Cloud Computing: The Big Picture

Cloud Applications - Commonly called as Software as a service(Saas)

the third-party providers provide end-user applications to their customers with some administrative capability at the application level, such as the ability to create and manage their users. Also some level of customizability is possible such as the customers can use their own corporate logos, colors, etc.

Cloud Platform – technologies for running applications, storing data and more

Amazon Web Services:

Among all the cloud service providers Amazon is considered is the most powerful and flexible solution. AWS's virtual cloud platform comes with most of the attributes of an actual computer including hardware (CPU(s) & GPU(s) for processing, hard-disk/SSD for storage & local/RAM for memory); an operating system to choose from and pre-loaded apps like web servers, databases, CRM, etc. In fact, now you can obtain various AWS Certifications offered by Amazon to show off your achievements and keep learning till you master this cloud service.

Google Cloud Platform:

Google Cloud Platform offers the same core data storage and virtual machine functionality of AWS and Azure, or any other cloud provider. Google's strength lies in big data processing tools, artificial intelligence (AI) and machine learning initiatives, and container support.

Google's BigQuery and Dataflow bring strong analytics and processing capabilities for companies that work heavily with data, while Google's Kubernetes container technology allows for container cluster management and eases container deployment. Google's Cloud Machine Learning Engine and various machine learning APIs make it easier for businesses to leverage AI in the cloud.

Microsoft Azure:

The Windows Azure is used to deploy code on Microsoft's servers. This code holds access to local storage resources (blobs, queues, and tables). While the SQL Azure it is not a full SQL Server instance it can be integrated with SQL Server. The security features like authentication, security, etc. are supported using Azure AppFabric that allows applications within your LAN to communicate with Azure cloud. Overall it is a complete package that supports development, management as well security of applications.

Private Clouds – Cloud platform technologies in on-premises data centers

Private cloud is also known as an internal cloud or corporate cloud.

Private cloud provides computing services to a private internal network (within the organization) and selected users instead of the general public.

Private cloud provides a high level of security and privacy to data through firewalls and internal hosting. It also ensures that operational and sensitive data are not accessible to third-party providers.

HP Data Centers, Microsoft, Elastra-private cloud, and Ubuntu are the example of a private cloud.

1) More Control

Private clouds have more control over their resources and hardware than public clouds because it is only accessed by selected users.

2) Security & privacy

Security & privacy are one of the big advantages of cloud computing. Private cloud improved the security level as compared to the public cloud.

3) Improved performance

Private cloud offers better performance with improved speed and space capacity.