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Practice Mode: Score will not be recorded

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# **Quiz Results: Concept Review Exam**

| 1. | <ol> <li>A DynamoDB item is a collection of name and value attributes.</li> </ol> Correct   |
|----|---|
|    | Correct answer  |
|    | True  |
| 2. | 2) You define the following S3 bucket policy to grant users access to your bucket, but the S3 bucket policy editor will not allow you to submit it. Why is this policy not working? { "Id": "Policy1441839160967", "Version": "2012-10-17", "Statement": [ { "Sid": "Stmt1441839157568", "Action": [ "s3:ListBucket" ], "Effect": "Allow", "Resource": "arn:aws:s3::: linuxacademy.testbucket.2 " } ] } |
|    | Incorrect   |
|    | Correct answer  |
|    | S3 bucket policies require a Principal be defined   |
| 3. | 3) Which DynamoDB API call does not consume capacity units?   |
|    | Correct   |
|    | Correct answer  |
|    | UpdateTable   |
|    | Explanation   |
|    | The UpdateTable API call is used to change the required provisioned throughput capacity.  |
|    | Further Reading   |
|    | https://linuxacademy.com/cp/courses/lesson/course/119/lesson/4/module/11  |
| 4. | 4) One DynamoDB read capacity unit is equal to one strongly consistent read per second.   |
|    | Correct   |
|    | Correct answer  |
|    | True  |

Explanation

Strongly consistent reads require more effort and consume twice as many database resources as an

eventually consistent read.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/119/lesson/4/module/11

5. 5) Which API call would you use to attach an EBS volume to an EC2 instance?

Correct

Correct answer

AttachVolume

6. 6) When using the Ref function in CloudFormation, what do we get back if we pass in the logical ID of an AWS::EC2::Instance object?

**Incorrect** 

Correct answer

The object's InstanceId

**Explanation** 

Example: i-437ba30

7. 7) Your "forums" table has a primary key of "id". Using DynamoDB, you're able to query the data based on the id primary key. You need to be able to query the forums table by userId. What would you add to the table during table creation time?

#### Correct

#### Correct answer

Create a secondary index.

8. **8)** You need to announce an emergency downtime for a production AWS web application. This downtime notification will require different sets of instructions for different devices. All of the application users signed up to receive SNS notifications from the "mywebapp" topic when they began using the application and they are currently subscribed to this topic. What are appropriate ways for you to provide timely, device-specific instructions to end users when announcing this downtime?

#### **Incorrect**

#### Correct answer

Send a single message, but customize the text in the SNS message field so that each device gets only the information that is appropriate for them

## **Explanation**

A & B could work, but C is the quickest and easiest resolution. Using the SNS JSON message generator, you can choose the appropriate endpoint types and edit the generated code to send different text to the different endpoint types.

9. 9) S3 names are stored lexicographically (alphabetical order).

Correct

Correct answer

True

## **Explanation**

http://docs.aws.amazon.com/AmazonS3/latest/API/mpUploadComplete.html: Amazon S3 maintains an index of object key names in each AWS region. Object keys are stored lexicographically across multiple partitions in the index. That is, Amazon S3 stores key names in alphabetical order. The key name dictates which partition the key is stored in. Using a sequential prefix, such as time-stamp or an alphabetical sequence, increases the likelihood that Amazon S3 will target a specific partition for a large number of your keys, overwhelming the I/O capacity of the partition. If you introduce some randomness in your key name prefixes, the key names, and therefore the I/O load, will be distributed across more than one partition.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

10. **10)** You're creating a forum DynamoDB database for hosting web forums. Your "thread" table contains the forum name and each "forum name" can have one or more "subjects". What primary key type would you give the thread table in order to allow more than one subject to be tied to the forum primary key name?

**Correct** 

Correct answer

Hash and Range

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/119/lesson/3/module/11

11. **11)** Your application instance takes 60 seconds to process instructions received in an SQS message. Assuming the SQS queue is configured with the default Visibility Timeout, what is the best way to configure your application to ensure that no other instances retrieve a message that has already been processed or is currently being processed?

#### Correct

#### Correct answer

Use the ReceiveMessage API call to retrieve the message, the ChangeMessageVisibility API call to increase the visibility timeout, and the DeleteMessage API call to delete the message when processing completes

## **Explanation**

The message queue is using the default Visibility Timeout of 30 seconds, but the application takes 60 seconds to process the instructions from the message. It is therefore necessary to increase the Visibility Timeout of the message to prevent it from becoming visible in the queue for other instances to process while it is still being processed by the first instance. (Another solution could be to increase the visibility timeout of the entire queue.) It is also necessary for the instance to delete the message from the queue once it has finished processing it, otherwise the message will become visible in the queue after the Visibility Timeout expires.

| 12. | 12) A DynamoDB table can contain local secondary indexes on a table.                     |  |  |  |  |  |  |
|-----|--|--|--|--|--|--|--|
|     | Correct  |  |  |  |  |  |  |
|     | Correct answer   |  |  |  |  |  |  |
|     | 5  |  |  |  |  |  |  |
|     | Explanation  |  |  |  |  |  |  |
|     | You can define up to 5 local secondary indexes and 5 global secondary indexes per table. |  |  |  |  |  |  |
|     | Further Reading  |  |  |  |  |  |  |
|     | https://linuxacademy.com/cp/courses/lesson/course/119/lesson/3/module/11                 |  |  |  |  |  |  |
| 13. | 13) "256" is not the correct answer to which of the following? Select all that apply.    |  |  |  |  |  |  |
|     | Correct  |  |  |  |  |  |  |

# Correct answer

What is the maximum S3 bucket name length?, What is the maximum length, in bytes, of a DynamoDB range primary key attribute value?

## **Explanation**

The maximum length of a DynamoDB range primary key attribute value is 2048 bytes. An S3 bucket name can be between 3 and 63 characters long, and can contain only lower-case characters, numbers, periods, and dashes.

14. **14)** Company B provides an online image recognition service and utilizes SQS to decouple system components for scalability. The SQS consumers poll the imaging queue as often as possible to keep end-to-end throughput as high as possible. However, Company B is realizing that polling in tight loops

is burning CPU cycles and increasing costs with empty responses. How can Company B reduce the number of empty responses?

#### **Correct**

#### Correct answer

Set the imaging queue ReceiveMessageWaitTimeSeconds attribute to 20 seconds.

