Amazon Web Services

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- Amazon uses Xen Hypervisor for virtualization

AWS Services and Products

- Storage and Content Delivery
- Compute and Networking
- Database
- App Services
- Deployment and management

AWS Services and Products

- Compute and Networking
  - EC2 (Elastic Compute Cloud)
  - Elastic MapReduce
  - Route 53
  - VPC (Virtual Private Cloud)

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EC2

- Virtual Servers in the Cloud
- Zones
- Elastic Block Storage
- Security Groups
- Elastic IP
- Load Balancers
- Auto scaling
- Launching an AWS Instance

EC2 - Advantages

- Elastic
- Complete control through Root
- Flexible
- Reliable
- Secure
- Inexpensive

Elastic Map Reduce

- A Web Scale Infrastructure of EC2+S3
- Hadoop Ready
- Applications
  - Hive Process
  - Streaming
  - Word Count
- Process/Job flow
  - Store Input Data
  - Process the data with EC2
  - Store Output Data

Route 53

- It is a scalable Domain Name System
- DNS Web Service
- Functions
  - DNS Records
  - Directory Assistance Service
- Hosted Zones
- No Latency

Route 53 - Advantages

- High Availability
- Scalable
- Simple
- Secure
- Fast
- Cost Effective

Virtual Private Cloud (VPC)

- Isolated Cloud
- User Defined IP Range
- Subnets
  - Single Public
  - Public & Private
  - Public & Private with VPN Access
  - Private Only
- ACL (Access Control List) & NAT (Network Address Translation)
- IP Sec

Virtual Private Cloud (VPC)

- Routing Topology
  - Subnets
  - Static Private IP
  - VPC Router
  - Routing Table
- Advantages
  - Multiple Connectivity
  - Secure
  - Simple
  - Scalable & Reliable