BATCH : BATCH 107

LESSON : **AWS**

DATE : 14.03.2023

SUBJECT : **AWS EFS**

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AWS EFS

What is EFS ?

- ✔ Amazon Elastic File System (Amazon EFS) is a serverless and set-and-forget elastic file system. It can be used with AWS Cloud services and on-premises resources.
- ✔ Amazon EFS is designed to increase and decrease the storage capacity automatically as you **add** or **remove** files. So, it is a flexible-capacity storage solution.

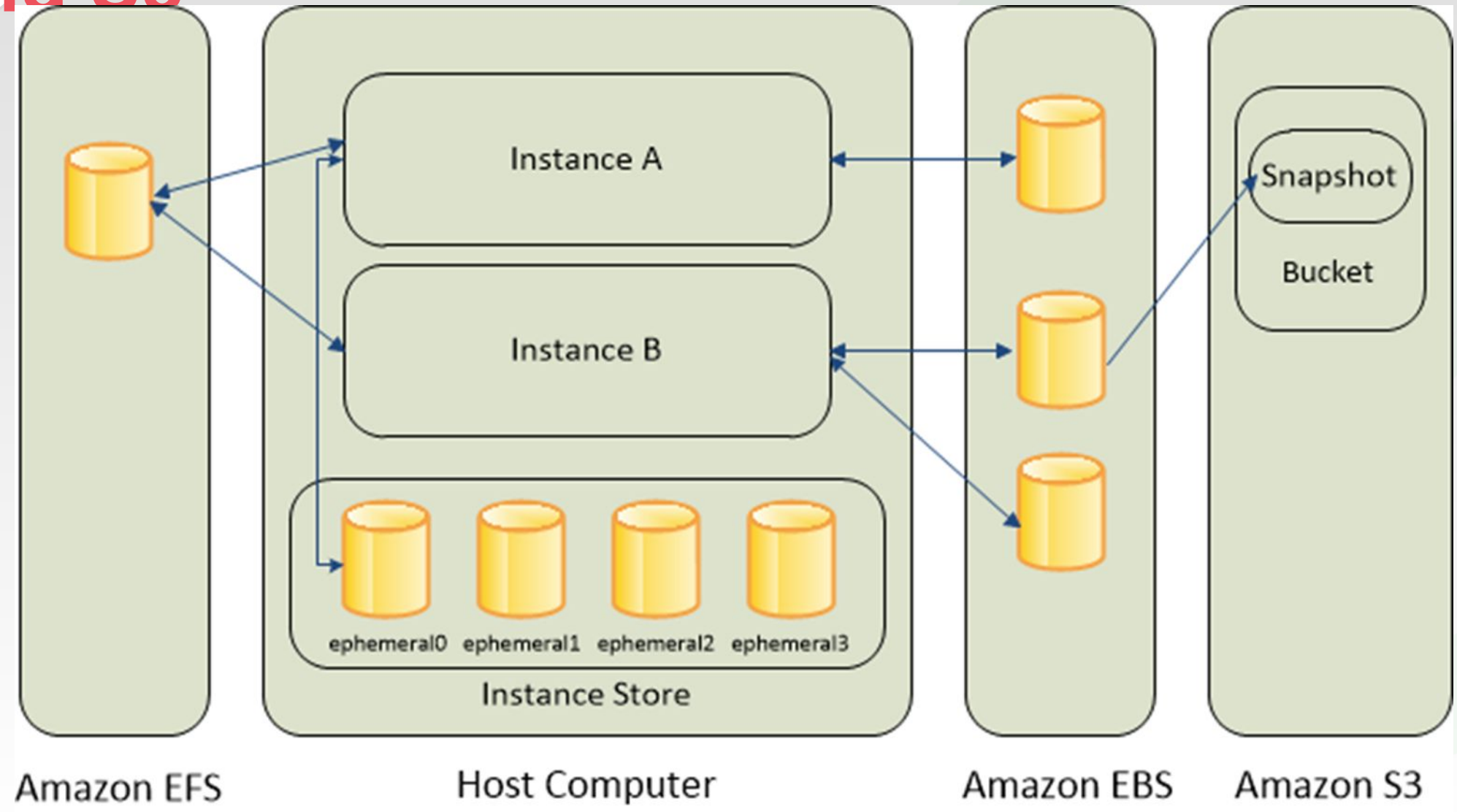
Quotas and Limits

Resource quotas

Following are the quotas on Amazon EFS resources for each customer account in an AWS Region.