## **Explanation**

ReceiveMessageWaitTimeSeconds when set to greater than zero enables long polling. Long polling allows the Amazon SQS service to wait until a message is available in the queue before sending a response. Short polling continuously pools a queue and can have false positives. Enabling long polling reduces the number of poll requests, false positives, and empty responses.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/127/lesson/1/module/11

15. **15)** As you retrieve information from DynamoDB, you receive this error: "ProvisionedThroughputExceededException", but upon investigation you notice that you're not exceeding your table read capacity throughput. What is causing this error?

#### Correct

#### **Correct answer**

We are exceeding a partition's throughput capacity, even if we're not exceeding the table throughput capacity

## **Explanation**

How can we exceed a partition's capacity if we're not exceeding table capacity? Because DynamoDB distributes capacity among all of the different partitions. Since DynamoDB uses our partition keys (previously known as Hash keys) to group data in different partitions, if we query the similar data over and over again, we will exceed that partition's throughput capacity - we will have uneven distribution of load. This is why it's very important to choose partition keys that are well distributed.

16. **16)** You are creating several DynamoDB tables for a new project. While doing so, you receive the error message, "LimitExceededException." You are well below the maximum number of tables per account and there is no read or write activity on the tables yet. Why have you received this error?

## **Correct**

#### Correct answer

You attempted to create more than one table with a secondary index at a time

## **Explanation**

|     | You can create global and local secondary indexes at the same time you create a table, but you must wait for the first table with a secondary index to become active before creating the next one. Failure to do so produces the "LimitExceededException" error. http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/SecondaryIndexes.html |  |  |  |  |
|-----|--|--|--|--|--|
| 17. | 17) Which of the following AWS Services are offered at no cost?  |  |  |  |  |
|     | Correct  |  |  |  |  |
|     | Correct answer   |  |  |  |  |
|     | Auto Scaling, Amazon VPC   |  |  |  |  |
| 18. | 18) By default, AWS allows you to have tables per account, per region.   |  |  |  |  |
|     | Correct  |  |  |  |  |
|     | Correct answer   |  |  |  |  |
|     | 256  |  |  |  |  |
|     | Explanation  |  |  |  |  |
|     | Default table limit in EACH region is 256. If more tables are needed, than all is required is a request to AWS to increase the table limit.  |  |  |  |  |
|     | Further Reading  |  |  |  |  |
|     | https://linuxacademy.com/cp/courses/lesson/course/119/lesson/3/module/11   |  |  |  |  |
| 19. | <b>19)</b> You have items in your table that are 12KB in size and you want to have 10 strongly consistent reads per second. How many read capacity units would you need to provision?  |  |  |  |  |
|     | Correct  |  |  |  |  |
|     | Correct answer   |  |  |  |  |
|     | 30   |  |  |  |  |

30

Explanation

 $10 \times (12/4) = 30$ 

# **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/119/lesson/4/module/11

20. **20**) Which of the following statements is true about DynamoDB?

#### Correct

#### **Correct answer**

Requests are eventually consistent unless otherwise specified.

## **Explanation**

Data is eventually consistent because DynamoDB maintains multiple copies of an item to ensure durability. The default read is an eventually consistent read. You can specify strongly consistent reads but it does require additional read capacity units each request. However, it will receive the most recent version of the item is you specify a strongly consistent read.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/119/lesson/6/module/11

21. **21)** S3 Bucket ownership is transferable.

#### Correct

#### Correct answer

False

## **Explanation**

Bucket ownership is not transferable; however, if a bucket is empty, you can delete it. After a bucket is deleted, the name becomes available to reuse, but the name might not be available for you to reuse for various reasons.

#### **Further Reading**

http://docs.aws.amazon.com/AmazonS3/latest/dev/BucketRestrictions.html

22. **22)** You attempt to store a new object in the US-STANDARD region in Amazon S3 and receive a confirmation that it has been successfully stored. You then immediately make another API call and attempt to read this object. Will you be able to read this object immediately after?

#### **Correct**

#### Correct answer

Yes, US-Standard has read-after-write consistency which means you will have access to the object immediately after.

#### **Further Reading**

http://docs.aws.amazon.com/AmazonS3/latest/dev/LocationSelection.html

| 23. | 23) What kind of message does SNS send to endpoints?   |
|-----|--|
|     | Correct  |
|     | Correct answer   |
|     | A JSON document with parameters like Message, Signature, Subject, Type   |
|     | Explanation  |
|     | Amazon SNS messages do not publish the source/destination  |
| 24. | <b>24)</b> DynamoDB supports two types of primary keys, "Hash Type" and "Hash and Range Type" primary keys.  |
|     | Correct  |
|     | Correct answer   |
|     | True   |
|     | Explanation  |
|     | These have been more recently renamed to Partition Key and Partition Key and Sort Key, though the exam may not reflect it yet.   |
| 25. | <b>25</b> ) 10.2.181.56 is a valid S3 bucket name.   |
|     | Correct  |
|     | Correct answer   |
|     | False  |
|     | Explanation  |
|     | Bucket names must not be formatted as an IP address.   |
|     | Further Reading  |
|     | https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11   |
| 26. | <b>26)</b> Since S3 object are stored lexicographically, by introducing "randomness" to your S3 names it helps S3 storage distribute the I/O load across more than one partition. Given the following examples, how could you add a hashed prefix to the naming convention to increase I/O performance? bucket/2010-26-05-15-00-00/myfolder234234/photo1.jpg bucket/2010-26-05-15-00-00/myfolder3857422/photo2 ing |

Correct

#### Correct answer

bucket/8761-2010-26-05-15-00-00/myfolder234234/photo1.jpg

## **Explanation**

http://docs.aws.amazon.com/AmazonS3/latest/API/mpUploadComplete.html: Amazon S3 maintains an index of object key names in each AWS region. Object keys are stored lexicographically across multiple partitions in the index. That is, Amazon S3 stores key names in alphabetical order. The key name dictates which partition the key is stored in. Using a sequential prefix, such as time-stamp or an alphabetical sequence, increases the likelihood that Amazon S3 will target a specific partition for a large number of your keys, overwhelming the I/O capacity of the partition. If you introduce some randomness in your key name prefixes, the key names, and therefore the I/O load, will be distributed across more than one partition.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

27. **27)** Which of the following is not true about SWF?

