



What is a Datacenter and how can it help us?

Datacenters:

A datacenter is a facility composed of networked computers and storage that businesses or other organizations use to organize, process, store and disseminate large amounts of data.

Datacenters are not a single thing, but rather, a conglomeration of elements. At a minimum, Datacenters serve as the principal repositories for all manner of IT equipment, including servers, storage subsystems, networking switches, routers and firewalls, as well as the cabling and physical racks used to organize and interconnect the IT equipment. A Datacenter must also contain an adequate infrastructure, such as power distribution and supplemental power subsystems, including electrical switching; uninterruptable power supplies; backup generators and so on; ventilation and Datacenter cooling systems, such as computer room air conditioners; and adequate provisioning for network carrier connectivity. All of this demands a physical facility with physical security and sufficient physical space to house the entire collection of infrastructure and equipment.

Some major benefits of hosting the data at a datacenter:

- The servers are going to be kept in a secure environment where they are off limits to everyone
- There are no power outage on the servers meaning that the data will be safely
- The datacenter will have multiple high bandwidth and geographically diverse fiber connections to the internet, meaning that the connection to the server cannot fail
- The servers is in ideal air-conditioned environment
- Everything is backed up by the datacenter themselves
- No system halts or hardware failure due to daily preventative maintenance
- 24/7 Support from the datacenter's side for any software or configuration help
- High security standards are implemented and any security threat is dealt with immediately
- Network and Hardware upgrades are carried out regularly