



COLOCATION VS IN-HOUSE DATA CENTER

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Introduction

Data Centers (DC) are an essential part of most organizations today. Many companies daily come to the point that they must make or even re-make a decision about their Data Centers. In some cases, Data Centers are coming to the end of their life spans (*usually 5 years*) and they need to decide whether it is time to upgrade the hardware or move to a Colocation. In some other cases, an organization's quick expansion is too much to handle for the server in the cabinet, which were bought a couple of years ago to serve a few users. All the above in combination with a few tight budgets, are sending the accounting department and CFO's in search of ways to save money and shared Data Center facilities look promising. At the same time many people choose to keep hold of the ownership of the most valued IT assets of the company. Below we analyze two ways of doing that, each with its advantages and disadvantages.

In-House Data Center / Server Room

The in-house Data Center or also called Server room, is an on-site IT facility operated and managed by the company's IT department. Since it is physically located within the company premises, everything - its backup, bandwidth, security requirements, cooling and power are controlled by the organization.

PROS:

- Hardware is on-site, allowing for easier maintenance and troubleshoot.
- The uptime and security features are controlled by the IT team, enabling personalized measures.
- You can expand and modify it to fit your needs.

CONS:

- The actual construction costs fall on the organization and the operation costs usually are more expensive than the colocations one.
- Redundancy is very challenging. In order to build robust emergency backup facilities, it can cost a lot of money for a small to medium sized company.
- On-site disaster recovery does not provide recourse in case of catastrophe.



Colocation

Colocation facility is also known as a shared data center, where a company or organization can rent space for servers, firewalls and other hardware. The Data Centers usually provides the business that are renting their space internet bandwidth, Power, HVAC, physical security etc. The amount they charge is usually defined by the space you want to rent on the rack, cabinet or room. In a Colocation usually additional management services are also offered, which can help a growing company by having to spend less time managing the IT.

PROS:

- Redundancy: many Data Centers offer redundant power and internet to help maximize uptime.
- Colocation facilities can reduce costs. Cooling (A/C) and power bills are split between multiple clients, and they also tend to have the best internet connections from providers.
- Colocation Data Centers usually provide mirrored data centers for Disaster Recovery purposes.

CONS:

- The hardware is far from the IT team for maintaining and troubleshooting.
- Depending on the arrangement the client might not be eligible for 24/7 maintenance if needed.
- The bandwidth between the DC and the company premises can cause latency problems

Conclusion

Although *In-House Hosting* provides the most hands-on control of your servers, it is usually at a higher cost and is less time efficient. On the other hand, Colocation offers shared space at usually a more affordable price, but its offsite location means that 24/7 access is not guaranteed if a problem arises.



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