

Cloud Computing Service





Agenda

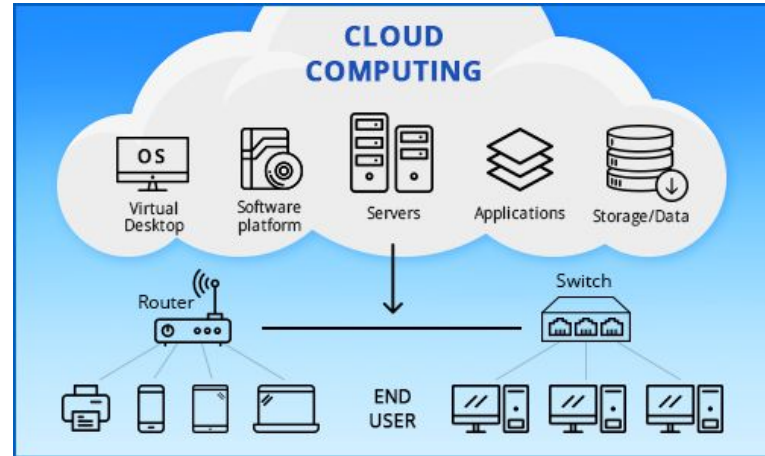
1. What is Cloud Computing?
2. Benefits of Cloud Computing
3. Cloud Computing Services
4. Cloud Computing Service Provider

1. What is Cloud Computing?

Cloud Computing is the delivery on-demand computing services over the internet on pay-as-you-go basis.

Example :

- Cloud Storage
- Software Platform

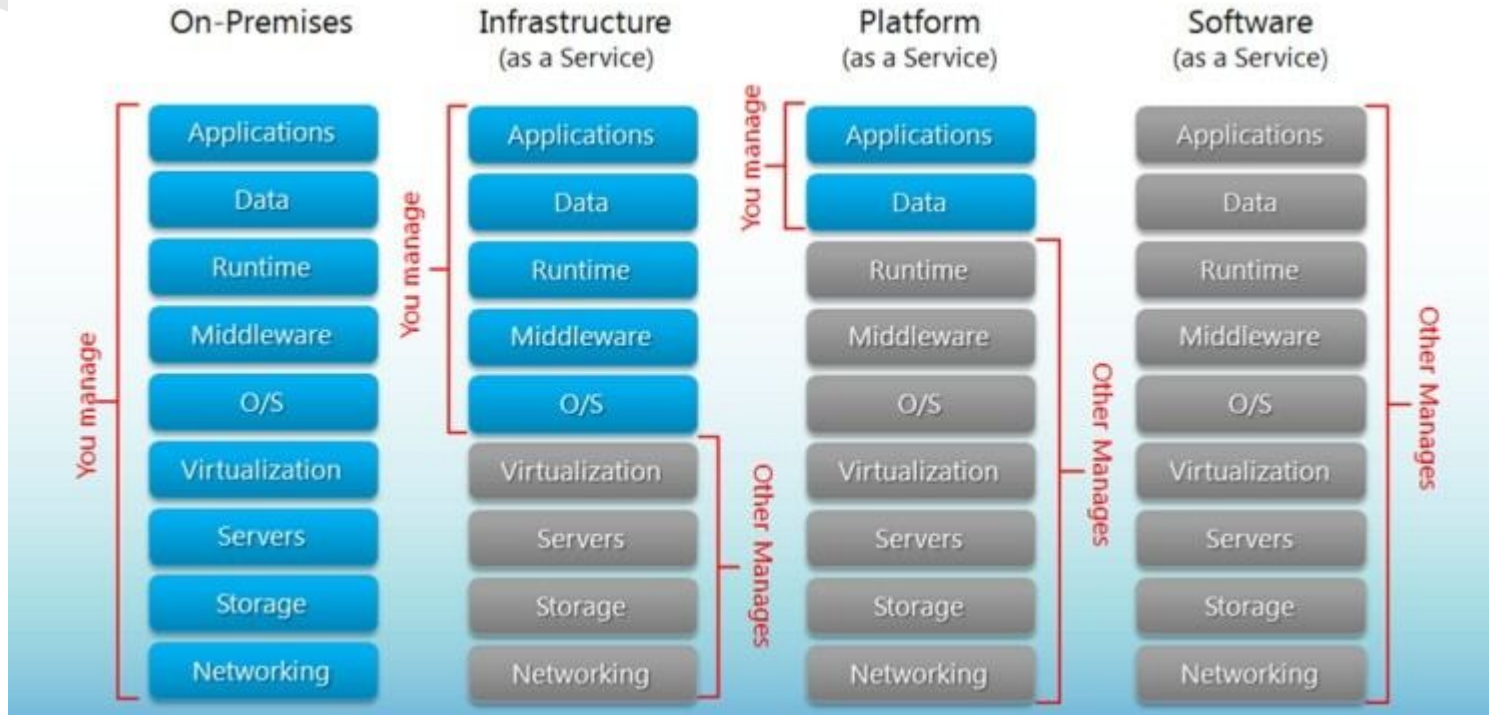




2. Benefits of Cloud Computing

1. Pay for what you use (scale up pay more, scale down pay less)
2. No server space required
3. No need software and hardware maintenance experts
4. More Data Security
5. Disaster Data Recovery (Much more to do data recovery)
6. Flexibility (Eg. Restructure for new business need by just a few button clicks)
7. Auto software update
8. Team Collaboration
9. Rapid implementation

3. Categorization of Cloud Computing





4. Cloud Computing Service Provider

1. AWS
2. Google Cloud Platform
3. AZURE
4. Comparison of them



4.1.AWS (Amazon Web Service)

What is AWS?

