



SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

Enterprise Standards and Best Practices for IT Infrastructure

4th Year 2nd Semester 2016

Amazon EC2 DB Instances

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SLIIT ID: IT13121020

Group Number: Group 02

Practical Session: <WD Friday>

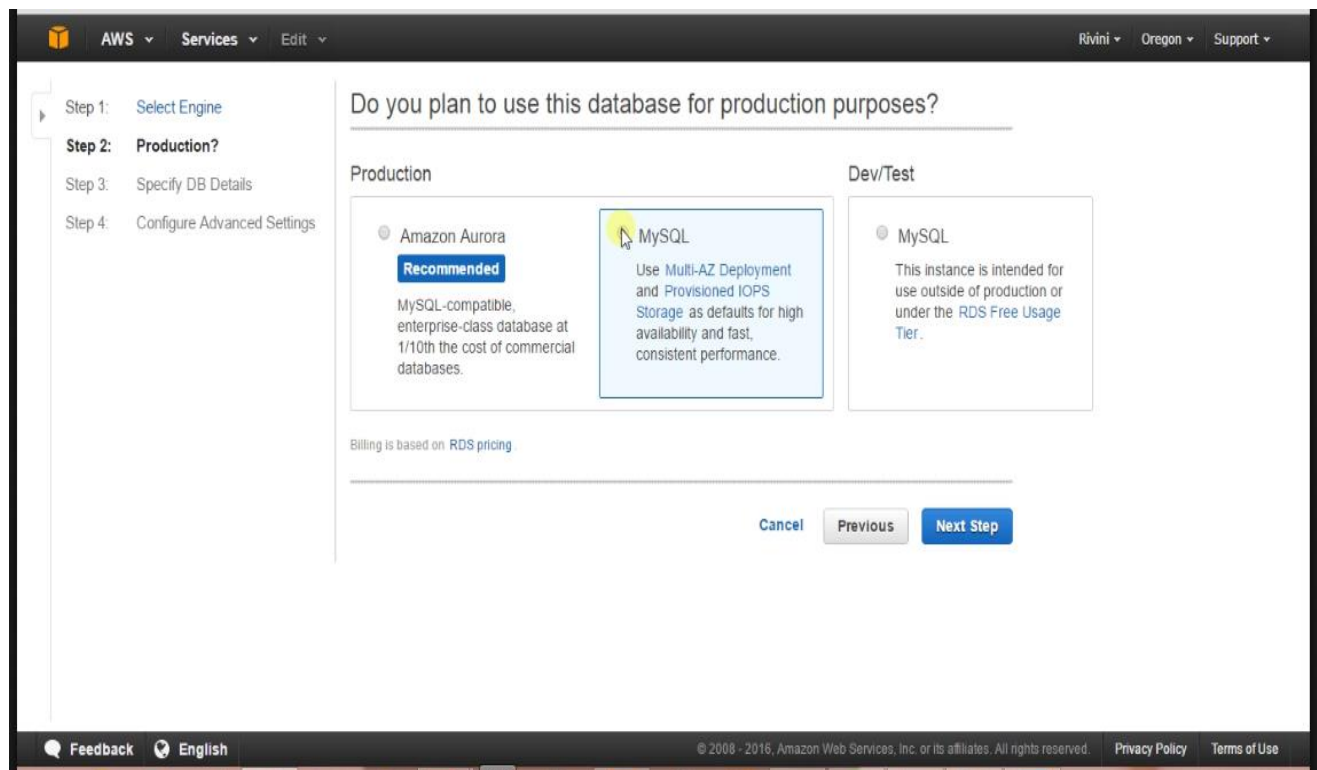
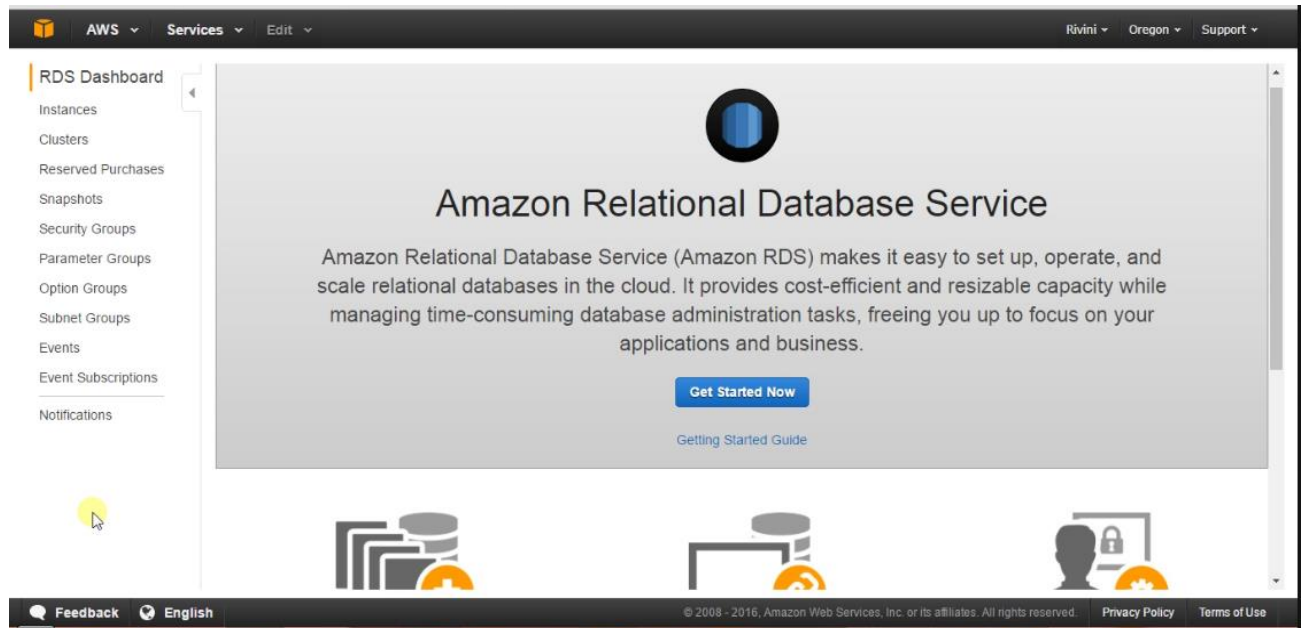
Practical Number : <Lab 3 >

