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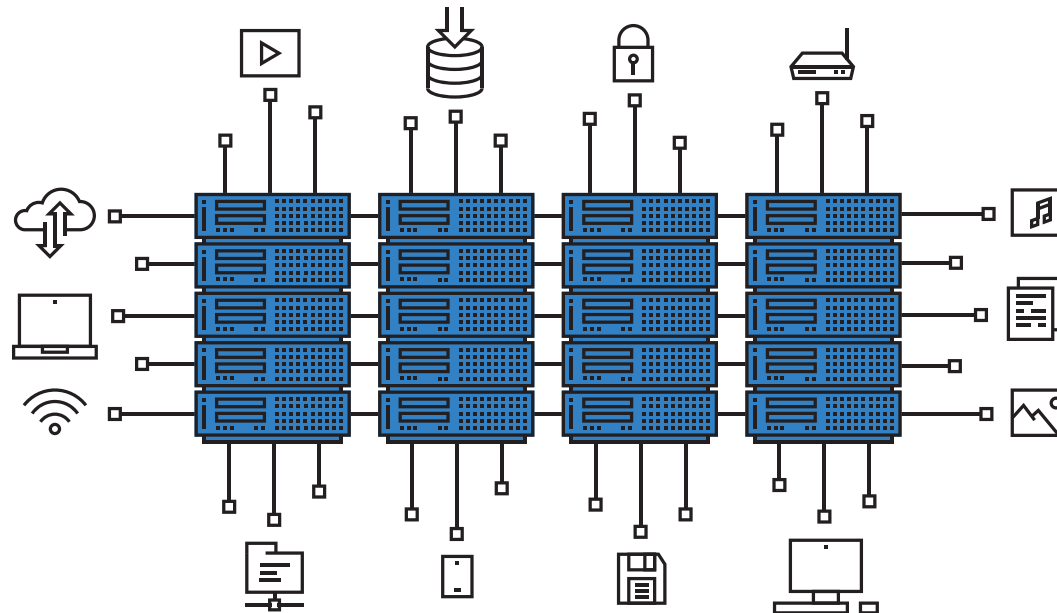
Evaluating Datacenter Colocation

Flexibility and security for business growth



YOU ABSOLUTELY
NEED TO DO THE
BUY-VS-BUILD
ANALYSIS. I'M A
PAST ENTERPRISE
DATACENTER
MANAGER, AND
FROM WHAT I
KNOW NOW, MORE
SHOULD BE USING
COLOCATION THAN
THEY DO.

*Jeff Paschke,
Senior Analyst,
Tier1 Research
in Computerworld
Magazine*



COLOCATION IS A SERVICE
THAT ALLOWS CUSTOMERS
TO INSTALL AND OPERATE
COMPUTER SERVER AND
TELECOMMUNICATIONS
EQUIPMENT IN A SECURE
DATACENTER ENVIRONMENT.
BASIC COLOCATION
SERVICES INCLUDE CABINET,
POWER, AND NETWORK
CONNECTIVITY.

THE ADVANTAGES OF COLOCATION

As companies mature and increasingly look to the cloud, colocation or partial colocation of their networks, servers, or storage equipment becomes less an option and more a necessity. While some companies — particularly those in healthcare and financial services — must meet stringent SAS 70/SSAE 16 certification at their inception, other firms often simply reach a point where they must make the determination to grow their datacenter infrastructure and staff in-house, or pair with a trusted partner for full or partial colocation.

There are three general reasons for choosing colocation:

- Manage growth and maintain system reliability
- Mitigate risk and provide means for disaster/data recovery
- Avoid and reduce costs

This quick-reading document presents criteria to help you evaluate colocation. If you have questions or would prefer to work directly with one of our sales consultants to understand your specific colocation needs, please contact us at your convenience.

Colocation is for businesses of all sizes

There is a perception that colocation is expensive and therefore only for larger companies. However, this is not true. A July 2011 study from Info-Tech Research Group concluded that:

While many organizations avoid colocation due to perceived misconceptions about size and service, Info-Tech research found that all can be successful in a colocation engagement:

- Organizational size is NOT a factor to success
- Size of engagement is NOT a factor of success



64% OF ORGANIZATIONS ENGAGE IN SOME FORM OF DATACENTER COLOCATION, BUT 77% DO NOT OUTSOURCE THE ENTIRE DATACENTER.

