



# Amazon EFS

# At the core of the lesson

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You will learn how to define Amazon Elastic File System (Amazon EFS) and how it works.

# What is Amazon EFS?



Amazon EFS

Amazon EFS is scalable, fully managed, elastic Network File System (NFS) storage for use with AWS Cloud services and on-premises resources.

# Features

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Amazon EFS is a petabyte-scale, low-latency file system that does the following:

- Supports NFS
- Is compatible with multiple AWS services
- Is compatible with all Linux-based instances and servers
- Uses tags

# Benefits

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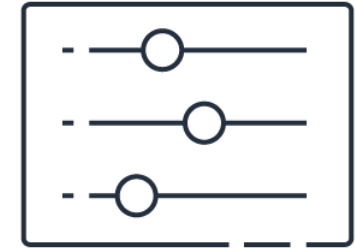
## High availability

Provides scalable, elastic file storage for use with AWS services



## Dynamic elasticity

Grows and shrinks automatically as you add and remove files



## Fully managed

Provides a shared file system storage for Linux workloads

# Performance attributes

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## Storage classes

- Standard storage classes
  - EFS Standard
  - EFS Standard Infrequent Access (Standard-IA)
- One Zone storage classes
  - EFS One Zone
  - EFS One Zone-IA (One Zone-IA)

## Performance modes

- General Purpose
- Max I/O

## Throughput modes

- Elastic Throughput
- Bursting Throughput
- Provisioned Throughput

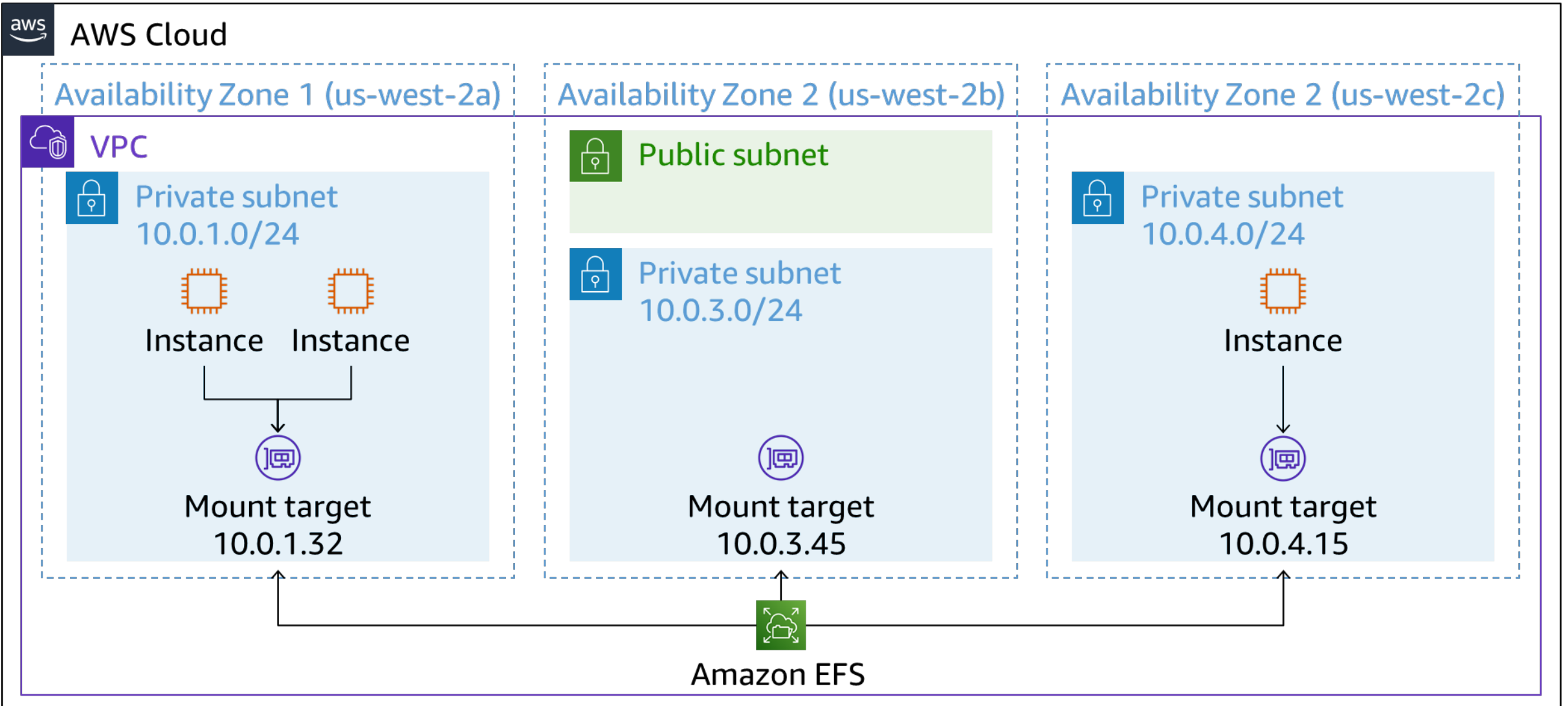
# Use cases

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Amazon EFS is designed to provide performance for a broad spectrum of workloads and applications, including the following:

- Home directories
- File system for enterprise applications
- Application testing and development
- Database backups
- Web serving and content management
- Media workflows
- Big data analytics

# Amazon EFS architecture

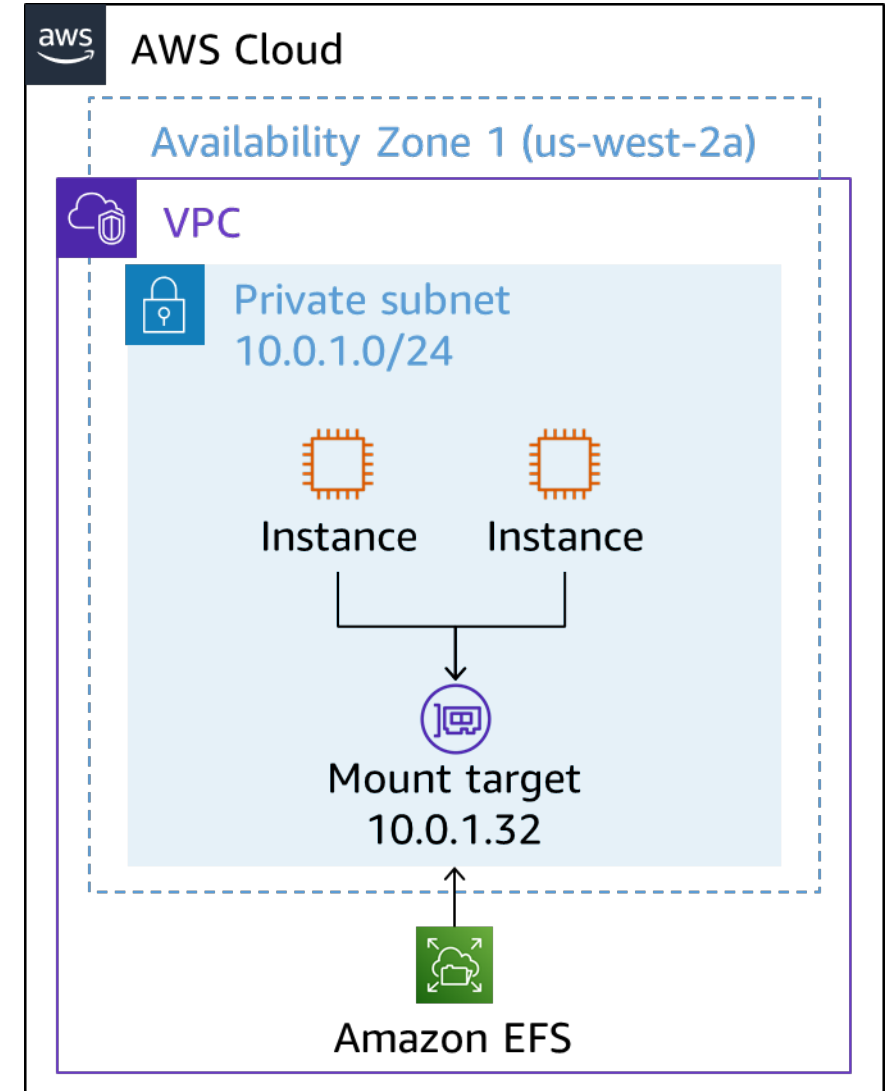




# How to use Amazon EFS

To set up Amazon EFS in your VPC, follow these steps:

1. Create your EFS file system.
2. Create your Amazon EC2 resources, and launch your EC2 instance.
3. Create your mount targets in the appropriate subnets.
4. Connect to your EC2 instance, and mount the EFS file system.
5. Clean up your resources, and protect your AWS account.



# Checkpoint questions

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1. Which file system protocol does Amazon EFS support?
2. Which AWS services are able to access Amazon EFS concurrently?
3. What are the main benefits of using Amazon EFS in your cloud environment?

# Key ideas

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- Amazon EFS provides file storage over a network.
- Amazon EFS is a fully managed file system storage service that uses the NFS protocol.
- Use Amazon EFS to support Linux-based workloads on AWS or on premises that require shared file system storage.



# Thank you

Corrections, feedback, or other questions?

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