Date of Submission: 31-07-2016

Date of Evaluation : _____

Evaluators Signature : _____

1. Choose an Amazon Database Instance: MySQL



2. Specify DB Details

Step 1: [Select Engine](#)

Step 2: [Production?](#)

Step 3: Specify DB Details

Step 4: [Configure Advanced Settings](#)

The following selections disqualify the instance from being eligible for the free tier:

- Multi-AZ Deployment
- Allocated Storage > 20GB
- Provisioned IOPS
- DB Instance Class

You will be charged normal RDS Prices. [Learn More.](#)

Estimate your monthly costs for the DB Instance using the [RDS Instance Cost Calculator](#).

Specify DB Details

Instance Specifications

DB Engine

mysql

License Model

general-public-license

DB Engine Version

5.6.27

DB Instance Class

5.6.27

Multi-AZ Deployment

5.6.23

Storage Type

5.6.22

Allocated Storage*

5.6.21b

Provisioned IOPS

5.6.21

Settings

DB Instance Identifier*

instance-mysql1

Review the [Known Issues/Limitations](#) to learn about potential compatibility issues with specific database versions.

Version number of the database engine to be used for this instance.

Feedback

English

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Step 1: [Select Engine](#)

Step 2: [Production?](#)

Step 3: Specify DB Details

Step 4: [Configure Advanced Settings](#)

The following selections disqualify the instance from being eligible for the free tier:

- Multi-AZ Deployment
- Allocated Storage > 20GB
- Provisioned IOPS
- DB Instance Class

You will be charged normal RDS Prices. [Learn More.](#)

Estimate your monthly costs for the DB Instance using the [RDS Instance Cost Calculator](#).

Review the [Known Issues/Limitations](#) to learn about potential compatibility issues with specific database versions.