Resource	Quota
Number of access points for each file system	120
Number of connections for each file system	25,000
Number of mount targets for each file system in an Availability Zone	1
Number of mount targets for each VPC	400
Number of security groups for each mount target	5
Number of tags for each file system	50
Number of VPCs for each file system	1

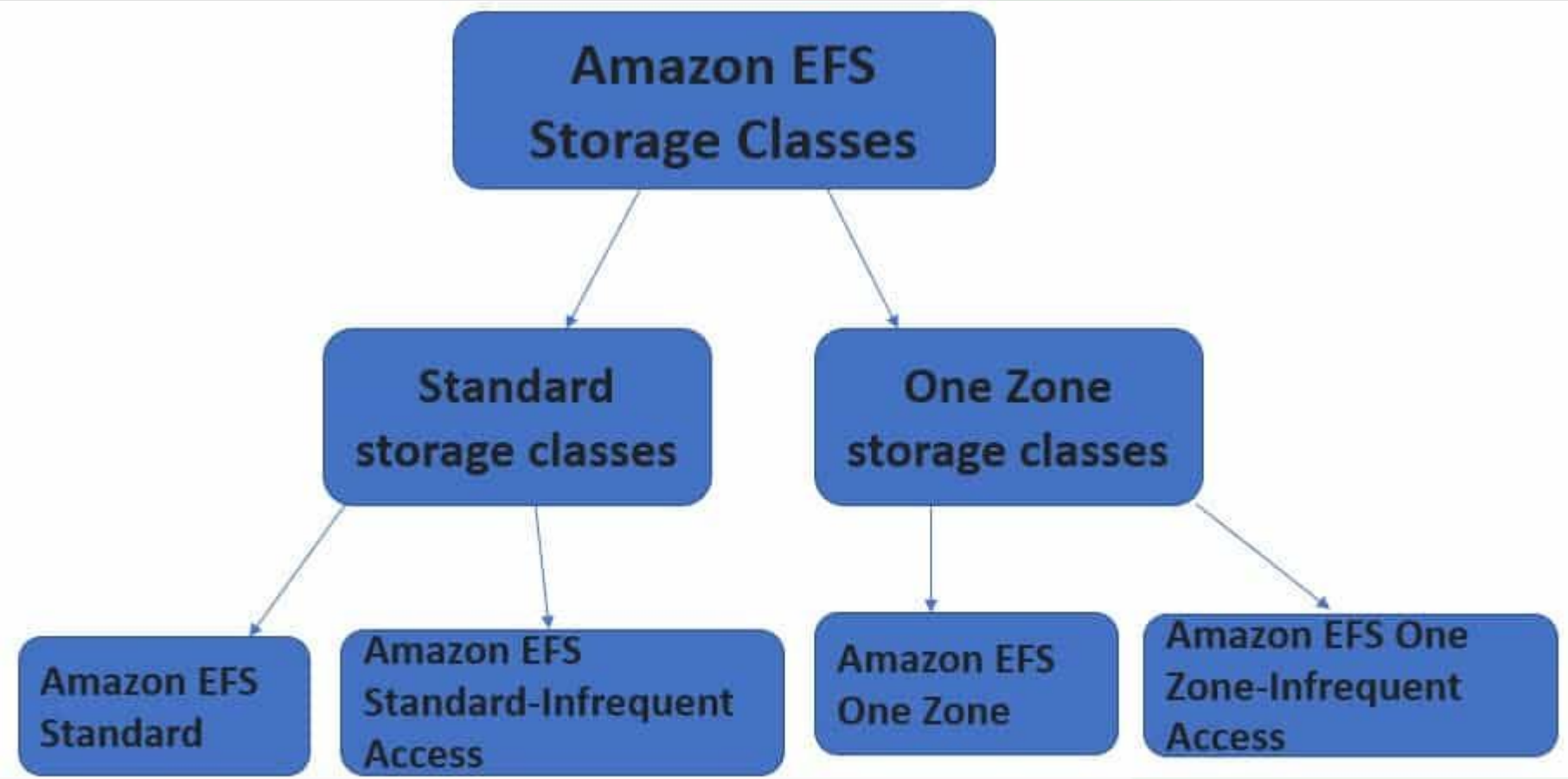
Comparing EFS with EBS and S3



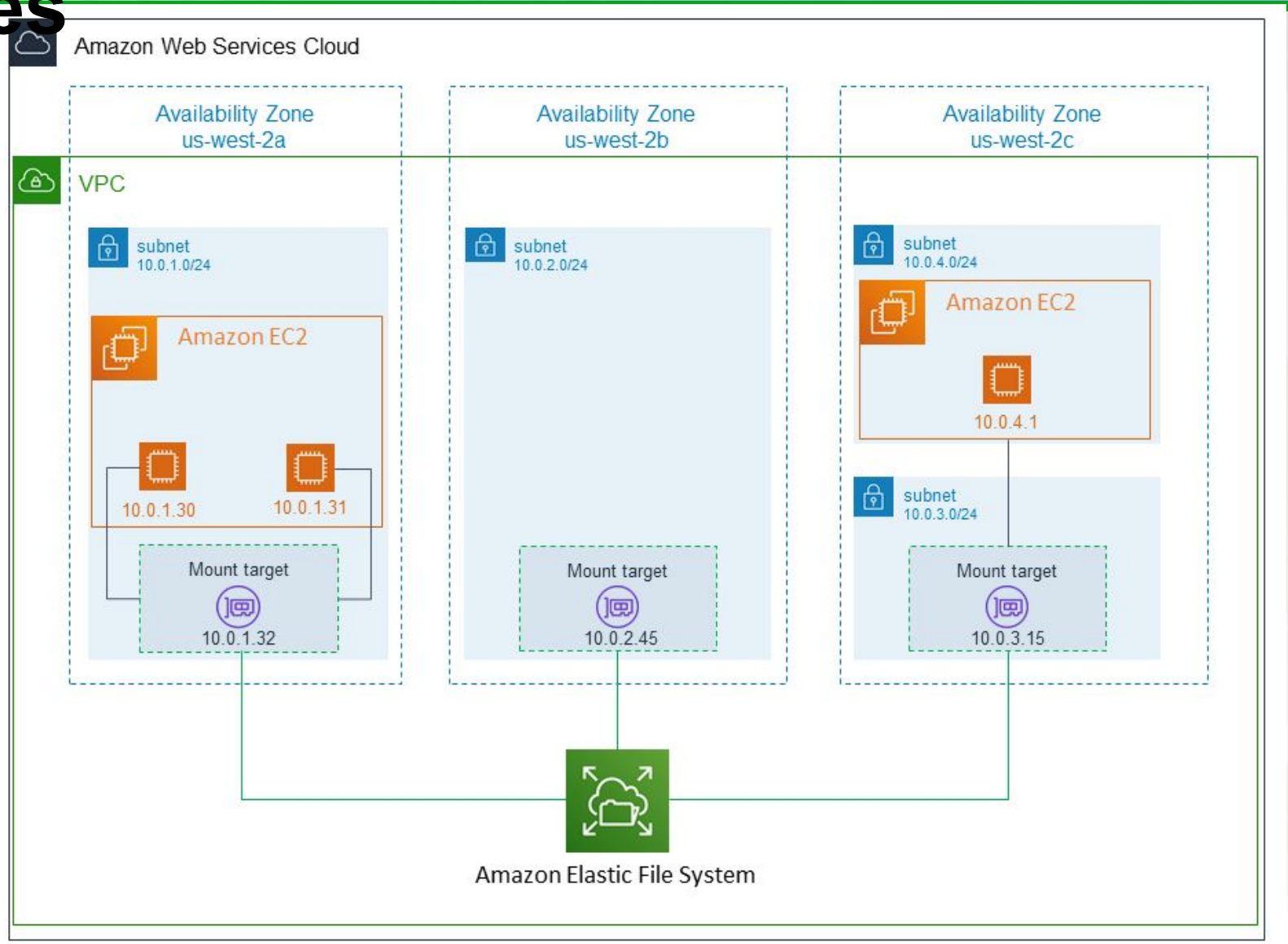
Features of EFS ?

