AWS

AWS – Partner Program holds tiers of Certifications and partner levels. This can be a long-term goal.

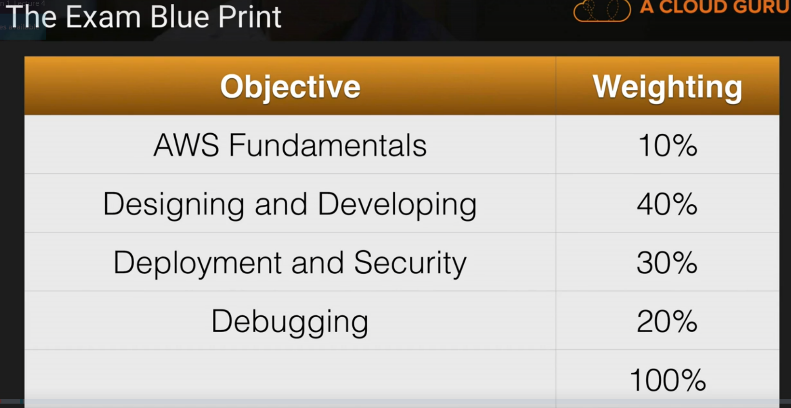
Entry Level Certification – Certified Practitioner (newest, came out in Reinvent 2017) – aimed at nontechnical and beginners path

Under Associate Tier – Certified Cloud Practitioner – Check this out.

In order to get the Devops Professional Ceritificate I need to complete Certified Developer Associate or Certified Sysops Administrator Associate exam.



There is an overlap of Knowledge for Certified Developer Associate exam and the Certified Solutions Architect Associate exam.

Questions and Pass Mark move around based on a bell-curve of everyone’s scores. 80 minutes to complete. $20 for practice. $150 for exam.

A Region is a geographical area. Each region consists of 2 or more availability zones. Availability Zone is simply a Data Center.

Edge Locations are endpoints for AWS which are used for caching content. Typically, this consists of CloudFront, Amazon’s Content Delivery Network (CDN). So, if someone were to host pics or videos in London and someone in Australia wanted to view them. They would download to an Australian Edge Location and be cached there so if anyone else wanted to view them it would be ready.

Again, I need to understand the differences between a Region, an Availability Zone, and an Edge Location.

A Region is a physical location in the world which consists of 2 or more Availability Zones (AZ).

An AZ is one or more data centers, each with redundant power, networking and connectivity, housed in separate facilities.

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Compute –

EC2 – Elastic Compute Cloud. Virtual Machines in AWS Platform.

EC2 Container Service – Where you run and manage Dockett containers at scale.

Elastic Beanstalk – Upload code, it will then handle settings such as Load Balancers, Scaling groups, or two instances, etc. So, all the developers should just focus on is their code.

Lambda – Lambda is code that you upload to the cloud and then you control when it executes. You don’t have to worry about any underlying physical or virtual machines. There is literally no operating system or anything to manage.

Lightsail – Amazon’s VPN service. For someone who doesn’t want to know any of the intricacies of AWS. It will just give you a server and a static IP address that you can use. It will give you RDP access for windows or SSH access for Linux. Then it will provide you with a console to manage everything with.

Batch – Not in any of the certification exams. You would use this to preform batch computing in the cloud.

Storage –

Simple Storage Service (S3) – You have Buckets, and you upload your files into buckets that are in the cloud.

Elastic File System (EFS) – Network attached storage so we can go in and store on any FS volume and mount that to multiple virtual machines.

Glacier – Data archival. You can basically archive all your data. Perhaps you don’t need your data all the time, or you want to check it every year, you can store it with Glacier for very very cheap.

Snowball – A way to bring in large amounts of data into the AWS data center. Instead of broadband or WI-FI, you can write it to a disc, it will then be imported manually.

Storage Gateway – Virtual Appliances or machines that you install in your datacenter and it replicates data back to S3.

Databases –

RDS – things like MySQL, Aurora, Oracle, any relational database

DynamoDB – for Non-Relational Databases

Elasticache – A way of caching common queried things from the databases. It’s just a caching service.

Red Shift – For data warehousing or business intelligence. This is where you will be preforming complex queries.

Migration –

AWS Migration Hub – Tracking service that allows you to track your applications as you migrate them to AWS. It integrates with other services within the migration framework.

Application Discovery Service – An automated set of tools that detects what applications you have and their dependencies. For example, if you have a program but it has a dependency of SQL Server, this will let you know what you need to ensure it works.

Database Migration Service – Easy way to migrate your databases from on premise to AWS.

Server Migration Service – Helps you migrate your virtual and physical servers into the AWS Cloud.

Snowball – Migrating large amounts of data, we are talking Terabytes.

Networking and Content Delivery –

VPC – Stands for Virtual Private Cloud. Think of it as a Virtual Data Center. You can configure things like the firewall, availability zones, network side address ranges, Network ACL, Route tables, etc.

CloudFront - Amazon’s Content Delivery Network. Things like Media files, video files, it stores the content closer to the Users.

Route 53 – Amazon’s DNS service. It is like an old school telephone book. If you look a cloud, it will give an IP Address.

API Gateway – A way of creating your own API’s for your other services to talk to.

Direct Connect – A way of running a dedicated line from your corporate head office directly into Amazon. It will directly connect into your PC.

Developer Tools –

CodeStar – Way of getting group of developers to work together. Collaborating with other developers. Project managing your code. Continuous delivery tool chain.

CodeCommit – Source Control Service. Place to store your code. Store private git repositories.

CodeBuild – Will compile that code for you or run tests against it and then it will produce software packages that are ready to deploy.

CodeDeploy – Automated deployment services.

CodePipeline – Continuous delivery service. Can see model and visualize the steps needed to automate the steps needed to release the software.

X-Ray – Used to debug and analyze applications. Can find root causes of issues.

Cloud9 – IDE Environment. A place where you can go to develop your code. Can develop in your web browser.