DB Instance Class

db.m3.xlarge — 4 vCPU, 15 GiB RAM

Multi-AZ Deployment

Yes

Storage Type

Provisioned IOPS (SSD)

Allocated Storage*

100

GB

Provisioned IOPS

1000

Settings

DB Instance Identifier*

instance-mysql1

Master Username*

rivini

Master Password*

.....

Confirm Password*

.....

Retype the value you specified for Master Password.

* Required

Cancel

Previous

Next Step

Feedback

English

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3. Configure Advance Settings

This screenshot shows the 'Database Options' configuration page in the AWS Management Console. The page is for a database instance named 'database1'. The 'Database Name' field is set to 'database1'. A note states: 'Note: If no database name is specified then no initial MySQL database will be created on the DB Instance.' The 'Database Port' is set to '3306'. The 'DB Parameter Group' is set to 'default.mysql5.6'. The 'Option Group' is set to 'default.mysql5-6'. The 'Copy Tags To Snapshots' checkbox is checked. The 'Enable Encryption' dropdown is set to 'No'. A callout box on the right says: 'Select to encrypt the given instance. Master key ids and aliases appear in the list after they have been created using the Key Management Service(KMS) console. [Learn More](#).' Below the 'Database Options' section is the 'Backup' section, which includes a note: 'Please note that automated backups are currently supported for InnoDB storage engine only. If you are using MyISAM, refer to detail [here](#).' The 'Backup Retention Period' is set to '7' days, and the 'Backup Window' is set to 'No Preference'. The 'Monitoring' section has 'Enable Enhanced Monitoring' set to 'Yes'. The footer includes 'Feedback', 'English', '© 2008 - 2016, Amazon Web Services, Inc. or its affiliates. All rights reserved.', 'Privacy Policy', and 'Terms of Use'.

Database Options

Database Name: database1

Note: If no database name is specified then no initial MySQL database will be created on the DB Instance.

Database Port: 3306

DB Parameter Group: default.mysql5.6

Option Group: default.mysql5-6

Copy Tags To Snapshots: ☒

Enable Encryption: No

Backup

Please note that automated backups are currently supported for InnoDB storage engine only. If you are using MyISAM, refer to detail [here](#).

Backup Retention Period: 7 days

Backup Window: No Preference

Monitoring

Enable Enhanced Monitoring: Yes

Select to encrypt the given instance. Master key ids and aliases appear in the list after they have been created using the Key Management Service(KMS) console. [Learn More](#).

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This screenshot shows the 'Maintenance' configuration page in the AWS Management Console. The 'KMS Key ID' is set to 'alias/aws/rds'. The 'Backup' section includes a note: 'Please note that automated backups are currently supported for InnoDB storage engine only. If you are using MyISAM, refer to detail [here](#).' The 'Backup Retention Period' is set to '7' days, and the 'Backup Window' is set to 'No Preference'. The 'Monitoring' section has 'Enable Enhanced Monitoring' set to 'Yes', 'Monitoring Role' set to 'Default', and 'Granularity' set to '60' seconds. A checkbox 'I authorize RDS to create the IAM role rds-monitoring-role' is checked. The 'Maintenance' section has 'Auto Minor Version Upgrade' set to 'Yes' and 'Maintenance Window' set to 'No Preference'. At the bottom, there are buttons for 'Cancel', 'Previous', and 'Launch DB Instance'. The footer includes 'Feedback', 'English', '© 2008 - 2016, Amazon Web Services, Inc. or its affiliates. All rights reserved.', 'Privacy Policy', and 'Terms of Use'.

KMS Key ID alias/aws/rds

Backup

Please note that automated backups are currently supported for InnoDB storage engine only. If you are using MyISAM, refer to detail [here](#).

Backup Retention Period: 7 days

Backup Window: No Preference

Monitoring

Enable Enhanced Monitoring: Yes

Monitoring Role: Default

Granularity: 60 second(s)

☒ I authorize RDS to create the IAM role rds-monitoring-role.