Info-Tech Research Group

The study encourages small companies to seek the level of colocation service that best suits them today and in the future. In its summary, the study concluded:

"Many vendors in the colocation market space have cut out their basic level of service and are only offering managed services as their entry level service, however basic colocation services suit the small to mid-sized organization's needs. Customers must be prepared to have educated conversations with vendors to ensure they are engaging with the right vendor and the right level of service for the business needs now and in the future."

**" Develop a Colocation Strategy." Info-Tech Research Group, July, 2011*

Colocation for growth and reliability

Companies often choose colocation when their growth poses questions about scale, reliability, maintenance, capital costs and operating expenses. With the cost of constructing high density datacenters starting above \$1,000 per square foot, colocation is an obvious choice. Colocation supports growth and reliability by letting businesses:

- Buy only what's needed...from voice and data to high bandwidth to rack space and power
- Provide the controlled environment and conditioned power that sensitive equipment requires
- Access the Internet and MPLS private networks through multi-threaded, high capacity bandwidth without paying for expensive fiber or DS3s to the premises
- Access additional services such as onsite support, data backup and disaster recovery services
- Avoid revenue loss and productivity loss by keeping system uptime rates at 99.999%

Colocation is not an all-or-nothing strategy. Many businesses outsource only a portion of their datacenter needs.

Compliance may make colocation necessary

Sarbanes/Oxley, HIPAA, FED banking regulations and Payment Card Industry (PCI) regulations all put restrictions on how data can be stored, accessed and transmitted.

Colocation datacenters are temperature and humidity controlled, secured through access controls, and staffed 24 hours a day, seven days a week for 365 days of the year. Most businesses could never afford the multiple connections and network availability provided by SAS 70/SSAE 16 certified datacenters, or the security layers and methods they use to protect the facility, such as restricted access and video recording 24x7 inside and around the facility.

Colocation for risk mitigation and disaster/data recovery

News like this breaks on a monthly basis: An earthquake and flood devastate a region. A 12-hour power outage puts millions of people in the dark. A Category 3 hurricane deluges half the state. Yet these are just a few of the threats that put businesses offline — and out of business.

Businesses — including small businesses — utilize colocation as part of disaster planning and recovery. By placing sensitive equipment and data in a building specifically designed to resist natural and man-made disasters — from fires, floods and earthquakes, to sabotage, terrorism and physical attacks — businesses add a strong measure of insurance against downtime.

NORTH AMERICAN BUSINESSES LOSE \$26.5 BILLION IN REVENUE EACH YEAR FROM IT SYSTEM DOWNTIME WITH THE BIGGEST IMPACT ON SMBs, ACCORDING TO A REPORT FROM CA TECHNOLOGIES. SMALL COMPANIES SUFFER THE MOST DURING PERIODS OF DOWNTIME, SHOWING THE LEAST ABILITY TO GENERATE REVENUE — 39% COMPARED TO 19% FOR MEDIUM-SIZED COMPANIES AND 28% FOR LARGE COMPANIES. A SIMILAR PATTERN EMERGED DURING RECOVERY TIME — 23% FOR SMALL COMPANIES, 11% FOR MEDIUM, AND 18% FOR LARGE.



TPx recommends seeking datacenters that include a range of proactive and remediating features such as:

- 24x7x365 support and access
- Multi-entrance fiber connectivity
- Active video surveillance monitoring systems
- Full HVAC and humidity environmental controls
- VESDA monitored pre-action fire suppression systems
- Flexible connectivity and bandwidth options
- 'Remote hands' on-site support

Other features such as raised floors and biometric security are available in some datacenters but aren't needed by all businesses.

Colocation for cost avoidance and cost reduction

The costs of colocation services and bandwidth have fallen to such low levels that today, only the largest businesses build their own datacenters. Smaller companies, those with revenue of less than a million up to \$250 million, can currently enjoy


unprecedented colocation services at rates that are at or near historical lows.

Cost avoidance benefits of colocation can include:

- No large capital expenses for building construction and equipment purchases
- No need to hire additional staff for IT and security
- Avoided downtime through better power management
- Lower or avoided recovery periods and costs
- Longer life for equipment thanks to better environmental controls
- No costs for backup generators and UPS

Cost reduction benefits include:

- Lower connection and bandwidth costs
- Lower utility rates due to bulk purchasing
- Reduced costs for backup services and disaster mitigation



GIVEN THE MASSIVE COSTS AND TIME DEMANDS REQUIRED TO BUILD A TRADITIONAL DATACENTER, FEWER ORGANIZATIONS ARE DECIDING TO BUILD THEIR OWN DATACENTERS.

