

TEAM LEAD VERSION (Week-4)



Meeting Agenda

- ▶ Icebreaking
- ▶ Questions
- ▶ Interview/Certification Questions
- ▶ Coding Challenge
- ▶ Video of the week
- ▶ Retro meeting
- ▶ Case study / project

Teamwork Schedule

Ice-breaking

10m

- Personal Questions (Stay at home & Corona, Study Environment, Kids etc.)
- Any challenges (Classes, Coding, AWS, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

Team work

10m

- Ask what exactly each student does for the team, if they know each other, if they care for each other, if they follow and talk with each other etc.

Ask Questions

15m

1. If you want to make radical changes to your team's project and don't want to impact the rest of the team, you should implement your change in _____. (Git)

- A. the root
- B. a tag
- C. the trunk
- D. None of the above

Answer: D

"Branch"

2. What are characteristics of Amazon S3? (Choose 2 answers from the options given below.)

- A. S3 allows you to store objects of virtually unlimited size.
- B. S3 allows you to store virtually unlimited amounts of data
- C. S3 should be used to host a relational database.
- D. Objects are directly accessible via a URL.

Answer: B and D

Each object does have a limitation in S3, but you can store virtually unlimited amounts of data. Also each object gets a directly accessible URL.

3. What is a shell script?

- A. group of commands
- B. a file containing special symbols
- C. a file containing a series of commands
- D. group of functions

Answer: C

When we have to execute a series of commands altogether, we store them in a file which is itself executed as a shell script. A shell script is basically a computer program designed to be run by the UNIX shell.

4. To run the script, we should make it executable first by using ____.

- A. chmod +x
- B. chmod +r
- C. chmod +w
- D. chmod +rwx

Answer: A

Before we run the script, it is essential to make the script executable first. After that invoke the script name to run the script. For making the script executable, we have to use `chmod +x script_name`.

5. Shell scripts need to be saved with an extension `.sh`.

- A. True
- B. False

Answer: B

It's not mandatory to save script files with `.sh` extension but we do so for our own convention as it makes it easy to match them with wildcards.

Interview/Certification Questions

20m

1. Which of the following default settings are incorrect for a newly created S3 bucket? (choose 2 options)

- A. Encryption is not enabled.
- B. Transfer Acceleration is enabled.
- C. No bucket policy exists.
- D. Versioning is enabled.

Answer: B and D

When creating an S3 bucket, you can change the default configuration according to your requirements or leave the default options and continue to create the bucket. You can always change the configuration after you created the bucket.

For option A, Default encryption is not enabled.

For option B, Transfer Acceleration is suspended by default.

For Option C, bucket policy does not exist by default. We can restrict bucket access through bucket policy.

For option D, By default Versioning is Disabled.

2. In Amazon S3, what is the difference between lifecycle policies and intelligent tiering?

- A.** Lifecycle policies are not dependent on access patterns as is the case with intelligent tiering, instead they are pre-configured with a transition rule.
- B.** Intelligent tiering is an object storage class which is not dependent on access patterns, it uses a pre-configured transition rule.
- C.** When transitioning objects into different storage classes, intelligent tiering is automatic whilst lifecycle policies have to be manually triggered.
- D.** Lifecycle policies cannot be configured to permanently delete objects from an S3 bucket whilst intelligent tiering can do so if versioning is turned on.

Answer: A

Within Amazon S3, lifecycle policies are used to automatically transition objects through different storage classes in accordance to a preconfigured rule. This rule will typically move the object regardless of how frequently it is accessed. For more information, please refer to the [Link](#)

3. A company wants to utilize aws storage. For them low storage cost is paramount, the data is rarely retrieved, and data retrieval times of several hours are acceptable for them. What is the best storage option to use?

- A.** AWS Glacier
- B.** AWS S3 Reduced Redundancy Storage
- C.** EBS backed storage connected to EC2
- D.** AWS CloudFront

Answer: A

Amazon Glacier is a storage service optimized for infrequently used data, or "cold data." The service provides durable and extremely low-cost storage with security features for data archiving and backup. With Amazon Glacier, you can store your data cost effectively for months, years, or even decades.

For more information on AWS Glacier, please refer to the [Link](#)

4. Which of the following can be attached to EC2 Instances to store data?

- A.** Amazon Glacier
- B.** Amazon EBS Volumes
- C.** Amazon EBS Snapshots
- D.** Amazon SQS

Answer: B

An Amazon EBS volume is a durable, block-level storage device that you can attach to a single EC2 instance. You can use EBS volumes as primary storage for data that requires frequent updates, such as the system drive for an instance or storage for a database application

5. Development teams in your organization use S3 buckets to store log files for various applications hosted in AWS development environments. The developers intend to keep the logs for a month for troubleshooting purposes, and subsequently purge the logs.

Which feature should be used to enable this requirement?

- A. Adding a bucket policy on the S3 bucket.
- B. Configuring lifecycle configuration rules on the S3 bucket.
- C. Creating an IAM policy for the S3 bucket.
- D. Enabling CORS on the S3 bucket.

Answer: B

AWS Documentation mentions the following on Lifecycle policies: Lifecycle configuration enables you to specify the Lifecycle management of objects in a bucket. The configuration is a set of one or more rules, where each rule defines an action for Amazon S3 to apply to a group of objects. These actions can be classified as follows:

- Transition actions: In which you define when objects transition to another storage class. For example, you may choose to transition objects to the STANDARD_IA (IA, for infrequent access) storage class 30 days after creation or archive objects to the GLACIER storage class one year after creation.
- Expiration actions – In which you specify when the objects expire. Then, Amazon S3 deletes the expired objects on your behalf.

For more information on AWS S3 Lifecycle policies, please visit the following [Link](#)

Video of the Week

5m

- [Top 7 Cloud Infrastructure Interview Questions](#)

Retro Meeting on a personal and team level

10m

Ask the questions below:

- What went well?
- What could be improved?
- What will we commit to do better in the next week?

Coding Challenge

5m

- [Coding Challenge: Validate Combination of Brackets](#)

We assume that each group has two sub teams. Each week, one of the sub-teams will present their solution.

Case study/Project

10m

Case study should be explained to the students during the weekly meeting and has to be completed in one sprint (2 weeks) by the students. Students should work in small teams to complete the case study.

- [Project-001 : Roman Numerals Converter Application \(Python Flask\) deployed on AWS EC2 with Cloudformation](#)

Closing

5m

-Next week's plan

-QA Session