Maintenance

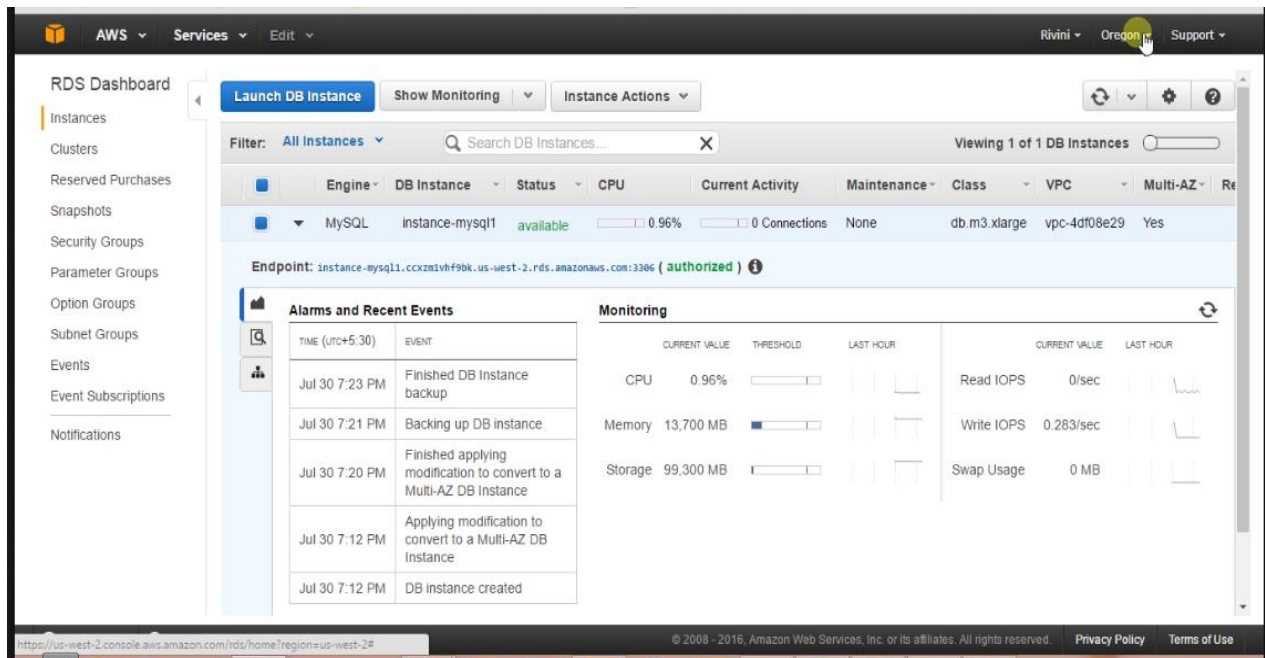
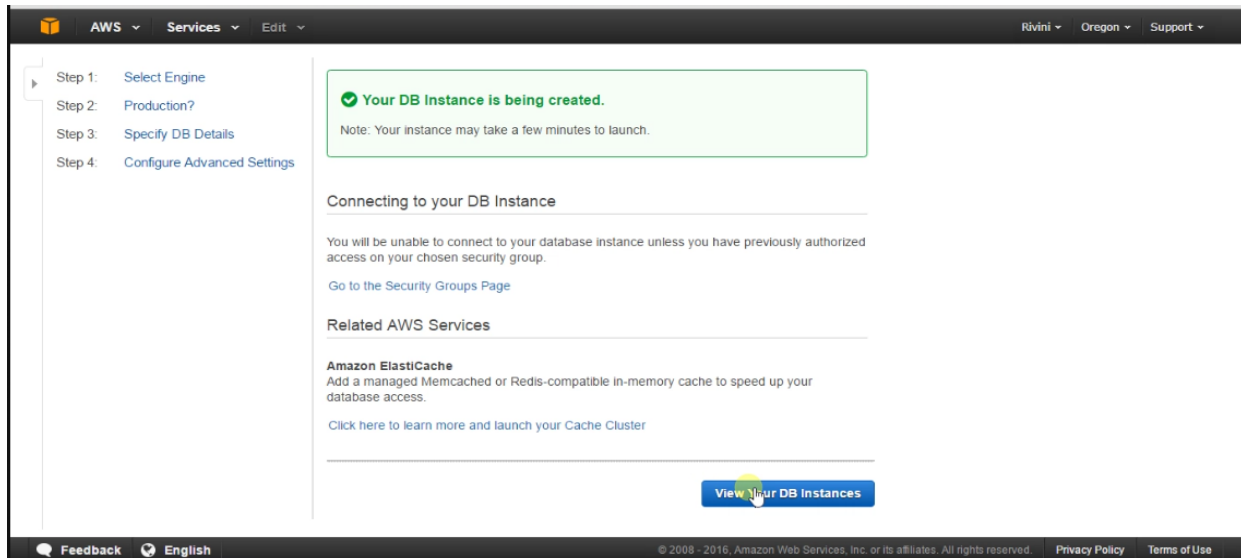
Auto Minor Version Upgrade: Yes

