AWS Solution Architect Associate Certification Training – Module 26

26. Migration Service: SNOWBALL

Moving your data and applications to the cloud ain't easy, but Amazon has a number of services that can take some of the load off. Some of them are:

AWS Migration Hub

AWS Migration Hub provides a single place to monitor migrations in any AWS region where your migration tools are available. There is no additional cost for using Migration Hub. You only pay for the cost of the individual migration tools you use, and any resources being consumed on AWS.

Features

- ✓ Allows you to import information about their on-premises servers and applications into the Migration Hub so you can track the status of application migrations.
- ✓ Shows the latest status and metrics for your entire migration portfolio. This allows you to quickly understand the progress of your migrations, as well as identify and troubleshoot any issues that arise.
- ✓ Provides all application details in a central location. This allows you to track the status of all the moving parts across all migrations, making it easier to view overall migration progress

AWS Database Migration Service

AWS Database Migration Service helps you migrate databases to AWS quickly and securely. The source database remains fully operational during the migration, minimizing downtime to applications that rely on the database. The AWS Database Migration Service can migrate your data to and from most widely used commercial and open-source databases. AWS Database Migration Service supports homogeneous migrations such as Oracle to Oracle, as well as heterogeneous migrations between different database platforms, such as Oracle or Microsoft SQL Server to Amazon Aurora. With AWS Database Migration Service, you can continuously replicate your data with high availability and consolidate databases into a petabyte-scale data warehouse by streaming data to Amazon Redshift and Amazon S3.

Benefits

- ✓ Simple to use
- ✓ Minimal downtime
- ✓ Supports widely used databases
- ✓ Low cost
- ✓ Fast and easy to setup
- ✓ Reliable

AWS Snowball

Snowball is a petabyte-scale data transport solution that uses devices designed to be secure to transfer large amounts of data into and out of the AWS Cloud. Using Snowball addresses common challenges with large-scale data transfers including high network costs, long transfer times, and security concerns. Customers today use Snowball to migrate analytics data, genomics data, video libraries, image repositories, backups, and to archive part of data center shutdowns, tape replacement or application migration projects. Transferring data with Snowball is simple, fast, more secure, and can be as little as one-fifth the cost of transferring data via high-speed Internet.

With Snowball, you don't need to write any code or purchase any hardware to transfer your data. Simply create a job in the AWS Management Console ("Console") and a Snowball device will be automatically shipped to you. Once it arrives, attach the device to your local network, download and run the Snowball Client ("Client") to establish a connection, and then use the Client to select the file directories that you want to transfer to the device. The Client will then encrypt and transfer the files to the device at high speed. Once the transfer is complete and the device is ready to be returned, the E Ink shipping label will automatically update and you can track the job status via Amazon Simple Notification Service (SNS), text messages, or directly in the Console.

Benefits

- ✓ High speed
- ✓ Extremely scalable
- ✓ Tamper resistant and secure
- ✓ Simple and compatible
- ✓ Low cost
- ✓ Easy data retrieval

How it works



Use cases

Cloud migration: If you have large quantities of data you need to migrate into AWS, Snowball is often much faster and more cost-effective than transferring that data over the Internet.

Disaster Recovery: In the event that you need to quickly retrieve a large quantity of data stored in Amazon S3, Snowball devices can help retrieve the data much quicker than high-speed Internet.

Datacenter decommission: There are many steps involved to decommissioning a datacenter to make sure valuable data is not lost. Snowball can help ensure that your data is securely and cost-effectively transferred to AWS during this process.

Content distribution: Use Snowball devices if you regularly receive or need to share large amounts of data with clients, customers, or business associates. Snowball devices can be sent directly from AWS to client or customer locations.