#### Correct

#### Correct answer

Humans can perform a decision task.

## **Explanation**

Humans can perform an activity task, but not a decision task.

## **Further Reading**

http://docs.aws.amazon.com/amazonswf/latest/developerguide/swf-dg-intro-to-swf.html

28. 28) Which of the following are supported platforms in Elastic Beanstalk?

#### Correct

#### Correct answer

Microsoft IIS, Apache

## Explanation

Supported platforms are covered in this lecture: https://linuxacademy.com/cp/courses/lesson/course/613/lesson/1/module/11

29. **29**) What is the function of a conditional write?

#### **Correct**

#### **Correct answer**

A change to a DynamoDB attribute will only be written if it that attribute's value has not changed since it was read

30. **30)** While working with the S3 API you receive the error: 403 forbidden. What is the most likely cause of this?

#### Correct

## Correct answer

AccessDenied

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/6/module/11

31. **31)** Setting the VisibilityTimeout = 0 has what affect on your message?

#### **Correct**

#### Correct answer

Makes the message immediately available

## **Explanation**

VisibilityTimout defines how long a message is INVISIBLE to other workers after being accessed by a worker. It is invisible so the worker who retrieved the message has the opportunity to process the message and remove it from the queue. If the worker is not successfully in processing the message, the VisibilityTimout then expires and the message is again available to be accessed by another worker. This ensures that if part of your application fails the message is not lost.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/150/lesson/2/module/11

32. 32) Which of the following will not cause a CloudFormation stack deployment to rollback?

## Correct

#### Correct answer

The template contains invalid JSON syntax

## **Explanation**

|     | the template will not be able to deploy resources, so there will not be a need to or opportunity to rollback.   |  |  |  |  |  |
|-----|---|--|--|--|--|--|
| 33. | 33) Which statement about DynamoDB is true?   |  |  |  |  |  |
|     | Correct   |  |  |  |  |  |
|     | Correct answer  |  |  |  |  |  |
|     | DynamoDB uses conditional writes for consistency.   |  |  |  |  |  |
|     | Explanation   |  |  |  |  |  |
|     | DynamoDB allows conditional writes to tables. Conditional writes are only performed if the current attributes of the item meet the specified conditions.  |  |  |  |  |  |
|     | Further Reading   |  |  |  |  |  |
|     | https://linuxacademy.com/cp/courses/lesson/course/119/lesson/6/module/11  |  |  |  |  |  |
| 34. | <b>34)</b> You have created a mobile application that relies on reading data from DynamoDB. How could you give each mobile device permissions to read from DynamoDB?  |  |  |  |  |  |
|     | Correct   |  |  |  |  |  |
|     | Correct answer  |  |  |  |  |  |
|     | Create an IAM role that can be assumed by an app that allows federated users  |  |  |  |  |  |
|     | Explanation   |  |  |  |  |  |
|     | It is bad practice to store any API credentials in a mobile application. Each mobile device should have their own permissions and access credentials to DynamoDB. In order to facilitate this, you can integrate federated users (Facebook, Google, Twitter, Amazon, etc) credentials with IAM. After authenticated as a federated user, the user/app can then assume an IAM role with the proper read/write permissions to DynamoDB. |  |  |  |  |  |
|     | Further Reading   |  |  |  |  |  |
|     | https://linuxacademy.com/cp/courses/lesson/course/119/lesson/7/module/11  |  |  |  |  |  |
| 35. | 35) One unit of read capacity is in size?   |  |  |  |  |  |
|     | Correct   |  |  |  |  |  |
|     | Correct answer  |  |  |  |  |  |
|     | 4KB   |  |  |  |  |  |

Invalid JSON syntax will cause an error message during template validation. Until the syntax is fixed,

## **Explanation**

One unit of read capacity is 4KB and one unit of write capacity is 1KB

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/119/lesson/4/module/11

36. **36)** Which of the following are subject to eventual consistency?

#### **Correct**

#### Correct answer

Reads of a DynamoDB table, unless you specify otherwise

## **Explanation**

Reads of a DynamoDB table are subject to eventual consistency by default, but you can choose strongly consistent reads instead.

37. 37) If you have an item that is 4KB in size and you want to provision read capacity units for 100 requests per second, using strongly consistent reads how many read capacity units do you need to provision?

Correct

**Correct answer** 

100

# **Explanation**

 $100 \times (4/4) = 100$ 

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/119/lesson/4/module/11

38. 38) A benefit of multi-part upload is that you can upload a file as it is being created.

## Correct

#### Correct answer

True

## **Explanation**

Multi-part upload API allows you to upload parts of an object once broken apart. As a file/object is

being created, the multi-part upload API will allow you to upload the file to S3. Only after all parts of the object have been uploaded do you execute the CompleteMultipartUpload API call which completes a multi-part upload by assembling previously uploaded parts.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

39. **39)** While working with the S3 API, you receive the following error: 409 Conflict. What is the most likely cause?

## **Correct**

#### Correct answer

BucketAlreadyExists

## Explanation

S3 error codes are handled with HTTP error responses. 409 conflict means there is a conflicting issue.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/6/module/11

40. **40)** What is one key difference between an Amazon EBS-backed and an instance-store backed instance?

#### Correct

#### **Correct answer**

Amazon EBS - backed instances can be stopped and restarted.

#### **Explanation**

You can stop and restart your instance if it has an Amazon EBS volume as its root device. The instance retains its instance ID, but can change as described in the Overview section. When you stop an instance, we shut it down. We don't charge hourly usage for a stopped instance, or data transfer fees, but we do charge for the storage for any Amazon EBS volumes. Each time you restart a stopped instance, we charge a full instance hour, even if you make this transition multiple times within a single hour. While the instance is stopped, you can treat its root volume like any other volume, and modify it (for example, repair file system problems or update software). You just detach the volume from the stopped instance, attach it to a running instance, make your changes, detach it from the running instance, and then reattach it to the stopped instance. Make sure that you reattach it using the storage device name that's specified as the root device in the block device mapping for the instance. If you decide that you no longer need an instance, you can terminate it. As soon as the state of an instance changes to shutting-down or terminated, we stop charging for that instance.

## **Further Reading**

41. **41)** Your app is using SQS to create distributed applications. Your messages need to contain more information than the 256KB SQS limit size allowed. How could you solve this problem?