*Lynda Stadtmueller
Datacenter Analyst
Frost & Sullivan
in Computerworld
Magazine
July 11, 2011*

Colocation choices: buy only what's needed

Colocation providers can vary greatly in what they offer, to how they bundle cabinets, power and bandwidth, and how they structure service level agreements (SLAs).

What's important to recognize is that businesses can choose from an array of options to suit their needs, with flexibility for rapid scaling. TPx recommends you seek providers who offer:

- Cabinets and partial cabinets with power
- Dynamic bandwidth
- Voice and data bandwidth up to 1Gbps
- Contracts from 1-3 years
- Additional available power
- SLAs to suit particular needs

There are many factors that combine for the right colocation agreement. TPx can assist you with this process, or simply answer specific questions. Contact us to get started.

A colocation disaster avoidance example

Businesses are increasingly relying on cloud-based services and are virtualizing servers to maximize their IT investments. But what happens when a business loses power and virtualized servers go down?

A business recently approached TPx with an issue they had experienced, hoping to avoid it in the future. The company had a power outage that brought down 25 virtual servers. At shutdown, each virtual server application file was renamed generically, forcing the company to allocate three staff members to manually examine each file, rename them back to their original file names and initiate the rebuild process. In total, the company spent 25 hours rebuilding the servers, losing:

- 1 full day for 3 technicians
- 1 day of company productivity
- Sales to new customers
- Customer and employee confidence

Support down the hall — while the business is down the road

Some businesses seek 'Remote Hands' services—technical support in the datacenter to help customers without requiring their on-site technical presence. Time lost in transit is an expense not only for staff, but in potential downtime. And having on-site support is more than just a reassurance; it allows businesses to balance their IT workload for more mission-critical tasks such as application development, maintenance and testing.

This Remote Hands service is often available 24/7/365 to deploy, maintain and help troubleshoot customers' equipment. TPx Remote Hands service, for example, can provide:

- Rebooting and power cycling of equipment
- Visual verification to assist remote troubleshooting
- Relaying status of equipment status indicators
- Plugging in head units to relay on-screen information
- Replacing or verifying cross-connect connectivity integrity
- Coordinated cable moves
- Verification of demarcation labels
- Non-recurring media swaps and power readings

Remote hands can help businesses focus on core business while safely maintaining data.

Criteria for datacenter colocation selection

While most colocation facilities are engineered to higher service levels than typical corporate facilities, businesses must still carefully evaluate the colocation services and contracts that colocation providers offer. When evaluating a colocation provider, TPx recommends that customers address these criteria:

1. What are the colocation services that are available?

Do you need basic colocation, managed services or more? Determine if you need a SAS 70/SSAE 16 certified facility. Understand if and how bundling makes a difference. Think about growth. While you may wish to start small today, look for the ability to add servers and additional services such as business continuity, data backup and disaster recovery.

2. What is the pricing structure of the services?

Consider bundle combinations. Look for red flags that constrain how you normally do business. Ask vendors to help you identify potential cost reductions.

3. How long is the term of a colocation contract?

Colocation services are so inexpensive that it may make sense to lock into longer term leases. Ask about additional discounts if you bundle services or upgrade in the future.

4. Can the lease be renewed at the end of the term?

Usually this is a no-brainer, but with colocation capacity tight in some markets, it's wise to have lease re-upping terms in writing.

Now is the time for colocation

Colocation makes sense to support growth, achieve compliance, mitigate potential harm and reduce costs.

TPx colocation has never been priced this low. Take a few minutes and speak to a TPx sales consultant to learn more about colocation and what's right for your business. He or she may even arrange a datacenter visit, where you'll tour the entire operation and have all of your questions answered.

ACCORDING TO A STUDY FROM AT&T, 66% OF U.S. COMPANIES EITHER USE HOSTED SERVICES TO AUGMENT THEIR BUSINESS CONTINUITY STRATEGIES OR ARE CONSIDERING DOING SO.



ABOUT TPX

TPx is the premier managed services carrier that delivers comprehensive communications solutions to 75,000 business locations nationwide. Businesses nationwide trust TPx to manage their mission-critical network services. TPx's award-winning, enterprise-grade unified communications, managed IT, and network connectivity services empower companies to unleash productivity by streamlining processes, proactively monitoring systems, and staying current with rapidly-changing technology. TPx backs its services with a zealous commitment to Customer Care, including a network uptime guarantee and 24/7/365 live-answer technical support.

Ready to move your business communications to the cloud? Call us at 800-399-4925.