- ✔ Amazon EFS file systems can automatically scale from gigabytes to petabytes of data without needing to provision storage.
- ✔ Compute services including Amazon EC2, Amazon ECS, Amazon Elastic Kubernetes Service (EKS), AWS Fargate, and AWS Lambda can be used compatible with the Amazon EFS file system.
- ✔ Multiple compute instances (even thousands of) can access an Amazon EFS file system at the same time.
- ✔ There is no minimum fee or setup cost and you pay only for the storage used by your file system.
- ✔ Amazon EFS is compatible with all Linux-based AMIs for Amazon EC2. It is not supported on Windows instances.

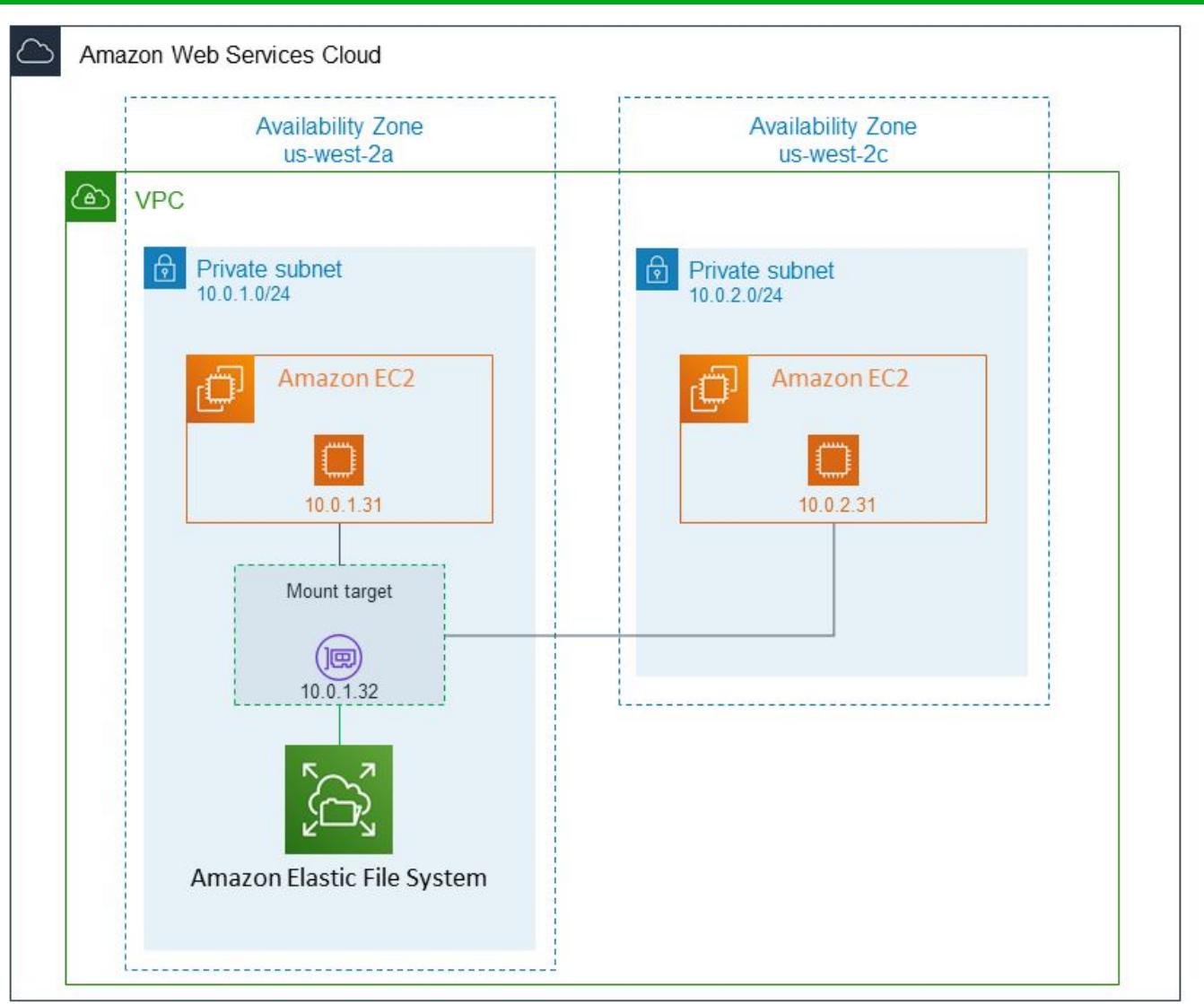
EFS Storage Classes



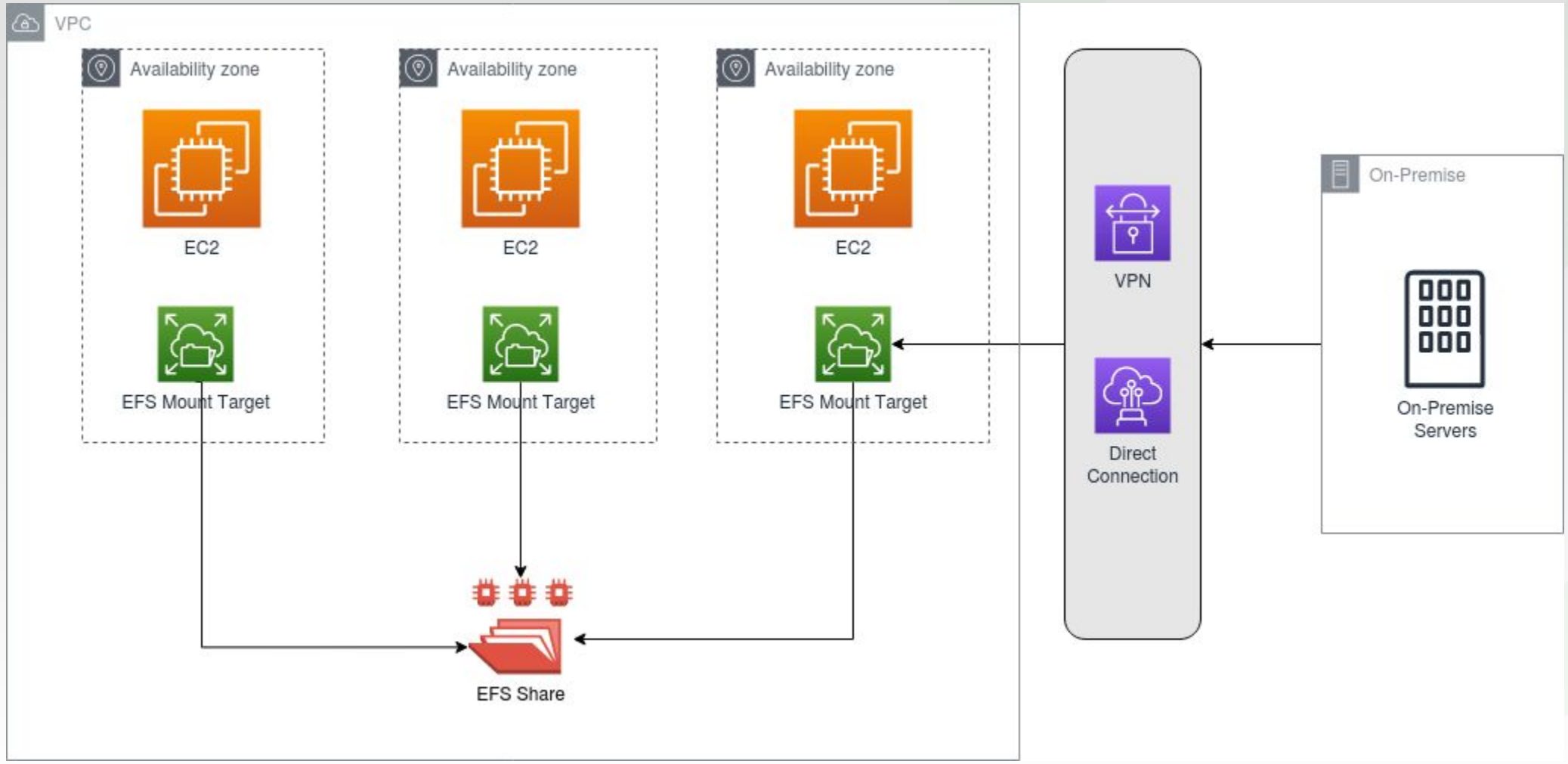
Amazon EFS with Standard storage classes