#### Correct

#### Correct answer

Store the information in S3 and attach retrieval information to the message for the application to process

## **Explanation**

SQS messages can contain up to 256KB of data. This data can include any information needed. In order to work around the limit issue, the message can contain information on how to access the larger dataset from another service such as S3 or DynamoDB.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/150/lesson/2/module/11

42. **42)** You have created an Elastic Load Balancer with Duration-Based sticky sessions enabled in front of your six EC2 web application instances in US-West-2. For High Availability, there are three web application instances in Availability Zone 1 and three web application instances in Availability Zone 2. To load test, you set up a software-based load tester in Availability Zone 2 to send traffic to the Elastic Load Balancer, as well as letting several hundred users browse to the ELB's hostname. After a while, you notice that the users' sessions are spread evenly across the EC2 instances in both AZ's, but the software-based load tester's traffic is hitting only the instances in Availability Zone 2. What steps can you take to resolve this problem?

#### Correct

#### Correct answer

Use a third party load-testing service to send requests from globally distributed clients, Force the software-based load tester to re-resolve DNS before every request

## **Explanation**

"If you do not ensure that DNS is re-resolved or use multiple test clients to simulate increased load, the test may continue to hit a single IP address when Elastic Load Balancing has actually allocated many more IP addresses. Because your end users will not all be resolving to that single IP address, your test will not be a realistic sampling of real-world behavior." http://aws.amazon.com/articles/1636185810492479

43. **43)** A unit of "read capacity" represents one strongly consistent read per second or two eventually consistent reads per second.

## Correct

# Correct answer True **Further Reading** https://linuxacademy.com/cp/courses/lesson/course/119/lesson/4/module/11 44. 44) EC2 instances are launched from Amazon Machine Images (AMIs). A given public AMI: Correct Correct answer can only be used to launch EC2 instances in the same AWS region as the AMI is stored. **Explanation** AMIs cannot be launched into another region. In order to launch a given AMI that lives in one region, into another, you can copy the AMI from one region to another. **Further Reading** https://linuxacademy.com/cp/courses/lesson/course/127/lesson/1/module/11 45. **45**) What is the minimum size of an S3 object? Correct Correct answer 0 bytes **Explanation** The minimum size of an object is 0 byte and the maximum size of an object is 5TB. Objects that are 5GB in size or larger must use the multi-part upload API in order to be uploaded to S3. **Further Reading** https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

46. **46)** A taxi company uses a mobile GPS application to track the location of each of their 60 cabs. The application records the taxi's location to a DynamoDB table every 6 seconds. Each transmission is just under 1 KB, and throughput is spread evenly within that minute. How many units of write capacity should you specify for this table?

#### **Correct**

#### Correct answer

## **Explanation**

60 seconds / one write per cab every 6 seconds = 10 writes per cab per minute. 60 cabs x 10 writes per cab per minute = 600 total writes per minute / 60 seconds = 10 writes per second.

47. 47) Which statement about DynamoDB is true?

#### Correct

#### Correct answer

DynamoDB uses optimistic concurrency control.

48. **48)** You've enabled website hosting on a bucket named "linuxacademy.com" in the US-East-1 (US standard region). Select the URL you'll receive from AWS as the URL for the bucket.

#### Correct

#### Correct answer

linuxacademy.com.s3-website-us-east-1.amazonaws.com

## **Explanation**

The default URL for S3 hosted websites lists the bucket name first followed by s3-website-region.amazonaws.com

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/2/module/11

```
49. 49) Why will the following CloudFormation template fail to deploy a stack? {
"AWSTemplateFormatVersion" : "2010-09-09", "Parameters" : { "VPCId" : { "Type": "String",
"Description" : "Enter current VPC Id" }, "SubnetId : { "Type": "String", "Description" : "Enter a
subnet Id" } }, "Outputs" : { "InstanceId" : { "Value" : { "Ref" : "MyInstance" }, "Description" :
"Instance Id" } }
```

#### **Correct**

#### Correct answer

A "Resources" section is mandatory but is not included

50. **50)** A local secondary index is an index that has the same hash key as the table, but a different range key.

#### Correct

|     | True  |
|-----|---|
|     | Explanation   |
|     | A secondary index is a data structure that contains a subset of attributes from a table, along with an alternate key to support Query operations. With a secondary index, queries are no longer restricted to the table primary key; you can also retrieve the data using the alternate key defined by the secondary index. A table can have multiple secondary indexes, which gives your applications access to many different query patterns. A local secondary index is an index that has the same hash key as the table, but a different range key.   |
|     | Further Reading   |
|     | https://linuxacademy.com/cp/courses/lesson/course/119/lesson/3/module/11  |
| 51. | <b>51)</b> A global secondary index is an index with a hash and range key that can be different from those or the table.  |
|     | Correct   |
|     | Correct answer  |
|     | True  |
|     | Explanation   |
|     | A secondary index is a data structure that contains a subset of attributes from a table, along with an alternate key to support Query operations. With a secondary index, queries are no longer restricted to the table primary key; you can also retrieve the data using the alternate key defined by the secondary index. A table can have multiple secondary indexes, which gives your applications access to many different query patterns. In a global secondary index, the Hash & Range key are different than that of the table therefore queries on the index can span all the data in the table across all partitions. |
| 52. | 52) Multi-part upload API allows you to stop and resume uploads.  |
|     | Correct   |
|     | Correct answer  |
|     | True  |
|     | Further Reading   |
|     | https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11  |
| 53. | <b>53)</b> If your table item's size is 3KB and you want to have 90 strongly consistent reads per second, how many read capacity units will you need to provision on the table?   |

**Correct answer** 

|     | Correct  |
|-----|--|
|     | Correct answer   |
|     | 90   |
|     | Explanation  |
|     | 90 (reads per second) x 3KB/4 (round up to nearest number) =90 Minimum capacity unit is 4KB in order to calculate required throughput we will need to take the number needed strongly consistent reads (90) and multiply it by the item request size. In order to easily solve that, we take the item size and divide by 4 (4 being the size of a read capacity unit) and round it up. |
|     | Further Reading  |
|     | https://linuxacademy.com/cp/courses/lesson/course/119/lesson/4/module/11   |
| 54. | 54) What is the default limit for CloudFormation templates per region?   |
|     | Correct  |
|     | Correct answer   |
|     | There are no limits to the number of templates   |
|     | Explanation  |
|     | There is no limit to the number of templates, however there is a limit of 200 stacks per AWS account.  |
|     | Further Reading  |
|     | https://linuxacademy.com/cp/courses/lesson/course/121/lesson/3/module/11   |
| 55. | 55) You run an ad-supported photo sharing website using S3 to serve photos to visitors of your site. At some point you find out that other sites have been linking to the photos on your site, causing loss to your business. What is an effective method to mitigate this?  |
|     | Correct  |
|     | Correct answer   |
|     | Remove public read access and use signed URLs with expiry dates.   |

56. **56)** You are working with the S3 API and receive an error message: 409 Conflict. What is the possible cause of this error?

