



Benefits of an Off-Site Data Center



Advantages of an Off-Site Data Center

In today's IT environment, there are many advantages offered by an off-site data center. Many of these advantages revolve around the typical lease vs. buy scenario, if your company does not already have state-of-the-art data centers in redundant and diverse locations. The aggregate amount of services at a colocation site will likely be many times more than could be afforded if you built and maintained your own data center.

The remaining issues then revolve around Business Continuity and Disaster Recovery by separating your business operation from your data center. The simple question that you have to ask is "What is the on-going viability of your business in case of a disaster at your primary location?"

Benefits of an Off-Site Data Center

Reduced Capital Expenditures

In an IT audit, the generally accepted level of coverage required for a safe data center is "Need + 1" (N+1), meaning that for everything that is needed to operate, you will need one spare on hand. Colocation eliminates the need to build and maintain your own redundant environment. Leasing space in a large, well-built data center with (N+1) support is cheaper than building your own.

You must think through all of the possible points of failure in your data center. You need highly reliable systems at an (N+1) level for:

- Power supplies and distribution units
- Heating and cooling systems
- Humidity control systems
- Network infrastructure (switches, hubs, routers, firewalls, etc.)
- Redundant and diverse communications lines from multiple carriers

Reliable Fail-Over Power and Redundancy

Most on-site data centers do not have (N + 1) power supply and backup. Colocation sites invest significant capital in power engineering, automated fail-over and redundancy to ensure uninterrupted power for the entire facility in order to meet with uptime service level guarantees.

Risk Management

The separation of IT resources from your business operations provides for mitigation of risk and off site data protection. True High Availability is only available with multiple sites in diverse geographies.

SOX Audit Issues

The Sarbaines-Oxley (SOX) legislation has intensified the focus on IT reliability and survive ability. Many IT audits fail to pass Sarbaines-Oxley standards due to business operations and data center coexistence without sufficient business continuity and disaster recovery plans. Colocation sites deliver improved revenue protection through geographic diversity and an (N + 1) support structure.



Conclusion

A specifically built and maintained colocation site is a reliable and safe place in which to house mission critical systems for redundancy to a large company's main data center. A hardened third-party site can provide a cost effective alternative to building your own primary or secondary facility.

The decision of whether to use an off-site colocation center or to build your own facility at a separate location from your primary production site requires evaluation of many variables, including cost. Contact your Datanational representative to discuss your specific requirements.

Fire Protection

Most on-site data centers have not implemented sophisticated fire suppression systems, which localize fire damage and limit a potential system loss. One of our manufacturing clients recently had a fire break out in the plant cafeteria/kitchen, which led to an explosion in the plant and the total loss of the data center in that facility from the ensuing fire. If the fire itself does not affect the IT equipment, the water damage from a standard fire suppression system most likely will.

Colocation sites have zone specific fire suppression systems custom built with data center equipment in mind. These server-safe fire suppression systems are specifically designed for managing a fire within a data center and do not just flood the entire building with water.

Security

Most on-site data centers are not as secure as our colocation sites. Our partnered colocation sites provide biometric access and constant video surveillance of all activity within its center. Who is watching your own data center when you are not there?

Bandwidth Requirements

New technology solutions require significant increases in communications bandwidth. These common new technology solutions include:

- eBusiness Solutions
(Business to Business & Business to Consumer)
- High Availability Solutions
(System mirroring across geographies)
- Backup to Disk Strategies
(Requiring burstable high speed communications lines)
- Voice Over Internet Protocol (VOIP)
(Requiring high bandwidth and high availability)

Business Mobility

An off-site data center simplifies the move process from one building to another with minimal downtime related to IT systems (as they stay put).

