

AWS Session 1 Summary 15-02-2023

- India's Cloud First Policy: The Indian government has launched the "Cloud First" initiative as part of its goal to become a \$5 trillion economy. The initiative prioritizes the use of cloud computing technology in government agencies to improve efficiency, transparency, and services to citizens. AWS, with its 34% market share and expanding presence in India, is poised to contribute to this initiative. A new data center in Hyderabad showcases AWS's commitment to the Indian market.
- Cloud Computing: Cloud computing is the on-demand delivery of IT resources over the Internet with pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centers and servers, you can access technology services, such as computing power, storage, and databases, on an as-needed basis from a cloud provider like Amazon Web Services (AWS).
- Benefits of Cloud computing: We don't have to manage servers, We have the
 option for Pay as you go. It is Cost Savings, and with cloud computing, we can
 deploy globally in minutes.
- Data Centers: AWS (Amazon Web Services) operates a global network of data centers to provide cloud computing services. These data centers are distributed across regions and availability zones to provide high availability and fault tolerance.

Each data center contains thousands of servers, networking equipment, and storage devices to support the AWS infrastructure. AWS data centers are designed with a focus on security, compliance, and environmental sustainability.

Customers can choose the region and availability zone where their resources are deployed to optimize performance and minimize latency.

AWS has two data centers in India, It is in Mumbai and Hyderabad.

 AWS Availability Zones- AWS Availability Zones are physically separate data centers within a region that are connected through a high-speed network. Each Availability Zone is designed to be isolated from failures in other zones to provide fault tolerance and high availability. AWS currently offers over 80 Availability Zones across 25 regions worldwide.