- Cloud Computing Web services in the form of IT infrastructure services began to be offered by Amazon in 2004 for public use.



4.1.AWS (Amazon Web Service)

Top clients using AWS

- Spotify
- Adobe : Deploy its own software
- Airbnb : use almost of all AWS services
- Autodesk : Deploy and developing machine learning tools
- Aol
- Bitdefender
- BMW : maps updates to care automatically
- theguardian
- Financial times
- European Space Agency
- IMDb
- NASA
- HTC
- Harvard Medical School



4.2 Google Cloud Platform

What is Google Cloud Platform?

- Google Cloud is a suite of Cloud Computing services offered by Google. The platform provides various services like compute, storage, networking, Big Data, and many more that run on the same infrastructure that Google uses internally for its end users like Google Search and YouTube.



Few Benefit of Google Cloud Platform

1. Best Pricing
2. Work from Anywhere
3. Private Network
4. Security
5. Redundant Backup



Google Cloud Services

Google Cloud has been expanding across the globe. The reason is the wide array of services it offers to its users:

- Compute Services
- Storage Services
- Networking
- Big Data Services
- Machine Learning
- IoT

Google Cloud Platform services

COMPUTE	STORAGE/DATABASES	NETWORKING	BIG DATA/IoT	MACHINE LEARNING
<ul style="list-style-type: none">■ Compute Engine■ App Engine■ Container Engine■ Cloud Functions	<ul style="list-style-type: none">■ Cloud Storage■ Cloud SQL■ Cloud Bigtable■ Cloud Spanner■ Cloud Datastore■ Persistent Disk■ Data Transfer	<ul style="list-style-type: none">■ Virtual Private Cloud (VPC)■ Cloud Load Balancing■ Cloud CDN■ Cloud Interconnect■ Cloud DNS	<ul style="list-style-type: none">■ BigQuery■ Cloud Dataflow■ Cloud Dataproc■ Cloud Datalab■ Cloud Dataprep■ Cloud Pub/Sub■ Genomics■ Google Data Studio■ Cloud IoT Core	<ul style="list-style-type: none">■ Cloud Machine Learning Engine■ Cloud Jobs API■ Cloud Natural Language API■ Cloud Speech API■ Cloud Translation API■ Cloud Vision API■ Cloud Video Intelligence



Top User That Using GCP

- Twitter
- 20th Century Fox
- PayPal
- eBay
- Chevron
- HSBC
- LG CNS



4.3 AZURE

What is Microsoft Azure?

- Azure is a complete cloud platform that can host your existing applications and streamline new application development. Azure can even enhance on-premises applications. Azure integrates the cloud services that you need to develop, test, deploy, and manage your applications, all while taking advantage of the efficiencies of cloud computing.



Comparison

AWS

- Dominant market position
- Extensive, mature offerings
- Support for large organizations
- Extensive training
- Global reach
- Difficult to use
- Cost management
- Overwhelming options

Microsoft

Azure

- Second largest provider
- Integration with Microsoft tools and software
- Broad feature set
- Hybrid cloud
- Support for open source
- Issues with documentation
- Incomplete management tooling

Google

- Designed for cloud-native businesses
- Commitment to open source and portability
- Deep discounts and flexible contracts
- DevOps expertise
- Late entrant to IaaS market
- Fewer features and services
- Historically not as enterprise focused



Comparison

Machine Type	AWS	Azure	GCP
Smallest Instance	An instance with 2 virtual CPUs and 8 GB RAM will cost you around USD69/month.	An instance with 2 virtual CPUs and 8 GB RAM will cost you around USD70/month.	Instance with 2 virtual CPUs and 8 GB RAM will cost you around USD52/month.
Largest Instance	Largest instance that includes 3.84 TB RAM and 128 vCPUs will cost you around USD3.97/hour.	Largest instance that includes 3.89 TB RAM and 128 vCPUs will cost you around USD6.79/hour.	Largest instance that includes 3.75 TB RAM and 160 vCPUs will cost you around USD5.32/hour.



Comparison

- **Establishment:** With a head start of 5 years, **the winner here is AWS.**
- **Availability zones:** With a greater number of regions and availability zones, **the winner here is AWS.**
- **Market shares:** With around one-third of market shares in its name, **the winner here is AWS.**
- **Growth rate:** Having a growth rate of almost 100 percent, **the winner is GCP.**
- **Who uses them:** With various high-end customers using all the three cloud platforms, **it's a tie!**
- **Services:**
 - When it comes to the number of services, **the winner is AWS.**
 - Regarding the integration with open-source and on-premise systems, such as MS tools, that are mostly used in almost all organizations, **the winner is Azure.**
- **Pricing Models:** With more customer-friendly pricing models and discount models, **the winner here is Google Cloud.**



Comparison

AWS is the most mature, enterprise-ready provider, with the deepest capabilities for governing a large number of users and resources.

Using Azure cloud makes more sense to several organizations that use MS tools since it's easy to integrate MS tools with Azure cloud

GCP offering the best pricing model for the infrastructure, on which Google Search engine and YouTube run