### **AWS Cloud Practitioner Cheat Sheet**

Thanks for downloading the Cheat Sheet. This guide will help you to accelerate your learning even faster. The answers/snippets are not meant to explain to you a service, but to help you pass the exam.

Take for example Redshift, if you read a question that contains the phrase "data warehouse" it can only be Redshift, a NoSQL fully managed database is always DynamoDB.

I hope you enjoy this list and feel free to share it as you like.

Best,

Edwin from ElasticCB.com

#### File storage options

S3 Simple Storage Service	Object file storage option, durable storage, lower overall CPU resources, URL per object, Cost = storage class and GB
S3 Transfer Acceleration	Fast, easy, secure data transfer over long distances
Glacier	Not frequently accessed, data archive, most cost efficient, import data = glacier API, console, S3 lifecycle policies
EBS Elastic Block Store	EBS Snapshot, attached to EC2 instance, persistent
Snowball	Move tens of TB of data into the cloud
Golden Image	AMI

#### Databases

Redshift	Data warehouse
Aurora	Fully managed MySQL
DynamoDB	Fully managed NoSQL
RDS	Data redundancy across regions: read replicas,
	automated patches & backups, resize capacity,
	see the list of supported DBs in the AWS FAQ
DMS Database Migration Service	Migrate existing databases from your datacenter
EMR	A large number of data sets processed

#### Message services

SQS	Decouple resources, store messages across
	distributed systems
SNS	Send and receive notifications
SES	Send and receive emails

### Misc.

CloudFront	Edge location, content delivery network CDN,
	DDOS protection
Penetration testing	Performed by the customer on permit from AWS
VPC	Host resources
Cloudformation	Infrastructure as code
Elastic Beanstalk	Deploy and manage apps
ElastiCache	Cache web app data
Support Plans	Learn the overview from AWS FAQ
AWS VPN	Connect on-premise to AWS

### Compute

EC2	Pay per use, virtual servers, how to secure:
	security groups, network access lists
	Cost factors (Instance type, AMI, Region)
Spot instance	Flexible, spontaneously terminated, noncritical
	apps
On demand instance	A couple of months, dev and test environments
Reserved instance	At least a year, continuous high usage +90-100%
	Models: No upfront, partial upfront, full upfront
Elastic Load balancer	Distribute traffic to multiple EC2 instances, multi
	AZ not multi region
Autoscaling	Demand-based in and out scaling

## Security

AWS Shield/Advanced	DDOS protection
Trusted advisor	Cost optimization, security, infrastructure
	recommendations
Inspector	Security compliance, inspect EC2 against
	common threats
Shared Responsibility Model	See <u>AWS FAQ</u>
MFA	Unauthorized access, service to activate IAM,
	extra layer of protection
CloudWatch	Metrics collection tracking, CPU utilization
CloudWatch Logs	Aggregate EC2 logs
CloudTrail	Governance, compliance and risk audits access to
	resources
Route 53	Domain name service, register a domain

### AWS Cloud Practitioner Certification Guide

# Development

API	Programmatically developers,
	programmatic access
AWS Console	Web-based interface (Normal AWS site)
AWS SDK	Call from programs to AWS
CLI	Programmatic access

## Architecture of the cloud

Design for failure	Multi-AZ, Regions, Elastic Load Balancer
Multi-AZ, Regions, Elastic Load Balancer	Reduce interdependencies
Two or more Availability Zones	More availability
Elasticity	Scale capacity, based on demand
Disaster Recovery	See here page 9

### IAM

User	User with username and password
Roles	AWS API call from EC2
Principle of least privilege	User only lowest permission to do their job

## Billing & TCO

Cost Explorer	Forecast spending, manage costs
TCO Total cost of ownership	Number of servers migrated, from on-premise to
	AWS
AWS Cloud benefits	Pay as you go + no upfront cost
Consolidated billing	Cost reduction multiple accounts