel power, cooling, fiber or data port connectivity at the rack, patch panels and switches and added upstream carrier capacity.

Colocation facilities can be an effective way to plan for and address increased capacity considerations in your data center. Colocation will provide your organization with a footprint in a shared local facility where you rent the space, power and cooling. The infrastructure of the data center – UPS, diesel generator, CRAC/CRAH units, POEs, Meet-Me Rooms (MMRs) and security systems – are maintained by the data center landlord. Although you will be dividing the space and paying by the rack, you'll also get the benefit of 24/7 mechanical and engineering staff resources, along with increased security and peace of mind. When expansion needs arise, most colocation vendors will agree to RFOR (Right of First Refusal) on adjacent space or a location in close proximity to your footprint.

Uptime and Redundancy – Planning for redundancy in your new location will help manage risk and ensure maximum uptime, by helping you to prepare for powerful storms, unexpected commercial power outages or routine maintenance on the data center's infrastructure. A solutions architect can help you configure the right redundancy configuration for your organization, which can vary based on your organization's IT environment, business goals and budget. High availability can mean five nines reliability from 2N redundancy, or less from an N+1 configuration. Either way, it's important to recognize that system failures can have a detrimental impact on your organization's business operations, customer experience, workforce productivity and bottom line.

A relocation planning process that includes these six considerations for your new data center or IT infrastructure site will help to ensure maximum reliability and uptime, while minimizing operating expenses, once your move has been completed. Contact our experienced technology relocation services lead, Jason Long, to start planning your move today at 703.226.3211 or Jason.Long@invan.com, or visit our website at MoveInterstate.com/DataCenters to learn more.

