AWS,Git, Linux

Assessment Plan for Collabra

Prepared by beCloudReady

# OVERVIEW & PURPOSE

Assessment readiness for AWS, Git and Linux skills

# Short Answer

1. Highlight few differences between Block storage ( EBS ) & Object storage (s3)

EBS is block level storage, S3 is object storage.

EBS is accessible only through the EC2 instances, on the other hand S3 can be publicly accessible.

S3 is normally cheaper than EBS.

1. Highlight few differences between NoSQL & SQL databases

SQL db is used to store structured tabular data, NoSQL is used to store relatively unstructured key/value based data.

NoSQL uses hierarchical data storage, and SQL has no hierarchical data storage

1. Highlight few differences between ssh & http protocol

http protocol is not secured during transition of data packets. SSH creates a secure tunnel between client and server, hence it’s much more secured than http.

# Tasks 1

1. Create a new ec2 instance & new key ( AWS Ohio region )

Task 2

1. Create a S3 bucket with <yourname>\_final ( Ohio region )
2. Create 2 IAM users, one with readonly s3 access, another with s3fullaccess

Task 3:

1. Upload the file <https://github.com/becloudready/rds-tutorials/blob/master/mysql/mysqlsampledatabase.sql> into your s3 bucket
2. Download the aforesaid uploaded ( mysqlsampledatabase.sql ) into your ec2 instance ( cmdline )
3. Write the command that you used for step #2

aws s3 cp s3://yunfeimaofinal/mysqlsampledatabase.sql.txt mysqlsampledatabase.sql.txt

Task 4:

1. On ec2 instance Count number of lines of the mysqldump file ( downloaded from s3)

wc l mysqlsampledatabase.sql.txt

(4065 lines in total)

1. Create a new file from the file mysqlsampledatabase.sql where every word “mysql” is replaced with “yoursql”

sed ‘s/mysql/yoursql/g’ mysqlsampledatabase.sql > yoursql.txt

1. ( bonus ) Count how many times word NULL appeared on mysqlsampledatabase.sql file.

Task 5:

1. Create an RDS MariaDB instance on AWS Ohio region. (I’ve messed up Ohio region before, deleted a default vpc, That’s why I created it in Virginia)

mysql -htestmariadb.cncnrpa0hfac.us-east-1.rds.amazonaws.com -uMAO -pmypassword

1. Import the mysql dump file mysqlsampledatabase.sql into the RDS database

mysql -htestmariadb.cncnrpa0hfac.us-east-1.rds.amazonaws.com -uMAO -pmypassword < mysqlsampledatabase.sql.txt

Task 6:

1. Write an SQL query on the database created on step 5 : Select all customer names, and product names from the database in single query.

select c.customerName, p.productName from customers c inner join orders o on c.customerNumber = o.customerNumber inner join orderdetails od on o.orderNumber = od.orderNumber inner join products p on od.productCode = p.productCode;

2996 rows returned

Task 7:

1. Push your each answer as separate git commit into a new repository called aws\_assessment. ( Don’t put any AWS keys, secret, passwords into the commit, of delete the keys before you push them )