Correct

**Correct answer** 

|     | Further Reading  |
|-----|--|
|     | https://linuxacademy.com/cp/courses/lesson/course/118/lesson/6/module/11   |
| 57. | 57) An item stored in a DynamoDB can contain any number of associated to it.   |
|     | Correct  |
|     | Correct answer   |
|     | Attributes   |
|     | Explanation  |
|     | In DynamoDB, an item is a collection of attributes. Each attribute has a name and a value. An attribute value can be a number, a string, a binary, or a set of any of these types. |
| 58. | 58) Default timeout for visibility queue is seconds.   |
|     | Correct  |
|     | Correct answer   |
|     | 30   |
|     | Further Reading  |
|     | https://linuxacademy.com/cp/courses/lesson/course/150/lesson/2/module/11   |
| 59. | <b>59)</b> By default, what event occurs if your CloudFormation receives an error during creation?   |
|     | Correct  |
|     | Correct answer   |
|     | ROLLBACK_IN_PROGRESS   |
|     | Further Reading  |
|     | https://linuxacademy.com/cp/courses/lesson/course/121/lesson/3/module/11   |
| 60. | <b>60)</b> Your items are 6KB in size and you want to have 100 strongly consistent reads per second. How many read capacity units do you need to provision?                        |
|     | Correct  |

**Correct answer** 

You're attempting to remove a bucket without emptying the contents of the bucket first.

## **Explanation**

100 (reads per second) x 2 (6KB/4KB = 1.5 round to 2) = 200 read throughput capacity units. A unit of read capacity is 4KB in size. In order to calculate the number of required capacity units, we take the item size (6KB) divided by the size of a single unit of read throughput capacity (4KB) and multiple that by the number of needed reads per second.

## **Further Reading**

| https://linuxacademy | com/cp/cour/ | rses/lesson/course | /119/lesson/4/module/11 |
|----------------------|--------------|--------------------|-------------------------|
|                      | -            |                    |                         |

61. **61)** Which API call would you use to query an item by it's primary hash key?

#### Incorrect

#### Correct answer

GetItem

## **Explanation**

The GetItem operation returns a set of Attributes for an item that matches the primary key. If there is no matching item, GetItem does not return any data. It is suggested that you become familiar with the DynamoDB API calls.

## **Further Reading**

http://docs.aws.amazon.com/amazondynamodb/latest/APIReference/API GetItem.html

62. **62)** A SWF workflow task or task execution can live up to long?

#### Correct

#### Correct answer

1 year

## **Explanation**

SQS messages live up to 14 days, BUT an SWF workflow or task execution can last up to 1 year.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/122/lesson/1/module/11

63. 63) You would like to set up a static website on S3 with the least possible effort. The URL of the website is unimportant to you. Which of the following steps are necessary?

#### **Correct**

#### Correct answer

Upload an index document to your S3 bucket, Enable static website hosting in your S3 bucket properties, Select the "Make Public" permission for your bucket's objects

64. **64)** Parts of a multi-part upload will not be completed until the "complete" request has been called which puts all the parts of the file together.

**Correct** 

Correct answer

True

## **Explanation**

You first initiate the multi-part upload and then upload all parts using the Upload Parts operation (see Upload Part). After successfully uploading all relevant parts of an upload, you call this operation to complete the upload. Upon receiving this request, Amazon S3 concatenates all the parts in ascending order by part number to create a new object. In the Complete Multi-part Upload request, you must provide the parts list. You must ensure the parts list is complete, this operation concatenates the parts you provide in the list. For each part in the list, you must provide the part number and the ETag header value, returned after that part was uploaded.

## **Further Reading**

http://docs.aws.amazon.com/AmazonS3/latest/API/mpUploadComplete.html

65. **65)** Your supervisor asks you to find a solution for scheduling a sequence of tasks. The sequence may take several months to complete and it's very important that no tasks are processed more than once. What AWS service should you recommend?

Correct

Correct answer

**SWF** 

## **Explanation**

SWF workflows can last up to a year and tasks are guaranteed to be processed in the correct order.

66. **66)** Which of the following is true about S3 Server-Side Encryption?

**Correct** 

Correct answer

67. **67)** You're using CloudFormation templates to build out staging environments. What section of the CloudFormation would you edit in order to allow the user to specify the PEM key-name at start time?

#### **Correct**

#### Correct answer

**Parameters Section** 

### **Explanation**

Parameters property type in CloudFormation allows you to accept user input when starting the CloudFormation template. It allows you to reference the user input as variable throughout your CloudFormation template. Other examples might include asking the user starting the template to provide Domain admin passwords, instance size, pem key, region, and other dynamic options.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/121/lesson/1/module/11

68. **68)** Your application is trying to upload a 6 GB file to Simple Storage Service and you receive a "Your proposed upload exceeds the maximum allowed object size." error message. What is a possible solution for this?

#### Correct

#### Correct answer

Use the multipart upload API for this object

## **Explanation**

AWS S3 (Simple Storage Service) allows a maximum object size of 5TB. However, objects 5GB or larger are required to be uploaded using the multipart upload API.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

69. **69**) Which of the following cannot be used inside a CloudFormation template?

#### Correct

#### Correct answer

Ruby statements

#### **Explanation**

70. **70)** You are creating a CloudFormation template in the Singapore region which will create an S3 website bucket. You have created a parameter "LinuxAcademy" which is used to store the name of your S3 bucket, and you are hoping to create output from your template which will list the URL of the S3 website. Which of the following Join statements will provide the URL of your S3 website?

#### Correct

## Correct answer

```
"Fn::Join" : ["", ["http://", {"Ref":"LinuxAcademy"}, ".s3-website-", {"Ref":"AWS::Region"}, ".amazonaws.com"]]
```

## **Explanation**

The easiest way to return the URL of an S3 bucket in a CloudFormation template is "Fn::GetAtt": ["logical name of your AWS::S3::Bucket","WebsiteURL"]. Of the choices above, however, Answer C is the only one with the correct Join syntax to return the valid URL of the bucket.

