

# Glossary

From HUIT Architecture Advisory Group

## General Terminology

- Fate Sharing
- Cloud
- Administrative Interface - Anything that configures/controls a hardware system or subsystem. This is not meant to extend to direct program to program communication software uses in the normal course of operation. Examples of administrative interfaces include: SNMP, or SSH to a CLI. Web interfaces that provide access to this type of control management function whether directly to a separate server, or via access to special functions reserved for specific users or classes of users are also included in this category.
- Public Interface
- Customer Visible and Infrastructure Services - In some environments, customer visible services might be called business level services which may be an aggregation of many individual services. Examples of this type of service would be a videoconferencing facility, or a learning management facility. Other types of services are the (generally) lower level services such as routing and DNS are not visible to an end user, but are fundamental to the operation of high level (customer visible) services. These are examples of infrastructure services. In some cases, a service might be a user visible service in one context and an infrastructure service in another. An example of this is email. Email notification, is integral to many high level services but is not the main customer visible function. In other cases, an email service with its attendant client interfaces is the customer visible service.
- MOOC - Massive, open, online course.
- IDDB
- Infrastructure Failover
- Application Layer Failover
- Platform Layer Failover
- Session Layer Persistence

## Amazon/EC2-specific Terminology

The enterprise architecture effort has a key objective to avoid dependence on a single vendor for any aspect of the architecture. That said, Amazon is a leader in 'cloud services' and recognizing

some key terms will help understand examples and references used in the reference architectures. Like most vendors, Amazon has created new terms for existing concepts. Below are excerpts from the Amazon Web Service (AWS) references with links to more information:

- Amazon Elastic Block Store (EBS) - block level storage - persists across EC2 instances. [Read more.](#)
- Amazon EC2 Instance - An instance is a virtualized server. There are many different types. [Read more.](#)
- AMI - An Amazon Machine Image that serves as a template from which you can create EC2 instances. [Read more.](#)
- EBS - A block level storage volume service. From this low level service users can create standard file systems or other use a block interfaces as desired. [Read more.](#)
- RDS - Amazon Relational Database Service (Amazon RDS) gives you access to the capabilities of a familiar MySQL, Oracle or Microsoft SQL Server database engine. For more information [more on RDS](#)
- S3 - An object based storage system. [Read more.](#)
- Availability Zones And Regions - Amazon EC2 provides the ability to place instances in multiple locations. Amazon EC2 locations are composed of Regions and Availability Zones. Availability Zones are distinct locations that are engineered to be insulated from failures in other Availability Zones and provide inexpensive, low latency network connectivity to other Availability Zones in the same Region. This information is from [Amazon](#)
- Auto Scaling - Automatically adding compute resources based on demand. [Read more.](#)
- CloudWatch - Facility to monitor AWS resources and applications. [Read more.](#)
- Simple Notification Service Amazon (SNS) - Web service that sends notifications. [Read more.](#)
- DynamoDB - This is Amazon's implementation of a NoSQL DB. [Read more.](#)
- Amazon Virtual Private Cloud (Amazon VPC) - A virtual networking environment carved out of the Amazon Cloud. This lets you control IP address, subnets, router configuration etc. [Read more.](#)
- Elastic IP Address - This looks very much like a Virtual IP address used in our load balancers today. It is a public address behind which you can add or reprovision. [Read more.](#)
- Route 53 - Amazon's DNS Service. [Read more.](#)
- Elastic Load Balancing - These act like a cross between our load balancers and global site selector. [Read more.](#)
- CloudFront - This provides caching services for static content and can proxy requests for interactive content. [Read more.](#)
- AWS CloudFormation - manages a collection of related AWS resources. [Read more.](#)
- Security Group - This facility acts as a firewall for EC2 instances but does not require

separate configuration of each one. [Read more.](#)

- Amazon VPC - Virtual Private Cloud - allows creation of a private environment within the AWS environment. [Read more.](#)
- Simple Queue Service - A managed queue service for AWS. [Read more.](#)
- CloudFormation - used to create templates/scripts to describe/create resources [Read more.](#)
- Elastic Data Pipeline - for moving data and creating data processing workflows. [Read more.](#)
- Glacier - Secure and durable storage [Read more.](#)
- Simple Email Service - a facility to send email directly from the AWS environment. [Read more.](#)

Retrieved from "<https://wikis.fas.harvard.edu/huitarch/Glossary>"