**QUESTION 115**

A solutions architect is designing a shared storage solution for a web application that is deployed across multiple Availability Zones.

The web application runs on Amazon EC2 instances that are in an Auto Scaling group.

The company plans to make frequent changes to the content.

The solution must have strong consistency in returning the new content as soon as the changes occur.

Which solutions meet these requirements? (Select TWO)

1. Use AWS Storage Gateway Volume Gateway Internet Small Computer Systems Interface (ISCSI) block storage that is mounted to the individual EC2 instances.

1. Create an Amazon Elastic File System (Amazon EFS) file system.

Mount the EFS file system on the individual EC2 instances.

1. Create a shared Amazon Elastic Block Store (Amazon EBS) volume.

Mount the EBS volume on the individual EC2 instances.

1. Use AWS DataSync to perform continuous synchronization of data between EC2 hosts in the Auto Scaling group.

1. Create an Amazon S3 bucket to store the web content.

Set the metadata for the Cache-Control header to no-cache.

Use Amazon CloudFront to deliver the content.

**Answer:** AB

**Explanation:**

Reference: <https://docs.aws.amazon.com/storagegateway/latest/userguide/WhatIsStorageGateway.html>

<https://docs.aws.amazon.com/efs/latest/ug/how-it-works.html>

In this example, the EC2 instance in the us-west-2c Availability Zone will pay EC2 data access charges for accessing a mount target in a different Availability Zone.

Creating this setup works as follows:

1. Create your Amazon EC2 resources and launch your Amazon EC2 instance.

For more information about Amazon EC2, see Amazon EC2.

1. Create your Amazon EFS file system with One Zone storage.
2. Connect to each of your Amazon EC2 instances, and mount the Amazon EFS file system using the same mount target for each instance.

**QUESTION 159**

A company is implementing a shared storage solution for a media application that is hosted in the AWS Cloud.

The company needs the ability to use SMB clients to access data. The solution must he fully managed.

Which AWS solution meets these requirements?

1. Create an AWS Storage Gateway volume gateway.

Create a file share that uses the required client protocol.

Connect the application server to the tile share.

1. Create an AWS Storage Gateway tape gateway.

Configure tapes to use Amazon S3.

Connect the application server lo the tape gateway.

1. Create an Amazon EC2 Windows instance.

Install and configure a Windows file share role on the instance.

Connect the application server to the file share.

1. Create an Amazon FSx for Windows File Server tile system.

Attach the fie system to the origin server.

Connect the application server to the tile system

**Answer:** D

**QUESTION 168**

A company wants to migrate a high performance computing (HPC) application and data from

on-premises to the AWS Cloud.

The company uses tiered storage on-premises with hoi high-performance parallel storage to support the application during periodic runs of the application, and more economical cold storage to hold the data when the application is not actively running.

Which combination of solutions should a solutions architect recommend to support the storage needs of the application? (Select TWO)

1. Amazon S3 for cold data storage.
2. Amazon EFS for cold data storage.
3. Amazon S3 for high-performance parallel storage.
4. Amazon FSx for lustre tor high-performance parallel storage.
5. Amazon FSx for Windows for high-performance parallel storage.

**Answer:** AD

**Explanation:** <https://aws.amazon.com/fsx/lustre/>

Amazon FSx for Lustre makes it easy and cost effective to launch and run the world's most popular high-performance file system. Use it for workloads where speed matters, such as machine learning, high performance computing (HPC), video processing, and financial modeling.

**QUESTION 191**

A media company is evaluating the possibility ot moving rts systems to the AWS Cloud.

The company needs at least 10 TB of storage with the maximum possible I/O performance for video processing.

300 TB of very durable storage for storing media content, and 900 TB of storage to meet requirements for archival media that is not in use anymore.

Which set of services should a solutions architect recommend to meet these requirements?

1. Amazon EBS for maximum performance.

Amazon S3 for durable data storage, and Amazon S3 Glacier for archival storage.

1. Amazon EBS for maximum performance.

Amazon EFS for durable data storage and Amazon S3 Glacier for archival storage.

1. Amazon EC2 instance store for maximum performance.

Amazon EFS for durable data storage and Amazon S3 for archival storage.

1. Amazon EC2 Instance store for maximum performance.

Amazon S3 for durable data storage, and Amazon S3 Glacier for archival storage.

**Answer:** A

**Explanation:**

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html>

**QUESTION 109**

A company is running an SMB file server in its data center.

The file server stores large files that are accessed frequently for the first few days after the files are created.

After 7 days the files are rarely accessed.

The total data size is increasing and is close to the company's total storage capacity.

A solutions architect must increase the company's available storage space without losing low-latency access to the most recently accessed files.

The solutions architect must also provide file lifecycle management to avoid future storage issues.

Which solution will meet these requirements?

1. Use AWS DataSync to copy data that is older than 7 days from the SMB file server to AWS.

1. Create an Amazon S3 File Gateway to extend the company's storage space.

Create an S3 Lifecycle policy to transition the data to S3 Glacier Deep Archive after 7 days.

1. Create an Amazon FSx for Windows File Server file system to extend the company's storage space.

1. Install a utility on each user's computer to access Amazon S3.

Create an S3 Lifecycle policy to transition the data to S3 Glacier Flexible Retrieval after 7 days.

**Answer:** D

**QUESTION 238**

A company wants to use high performance computing (HPC) infrastructure on AWS for financial risk modeling.

The company's HPC workloads run on Linux.

Each HPC workflow runs on hundreds of Amazon EC2 Spot Instances, is shorl-lived, and generates thousands of output files that are ultimately stored in persistent storage for analytics and long-term future use.

The company seeks a cloud storage solution that permits the copying of on-premises data to longterm persistent storage to make data available for processing by all EC2 instances.

The solution should also be a high performance file system that is integrated with persistent storage to read and write datasets and output files.

Which combination of AWS services meets these requirements?

1. Amazon FSx for Lustre integrated with Amazon S3.
2. Amazon FSx for Windows File Server integrated with Amazon S3.
3. Amazon S3 Glacier integrated with Amazon Elastic Block Store (Amazon EBS).
4. Amazon S3 bucket with a VPC endpoint integrated with an Amazon Elastic Block Store (Amazon EBS) General Purpose SSD (gp2) volume.

**Answer:** A

**Explanation:**

<https://aws.amazon.com/fsx/lustre/>

Amazon FSx for Lustre is a fully managed service that provides cost-effective, high-performance, scalable storage for compute workloads. Many workloads such as machine learning, high performance computing (HPC), video rendering, and financial simulations depend on compute instances accessing the same set of data through high-performance shared storage.