

SNOWBALL

This is how it looks SNOWBALL



What is SNOWBALL ?



- Snowball is petabyte-scale data transport solution that uses secure appliances to transfer large amount of data into and out of AWS.
- Using snowball, addresses common challenges with large scale data transfers including high network costs, long transfer times and security concerns
- Transferring data with snowball is simple, fast, secure and can be as little as one-fifth the cost of high speed internet.

What is SNOWBALL ?



- Snowball comes in either a 50 TB or 80 TB size.
- Snowball uses multiple layers of security designed to protect your data including tamper-resistant enclosures, 256-bit encryption, and an industry Standard Trusted Platform Module(TPM) designed to ensure both security and full chain of custody of your data
- Once the data transfer job has been processed and verified, AWS performs a software erasure of the snowball appliance.

What is SNOWBALL ?



- Physical data transport solution that helps moving TBs or PBs of data in or out of AWS
- Alternative to moving data over the network (and paying network fee).
- Secure, tamper resistant, uses KMS 256 bit encryption
- Tracking using SNS and text messages. E-link shipping label
- Pay per data transfer job.
- Use cases: large data cloud migrations, DC decommission, DR.
- If it takes more than a week to transfer over the network, use Snowball Devices.

Snowball Process



- Request snowball devices from the AWS console for delivery.
- Install the snowball client on your servers
- Connect the snowball to your servers and copy files using the client.
- Ship back the device when you're done (goes to the right AWS facility).
- Data will be loaded into an S3 bucket
- Snowball is completely wiped
- Tracking is done using SNS, text message and the AWS console.

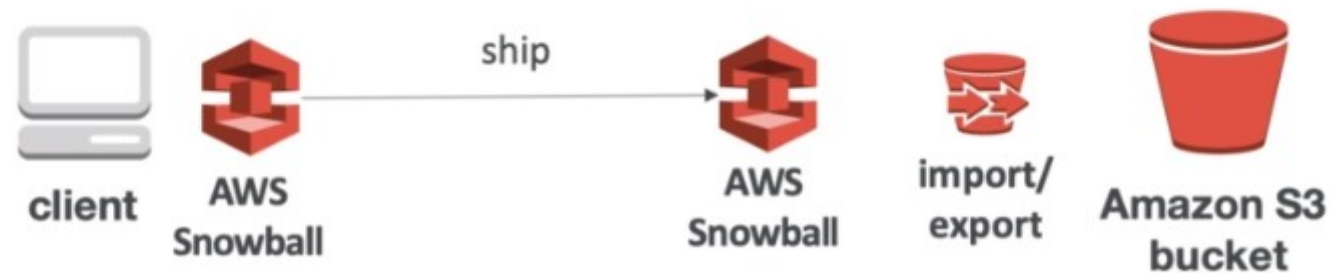
Snowball Process



- Direct upload to S3:



- With snowball



What is SNOWBALL EDGE?



- Snowball Edges add computational capability to the device.
- 100 TB capacity with either:
 - Storage optimized – 24 vCPU
 - Compute Optimized – 52 vCPU & optional GPU
- Supports a custom EC2 AMI so you can perform processing on the go.
- Supports custom Lambda functions
- Very useful to pre-process the data while moving.



What is SNOWMOBILE?



- Snowmobile is an Exabyte-scale data transfer service used to move extremely large amount of data to AWS.
- You can transfer up to 100PB per snowmobile.
- A 45-foot long shipping container, pulled by a semi trailer truck.
- Snowmobile makes it easy to move massive volumes of data to the cloud, including video libraries, image repositories or even a complete data center migration
- Transferring data with Snowmobile is secure, fast and cost effective

What is SNOWMOBILE ?



When should you use SnowBall



Available Internet Connection	Theoretical Min. Number of Days to Transfer 100TB at 80% Network Utilization	When to Consider AWS Import/Export Snowball?
T3 (44.736Mbps)	269 days	2TB or more
100Mbps	120 days	5TB or more
1000Mbps	12 days	60TB or more

Exam Tips



- What Snowball is
- Snowball Can
- Import to S3
- Export to S3