Amazon EFS with One Zone storage classe

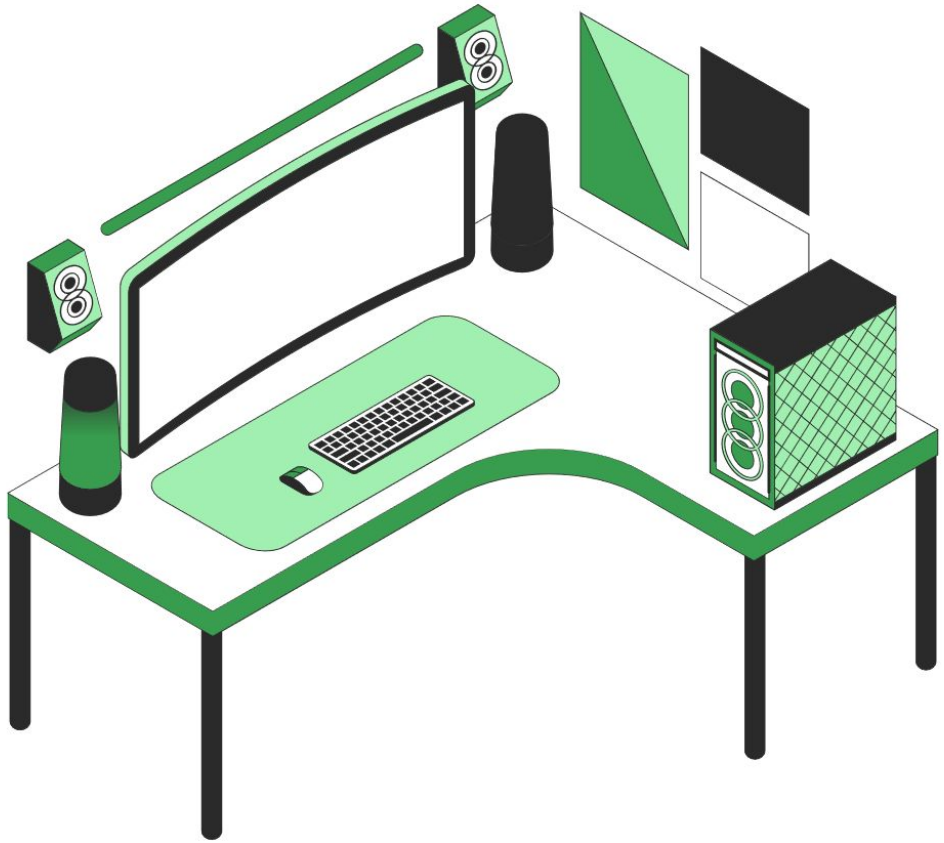


Amazon EFS with One Zone storage classes



Comparing EFS with EBS and S3

		File Amazon EFS	Object Amazon S3	Block Amazon EBS
Performance	Per-operation latency	Low, consistent	Low, for mixed request types, and integration with CloudFront	Lowest, consistent
	Throughput scale	Multiple GBs per second	Multiple GBs per second	Single GB per second
Characteristics	Data Availability/Durability	Stored redundantly across multiple AZs	Stored redundantly across multiple AZs	Stored redundantly in a single AZ
	Access	One to thousands of EC2 instances or on-premises servers, from multiple AZs, concurrently	One to millions of connections over the web	Single EC2 instance in a single AZ
	Use Cases	Web serving and content management, enterprise applications, media and entertainment, home directories, database backups, developer tools, container storage, big data analytics	Web serving and content management, media and entertainment, backups, big data analytics, data lake	Boot volumes, transactional and NoSQL databases, data warehousing & ETL



Do you have any questions?

Send it to us! We hope you learned something new.

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