

Operating System Application

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Operating System

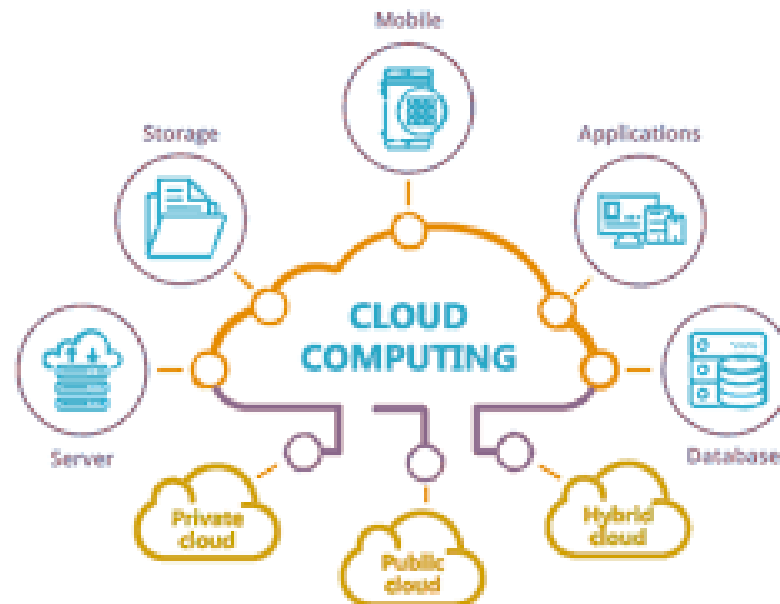
- An **operating system** (OS) is system software that manages computer hardware, software resources, and provides common services for computer programs.

Types of operating systems

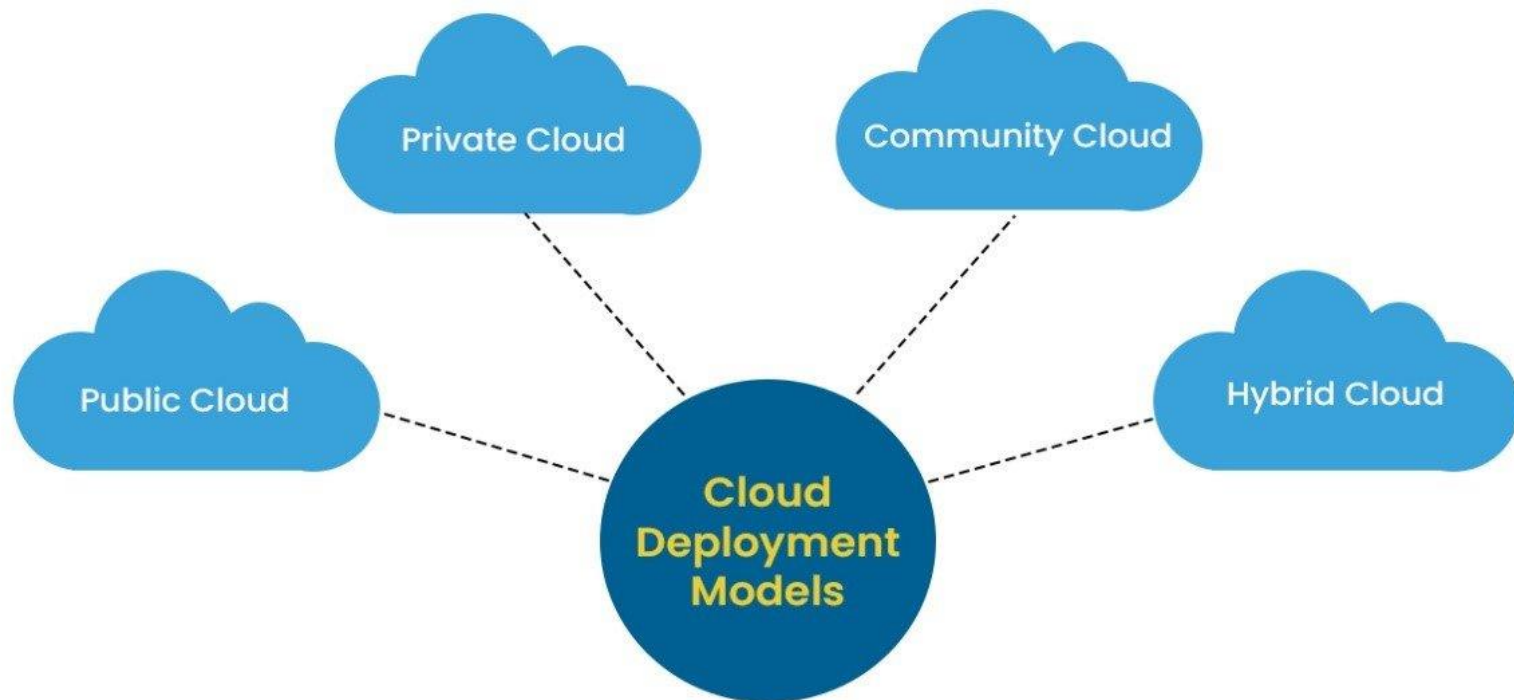
- Batch operating systems. The batch operating system does not have a direct link with the computer. ...
- Time-sharing or multitasking operating systems. ...
- Distributed operating systems. ...
- Network operating systems. ...
- Real-time operating systems. ...
- Mobile operating systems. ...
- Microsoft Windows. ...
- Apple iOS.

Cloud Computing

- Cloud computing is **the delivery of different services through the Internet, including data storage, servers, databases, networking, and software.** Cloud-based storage makes it possible to save files to a remote database and retrieve them on demand.



Types of cloud computing



- There are 4 main types of cloud computing: **private clouds, public clouds, hybrid clouds, and multclouds**. There are also 3 main types of cloud computing services: Infrastructure-as-a-Service (IaaS), Platforms-as-a-Service (PaaS), and Software-as-a-Service (SaaS).

- **Public Cloud** : The entire computing infrastructure is located on the premises of the CSP that offers Cloud services over the internet. This is the most economical option for those individuals/organizations that do not wish to invest in IT infrastructure. In a Public Cloud environment, the resources are shared between multiple users who are also called 'Tenants' The cost of using Cloud services is determined through the usage of IT resources consumed.

- **Private Cloud** : Individuals/organizations that choose Private Cloud gets dedicated infrastructure that is not shared by any other individual/organization. The security and control level is highest while using a private network. The costs are born by an individual/organization and are not shared with any other individual/organization. Management of Private Cloud is taken care of by the user and the CSP does not provide any Cloud management services.

- **Hybrid Cloud** : This Cloud deployment model includes the characteristics of Public Cloud and Private Cloud. Hybrid Cloud allows the sharing of data and applications between Public and Private Cloud environments. Organizations mainly use Hybrid Cloud when their On-Premise infrastructure needs more scalability, so they make use of scalability on Public Cloud to meet fluctuating business demands. Organizations can keep their sensitive data on their Private Cloud when reaping the power of the Public Cloud.

- **Community Cloud** : A Community Cloud is a Cloud infrastructure that is shared by users of the same industry or by those who have common goals. This Cloud infrastructure is built after understanding the computing needs of a community as there are many factors including compliances and security policies which need to be included in the community Cloud infrastructure.