71. 71) For which of these languages does AWS provide an SDK? Select 3

**Partially Correct** 

Correct answer

Go, PHP, Java

## **Further Reading**

https://aws.amazon.com/tools/

72. **72)** What is the maximum size of an S3 object?

Correct

Correct answer

5TB

## **Explanation**

Minimum object size is 0Byte and Maximum object size is 5TB. AWS requires you to use the multipart upload API in order to upload objects 5GB and larger. It is suggested to use the multi-part upload on objects 100MB or larger.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

| 73. | <b>73)</b> While working with the S3 API you receive the error message: 404 Not Found. What is the most likely cause for this error?  |
|-----|---|
|     | Correct   |
|     | Correct answer  |
|     | NoSuchBucket  |
|     | Further Reading   |
|     | https://linuxacademy.com/cp/courses/lesson/course/118/lesson/6/module/11  |
| 74. | <b>74)</b> S3 bucket names may only contain only lower case letters, periods, numbers, and dashes but do not have to contain them all.  |
|     | Correct   |
|     | Correct answer  |
|     | True  |
| 75. | 75) You have an Amazon S3 bucket that you use to store objects. You'd like to encrypt some of the new objects you upload to this bucket. What header do you need to use in order to request server-side encryption when using the REST API? |
|     | Correct   |
|     | Correct answer  |
|     | x-amz-server-side-encryption  |
| 76. | 76) DynamoDB supports cross table joins.  |
|     | Correct   |
|     | Correct answer  |
|     | False   |
|     | Explanation   |
|     | DynamoDB is a NoSQL database service and does not act like traditional relational databases. Relational databases allow for cross table joins. Due to the schema design of a NoSQL database, you cannot use cross table joins.              |
| 77. | 77) You want to find out what AMIs are available for you to use in a given region. Which API call is most appropriate?  |

Correct

#### Correct answer

DescribeImages

## **Explanation**

DescribeImages is the only valid API call above.

(http://docs.aws.amazon.com/AWSEC2/latest/APIReference/API\_DescribeImages.html) While there are a lot of EC2 API calls (see the URL), you do not need to learn all of them. Focus on the ones that are relevant to developers.

## **Further Reading**

http://docs.aws.amazon.com/AWSEC2/latest/APIReference/API DescribeImages.html

78. **78)** You attempt to create a new S3 bucket "Linux-Academy-Bucket-12-US-East-1-Production-Envrionment-12.25.14" in the US-East-1 region and the bucket creation fails. Why?

#### Correct

#### Correct answer

The bucket name uses capital letters.

## Explanation

Explanation: Buckets in all regions except US-East-1 have a maximum length of 63 characters for the bucket name. US-East-1 allows up to 256 characters for the bucket name. Bucket names cannot contain capital letters. \*Please note that the US-East-1 naming limit may change soon - "While the US Standard region currently allows non-compliant DNS bucket naming, we are moving to the same DNS-compliant bucket naming convention for the US Standard region in the coming months."

## **Further Reading**

http://docs.aws.amazon.com/AmazonS3/latest/dev/BucketRestrictions.html

79. **79**) Which of the following statements about SQS is true?

#### Correct

#### Correct answer

Messages will be delivered one or more times, and message delivery order is indeterminate.

## **Explanation**

Due to the distributed nature of SQS, messages can be duplicated. SQS does not guarantee that messages will be delivered only once but SQS does guarantee at least one message will be delivered. It is up to the developer to build logic into the code to ensure duplicate messages do not influence your application.

# **Further Reading**

| http | os://linuxacadem | y.com/ci | o/courses/ | lesson/ | course/ | 150/ | lesson/ | 1/module/11 |
|------|------------------|----------|------------|---------|---------|------|---------|-------------|
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|-----|---|
| 80. | 80) Which of the following is NOT a common S3 API call?   |
|     | Correct   |
|     | Correct answer  |
|     | ReadObject  |
|     | Explanation   |
|     | ReadObject is not an S3 call. Getting a general overview of S3 API calls will help you on the exam.   |
|     | Further Reading   |
|     | https://linuxacademy.com/cp/modules/view/id/11  |
| 81. | <b>81)</b> You have software on an EC2 instance that needs to access both the private and public IP address of that instance. What's the best way for the software to get that information? |
|     | Incorrect   |
|     | Correct answer  |
|     | Look it up in instance metadata   |
| 82. | 82) Which of the following is a default limit in S3?  |
|     | Correct   |
|     | Correct answer  |
|     | Accounts can have a maximum of 100 buckets  |
|     | Explanation   |
|     | This "used" to be a hard limit. However, in 2015 AWS changed it so it was only a soft limit and an increase can be requested.   |

83. **83)** The only SNS notification event supported by S3 is S3:ReducedRedundancyLostObject.

Correct

**Correct answer** 

False

## **Explanation**

S3 provides the S3:ReducedRedundancyLostObject for objects that are using the Reduce Redundancy Storage class on Amazon S3. This notification is used with SNS and sends a JSON object notification to the subscribed SNS topics if an object is lost by Amazon S3. This allows you to create automation and be informed with RRS (99.9% durability storage) has an object data loss from one of your buckets. AWS now supports event notifications for object creation as well.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/120/lesson/6/module/11

84. **84)** Your supervisor is upset about the fact that SNS topics that he subscribed to are now cluttering up his email inbox. How can he stop receiving email from SNS without disrupting other users' ability to receive email from SNS?

#### Correct

#### Correct answer

You can delete the subscription from the SNS topic responsible for the emails, He can use the unsubscribe information provided in the emails

## **Explanation**

Deleting the topic would cause all message types to cease for this notification. You cannot delete the endpoint from the subscription, but you can delete the subscription from the topic.

