

In-House or Hosted Servers: Are you making the right choice?



Maybe your business need has outgrown your server performance and you're thinking of replacing it. Or perhaps your server is dated and not supporting your business like it should. It might be that you're starting a new business and wondering if an in-house server is adequate or if you should adopt hosted solutions from the start.

In-House or Hosted Servers?

It's a tough decision that will impact your business on a daily basis. There's a lot to think about:

In-House Servers

Managing in-house servers may require initial capital expenditure investments, as well as internal IT staff or engagement of a managed service provider. With this solution, you'll also need to refresh your hardware, renew software licenses, perform upgrades, and extend warranties every five to seven years.



On the other hand, you'll have full control over the infrastructure and the ability to build a solution that's specific to your business needs.

In-House Servers

Advantages	Disadvantages
Provides physical control over infrastructure, the choice of hardware, including the ease and expand-ability of upgrades	Requires capital investment – hardware, associated software and high-speed redundant internet connectivity and redundant power supply
Provides control over the operating environment – the software and systems that run on the server	Needs hardware replacement every 5-7 years
Keeps security close to home. Only you can access the servers physically. Corporate data is stored/handled internally	Requires skilled IT maintenance & support team for setup and maintaining operating System, install security updates, patch updates, etc
Closeness to users reduces latency thus increases speed of access and performance	Not scalable. Difficult to scale up or down
Fixed cost of infrastructure and salary to in-house team	If some hardware breaks, you will lose 1/x share of your computing data, along with the data since last backup (depending on the hardware failure). Backup is required set up at different machine
Own internal resources and IT team manage the server and a tech support person on staff can address issues immediately	Manual installation and maintenance of standard software, web application, load balancer, firewall, etc.
Best suited if long term investment is planned	If people want to hurt you (or steal), they know where your servers are, physically. You require building physical security measures yourself (RFID access, CCTV, etc)

Hosted Server

Companies don't have to manage everything on-site, the hosted server is controlled by an experienced Managed IT Services Provider (MSP); relieving the headaches of cooling and housing servers and their related IT staff. This is a very desirable advantage for many firms that would rather invest their capital into other business areas. Beyond this, it also provides an easily scalable solution that can accommodate changing business needs.



On the other hand, you'll need a reliable and redundant internet connection from your office and in the event that your internet is down, you won't have access to the server.

Advantages	Disadvantages
Scalability on-the-fly and data resides in secure hosted environment	Contingent upon adequate Internet connectivity. In the event that your internet is down, you won't have access to the server
No on-site IT investment in hardware, licenses, anti-virus and anti spam softwares. Predictable monthly costs	Gives up control of security to managed services provider
No own installation and setup of firewalls, operation system or security packages	No physical access to the server
No investment in skilled IT team to manage the server	Communication with tech support specialist sitting somewhere else for support



Breaking Down Costs

	In-House Server	Hosted Server
Server Hardware	One time capex	Monthly opex
Storage	One time capex	Monthly opex
Set-up & Installation	One time capex	One time capex
OS Licenses	One time capex	Monthly opex
Server Client Access Licenses	One time capex	Monthly opex
Backup Licenses	One time capex	Monthly opex
Antivirus/Anti-spam Licenses	One time capex	Monthly opex
Warranty	On-going opex	No
IT Maintenance & Support	Monthly opex. High human resource cost	Monthly opex. Lower human resource cost
Depreciation + overhead costs	Yes	No
Firewall	One time capex	Included
High speed internet connection	Monthly opex	Included
Power, cooling, fire suppression	Monthly opex	Included
Training costs to IT personnel	Monthly opex	Included

Questions you should consider when weighing your options.

- What level of server performance and capacity do you need now and in the future? Does your hosting decision give you right architecture, and the flexibility you need for the future?
- What is the cost of downtime to your business, and how does it compare to the price of insuring against downtime with in-house IT resources or managed services?
- What could go wrong with your applications, and what regular maintenance do they need? Who in your organization has the experience and skills to help you?
- Do you have internal admin support with technical certification?
- Can you quickly contact them 24x7 in case of problems?
- How much time can the admin spend every day proactively checking server logs and monitoring performance to resolve issues before they become problems?
- Do you have spare parts and servers on hand for quick replacement in the event of hardware failure?
- Do you have redundant internet connectivity for your inbound and outbound data?
- Do you have redundant power connectivity from different grids and diesel generator backup in case power fails?
- Do you have high physical security (i.e., bio-metric and card access, RFID, CCTV, etc.) for your servers – especially to stop disgruntled people from causing harm?
- Do you have redundant servers for automatic fail-over in case one fails?
- Do you have application monitoring software in place to proactively catch issues before they become a problem?
- Do you back up your critical data and make sure that all patches and updates are installed so hackers don't get in?

