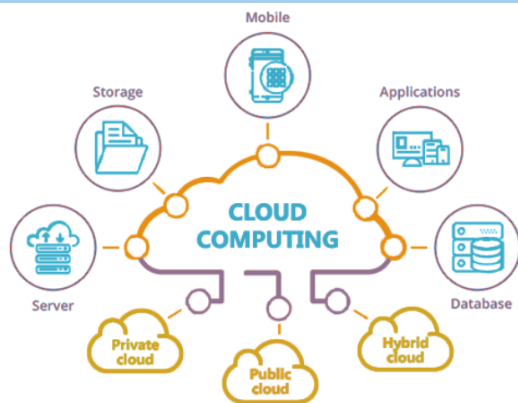


Cloud Computing

THE INTERNET ACTS AS A "CLOUD" OF SERVERS



What is Cloud Computing Service Provider?

Companies that establish public clouds, operate private clouds, or offer on-demand cloud computing components (also known as cloud computing services) such as Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS) are known as cloud service providers. When compared to on-premise IT, cloud services can save money on corporate processes.

Cloud provider is very helpful to access computing services instead of providing ourselves. It offers infrastructure in which it is the foundation of every computing environment. This infrastructure could include networks, database services, data management, data storage (cloud storage), servers and virtualization. It also provides platform, tools needed to create and deploy applications. These platforms could include operating systems and software which could be custom or else.

How does cloud computing help human life?

- TRADE CAPITAL EXPENSE
- MASSIVE ECONOMIES SALE
- INCREASE SPEED AND AGILITY
- TRADE CAPITAL EXPENSE
- STOP GUESSING CAPACITY
- STOP SPENDING MONEY ON RUNNING AND MAINTAINING DATA CENTERS
- GO GLOBAL IN MINUTES

Some examples of the cloud computing service providers include **Microsoft Azure, Google Cloud, DigitalOcean, IBM Cloud and Oracle.**

Microsoft Azure is one of the most rapidly expanding clouds available. Although Azure came out years after AWS and Google Cloud, it is still competing for the title of best cloud services provider. Azure's most appealing and intelligent feature is its exclusive cloud offering of Microsoft's past goods and services. Azure's cloud dominance is based on its intelligence. Azure is the only one who offers more data centers around the world.

Next, **Google Cloud**, like AWS and Azure, it provides services in a variety of areas including computing, storage, identity, security, database, AI and machine learning, virtualization, DevOps, and more. Google Cloud Services are offered in more than 200 countries over 20 regions, 61 zones, and 20 regions

Oracle Database is the first commercially available database that was designed to work seamlessly with enterprise grid computing. This architecture allows for the rapid deployment of new systems and the pooling of existing resources.

The database has both logical and physical structures. These two components can be separated by their physical storage units. Since the logical and physical storage structures are separate, the logical storage of data can be managed separately. This allows the management of data to focus on the physical storage of data.



DigitalOcean is a cloud computing vendor that offers an Infrastructure as a Service (IaaS) platform for software developers. DigitalOcean is very popular with open source developers and competes with AWS and Google Compute Engine. It offers nine droplet sizes. Developers have the option of resizing their droplets after creating them. DigitalOcean was founded in 2011, based in New York City.

IBM Cloud is a suite of cloud computing services for companies developed by IBM. The following services are available with this system such as networking, storage, administration, security, database analytics, artificial intelligence, and much more. All of the data is kept in the IBM cloud using the most advanced and cutting-edge security safeguards. The data loading time is really rapid, and the service is quite scalable. It offers IaaS, SaaS, and PaaS services via public, private, and hybrid cloud architectures, similar to other cloud service providers.

Comparison

| Pros : | Cons : |
|--|---|
| Microsoft Azure : <ul style="list-style-type: none"> - Infrastructure - Configuration - Ideal for Big Projects | Microsoft Azure : <ul style="list-style-type: none"> - Unsatisfactory customer experience & technical support |
| Google Cloud : <ul style="list-style-type: none"> - Reliability - Affordable | Google Cloud : <ul style="list-style-type: none"> - Limited features & services |
| Oracle Database : <ul style="list-style-type: none"> - Portability - Backup & Recovery - Multiple Database Support | Oracle Database : <ul style="list-style-type: none"> - Complexity - Difficult to manage - Expensive |
| DigitalOcean : <ul style="list-style-type: none"> - Easy to use - Affordable | DigitalOcean : <ul style="list-style-type: none"> - Unsatisfactory error addressing - Security issues |
| IBM Cloud : <ul style="list-style-type: none"> - Flexibility - Speed - Interoperability | IBM Cloud : <ul style="list-style-type: none"> - Complicated pricing model - Can be slow |

Summary

According to the Gartner Magic Quadrant for Cloud Infrastructure as a Service (IaaS) as of July 2019, AWS is the clear leader in terms of execution, but Microsoft's Azure is the visionary. Oracle, DigitalOcean, and IBM are all in the running for third place.