85. **85)** Which of the following types of servers would this CloudFormation template be most appropriate for? { "AWSTemplateFormatVersion" : "2010-09-09", "Description" : "My CloudFormation Template", "Resources" : { "MyInstance" : { "Type" : "AWS::EC2::Instance", "Properties" : { "InstanceType" : "t2.micro", "ImageId" : "ami-030f4133", "NetworkInterfaces" : [ { "AssociatePublicIpAddress" : "true", "DeviceIndex" : "0", "DeleteOnTermination" : "true", "SubnetId" : "subnet-0c2c0855", "GroupSet" : ["sg-53a4e434"] } ] } } } }

#### **Correct**

#### Correct answer

**Bastion host** 

## **Explanation**

The CloudFormation template specifies a public IP address for the server. A domain controller, database server, and log collection server typically would not require a public IP address. Bastion hosts do require public IP addresses.

86. **86)** You want 5 strongly consistent 1KB writes per second. How many units of throughput capacity do you need to provision?

|     | Correct answer  |
|-----|---|
|     | 5   |
|     | Explanation   |
|     | The only option for a write is strongly consistent. The throughput units needed to write 5 strongly consistent writes per second of 1KB in size is $5 \times 1 = 5$ .   |
| 87. | 87) S3 does not generally handle error codes with HTTP responses.   |
|     | Correct   |
|     | Correct answer  |
|     | False   |
|     | Explanation   |
|     | S3 handles error codes with HTTP response codes. e.g 404 - not founds 403 - permission issues etc.  |
|     | Further Reading   |
|     | https://linuxacademy.com/cp/courses/lesson/course/118/lesson/6/module/11  |
| 88. | <b>88)</b> Your supervisor calls you wanting to know why she has not been receiving email notifications for AWS billing alerts. What do you suspect the problem might be and how can you find out?  |
|     | Correct   |
|     | Correct answer  |
|     | Your supervisor has not responded to the confirmation email sent from SNS when you added a subscription for her email address. Verify by viewing Subscriptions for the appropriate Topic in SNS, The SNS Subscription is not configured for Email notifications. Verify by viewing Subscriptions for the appropriate Topic in SNS, Billing alerts are not configured. Verify by viewing Billing Alerts in Account Preferences |
| 89. | 89) At what size file should you use multi-part upload?   |
|     | Correct   |
|     | Correct answer  |
|     | 100 MB  |
|     | Explanation   |

Correct

Objects 5GB or larger require multi-part upload API to be uploaded to AWS. However, it is best practice to use the multi-part upload api for objects 100MB or larger.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

90. **90)** Which of these CloudFormation snippets of code will return an address that can be used to access our application from our browser if we're using a resource type of AWS::ElasticLoadBalancing::LoadBalancer with Logical ID "ElasticLoadBalancer"?

#### Correct

#### Correct answer

```
"Fn::Join": ["", ["http://", { "Fn::GetAtt": ["ElasticLoadBalancer", "DNSName"]}]]
```

## Explanation

The answer with "Ref" would return the Elastic Load Balancer physical ID The [ "ElasticLoadBalancer", "URL" ] is not a valid option (it should be EndpointURL instead)

91. **91)** You have reached your account limit for the number of CloudFormation stacks in a region. How do you increase your limit?

## **Correct**

#### Correct answer

Contact AWS.

## **Explanation**

AWS CloudFormation by default allows 20 stacks per region to be running at any given time. In order to increase this limit all you can contact AWS through an limit increase form.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/121/lesson/3/module/11

92. 92) You created three S3 buckets – "mydomain.com", "downloads.mydomain.com", and "www.mydomain.com". You uploaded your files, enabled static website hosting, specified both of the default documents under the "enable static website hosting" header, and set the "Make Public" permission for the objects in each of the three buckets. All that's left for you to do is to create the Route 53 Aliases for the three buckets. You are going to have your end users test your websites by browsing to http://mydomain.com/error.html, http://downloads.mydomain.com/index.html, and http://www.mydomain.com. What problems will your testers encounter?

#### Correct

#### Correct answer

There will be no problems, all three sites should work.

## **Explanation**

It used to be that the only allowed domain prefix when creating Route 53 Aliases for S3 static websites was the "www" prefix. However, this is no longer the case. You can now use other subdomains.

93. 93) A recent increase in the amount of users of an application hosted on an EC2 instance that you manage has caused the instance's OS to run out of CPU resources and crash. The crash caused several users' unsaved data to be lost and your supervisor wants to know how this problem can be avoided in the future. Which of the following would you not recommend?

#### Correct

#### Correct answer

Take frequent snapshots of the EBS volume during business hours to ensure users' data is backed up.

## **Explanation**

Snapshots can cause performance degradation. If your application is already under a heavy load, creating snapshots during business hours could worsen the problem. In addition, taking a snapshot of the EBS volume will not capture the users' unsaved data as it resides in the EC2 instance's memory, not on the EBS volume.

94. 94) You receive a call from a potential client who explains that one of the many services they offer is a website running on a t2.micro EC2 instance where users can submit requests for customized e-cards to be sent to their friends and family. The e-card website administrator was on a cruise and was shocked when he returned to the office in mid-January to find hundreds of angry emails complaining that customers' loved ones had not received their Christmas cards. He also had several emails from CloudWatch alerting him that the SQS queue for the e-card application had grown to over 500 messages on December 25th. You investigate and find that the problem was caused by a crashed EC2 instance which serves as an application server. What do you advise your client to do first?

#### **Correct**

#### Correct answer

Send an apology to the customers notifying them that their cards will not be delivered.

## **Explanation**

If an autoscaling group had been in place, it could have prevented this situation by deploying a new application server when the first one crashed. Autoscaling can also help during peak load times, like the holiday season, by deploying additional instances to meet the increased load. Unfortunately, autoscaling cannot resolve the problem of the unsent Christmas cards at this point because the issue occurred in late December and the problem was not discovered until mid-January. The maximum time a message can remain in an SQS queue is 14 days, so these messages have already been deleted. Unless the webserver contains a log of the requests that can be used to re-create the cards, the data cannot be

|     |     |              |   | 1  |
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| 100 | ~~, | <i>v</i> C i |   | u. |

| 95. | <b>95)</b> What is the only "required" | CloudFormation section | n in a template? | This section | is also wh | iere you |
|-----|--|------------------------|------------------|--------------|------------|----------|
|     | specify what AWS services are          | used by the template.  |                  |              |            |          |

#### Correct

#### Correct answer

resources

## **Explanation**

CloudFormation service is designed to launch and deploy AWS resources. Thus, the only required section is the resource section which defines what AWS resources are to be launched during stack creation time.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/121/lesson/3/module/11

96. **96)** Your EC2 component receives a message from a message queue. The message will then become invisible for 30 seconds. What API request must be called in order for the VisibilityTimeout not to make the message visible again?