Maintenance Window: No Preference

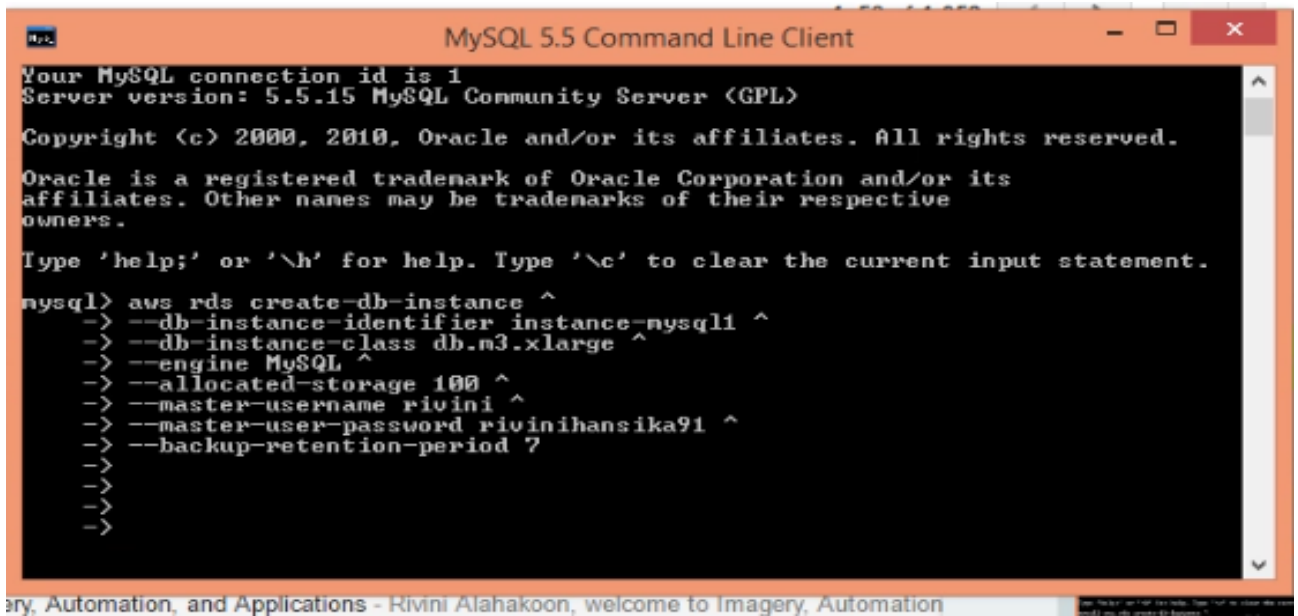
* Required Cancel Previous Launch DB Instance

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4. Launch DB instance



5. Connect instance



The screenshot shows a terminal window titled "MySQL 5.5 Command Line Client". The window has a standard macOS-style title bar with red, yellow, and green buttons. The text inside the terminal is as follows:

```
Your MySQL connection id is 1
Server version: 5.5.15 MySQL Community Server (GPL)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> aws rds create-db-instance ^
      --db-instance-identifier instance-mysql1 ^
      --db-instance-class db.m3.xlarge ^
      --engine MySQL ^
      --allocated-storage 100 ^
      --master-username rivini ^
      --master-user-password rivinihansika91 ^
      --backup-retention-period ?
      ^
      ^
      ^
      ^
      ^
```

At the bottom of the terminal window, there is a status bar with the text: "ary, Automation, and Applications - Rivini Alahakoon, welcome to Imagery, Automation".