#### **Correct**

#### Correct answer

DeleteMessage

## **Explanation**

The message will become invisible again if the worker instance that is processing the data in the message does not delete the message after it has been successfully completed. This allows another worker to then process the message again if the original worker fails to process the message.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/150/lesson/2/module/11

97. 97) Each AWS account can own how many buckets?

#### Correct

#### Correct answer

100

#### **Explanation**

AWS accounts are limited to the total number of buckets allowed. Since S3 is a global namespace, the limitation is per account and not per region. The limit cannot be increased upon request to AWS.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

98. 98) Which S3 error code does not have a corresponding HTTP 404 Status code?

**Correct** 

#### Correct answer

MissingSecurityHeader

## **Explanation**

An HTTP 404 status code means communication with the service was successful, but the request received a "not found" response. MissingSecurityHeader is an error message received if the S3 API call is missing security API information which prevents the request from being executed successfully. 400 bad request would be the HTTP response code for MissingSecurityHeader.

## **Further Reading**

http://docs.aws.amazon.com/AmazonS3/latest/API/ErrorResponses.html

99. **99)** What would you set in your CloudFormation template to fire up different instance sizes based off of environment type? i.e. (If this is for prod, use m1.large instead of t1.micro)

Correct

Correct answer

conditions

## **Explanation**

Conditions allow you to cause different resources to be launched that are listed in the template. If a specific condition is met for the resource, then the resource is launched. Conditions are created in their own property section and then referenced in the resource declaration.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/121/lesson/3/module/11

100. 100) Which of the following bucket names is invalid?

Correct

Correct answer

.linuxacademy.com, LinuxAcademy.com

## **Explanation**

"." characters are allowed inside of bucket names. However, bucket names CANNOT start with "." or "-" characters.

## **Further Reading**

https://linuxacademy.com/cp/courses/lesson/course/118/lesson/1/module/11

101. **101)** Which of the following is an incorrect S3 bucket name?

#### Correct

#### Correct answer

10.2.181.2, 1Linuxacademy.com

102. 102) Which of the following can be increased by contacting AWS?

#### Correct

#### **Correct answer**

S3 buckets per account, DynamoDB tables per account per region

103. 103) You have an EC2 instance deployed with an IAM role with write access permissions to an SQS queue. The instance is attempting to write a 512 KB message to an SQS queue. What will the result of this attempt be?

#### Correct

#### Correct answer

It will fail because it is greater than the 256 KB limit for SQS messages.

## **Explanation**

While it is true that SQS requests are measured in 64 KB chunks, the maximum message size is 256 KB, so a 512 KB message will not be accepted.

104. **104)** A corporate web application is deployed within an Amazon VPC, and is connected to the corporate data center via IPSec VPN. The application must authenticate against the on-premise LDAP server. Once authenticated, logged-in users can only access an S3 keyspace specific to the user.

#### **Incorrect**

#### Correct answer

The application authenticates against LDAP, and retrieves the name of an IAM role associated with the user. The application then calls the IAM Security Token Service to assume that IAM Role. The application can use the temporary credentials to access the S3 keyspace., Develop an identity broker which authenticates against LDAP, and then calls IAM Security Token Service to get IAM federated user credentials. The application calls the identity broker to get IAM federated user credentials with access to the appropriate S3 keyspace

# Retake Quiz



# **Cloud Servers**

Set Region: United States

| # Distribution | Server Actions                   | Status  | Public Private<br>IP IP | Public<br>Hostnames | Device<br>Mount | Expire Date         |
|----------------|----------------------------------|---------|-------------------------|---------------------|-----------------|---------------------|
| 1 16           | • Start Server • Delete Server   | stopped |                         |                     |                 | 21 Days 11<br>Hours |
| 2 16           | • Start Server • Delete Server • | stopped |                         |                     |                 | 3 Days 17<br>Hours  |

| # Distribution 3 116 | Server Actions              | Status<br>stopped IP | Private<br>IP | Public<br>Hostnames | Device<br>Mount | Exaire Date Hours   |
|----------------------|-----------------------------|----------------------|---------------|---------------------|-----------------|---------------------|
| •                    | Start Server                |                      |               |                     |                 |                     |
|                      | <u>Delete Server</u>        |                      |               |                     |                 |                     |
|                      | •                           |                      |               |                     |                 |                     |
| 4 17                 | Start Server  Delete Server | stopped              |               |                     |                 | 40 Days 6<br>Hours  |
| 5 16                 | Start Server  Delete Server | stopped              |               |                     |                 | 21 Days 11<br>Hours |
| 6 16                 | Start Server  Delete Server | stopped              |               |                     |                 | 21 Days 11<br>Hours |

# Distribution Server Actions Status Public Private Public Device Expire Date

## **Cloud Server FAQ**

Default Server User: [user]

Default Server Pass: [123456]

Default Root Pass: [123456]

Note: Depending on your internet provider or DNS lookup server, public hostnames might take extra time to resolve to your Cloud Servers new IP address.

Linux: Use the default "terminal" application

OS X: Use the default "terminal" Application

Windows: Download PUTTY here

## 120 Minutes Till Timeout

Refresh Timeout

Close

# **Connecting to Cloud Servers**

Root user login is disabled by default. Please see instructions on how to connect. Root access is allowed only after logging in as user "user" or any other regular user.

- 1. Once logged in with "user" type "su"
- 2. Enter password "123456"
- 3. Confirm password "123456"
- 4. Enter your own customer password
- 5. Root login is disabled by default so you will always need to login as a regular user first

A Virtual Machine is being provisioned for you, this may take a few moments.

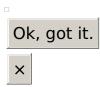
The cost of the real Cloud Servers are covered as part of your membership.

#### How to connect

- 1. You can connect to the virtual machine once it is running by selecting Login next to the gear box.
- 2. The default username is **user** and default password is **123456**.

3. On first login you will enter your **123456** password again a second time.

4. Then you can enter in your new password.



# Get help!

Feel free to ask us anything, that's what we're here for!

- Search the community for help
- C I need some help with the course material
- Account, billing, and technical issues, or ask an instructor a private question
- C I have some general feedback

Search the community



## Request a New Feature



## Refer a Friend!

Refer a Friend, and you will both receive a free Cloud Credential Certificate Voucher, when they sign up!

