



SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

Enterprise Standards and Best Practices for IT Infrastructure

4th Year 2nd Semester 2014

Creating DB Instance using AWS account

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Practical Session: Weekday IT Friday

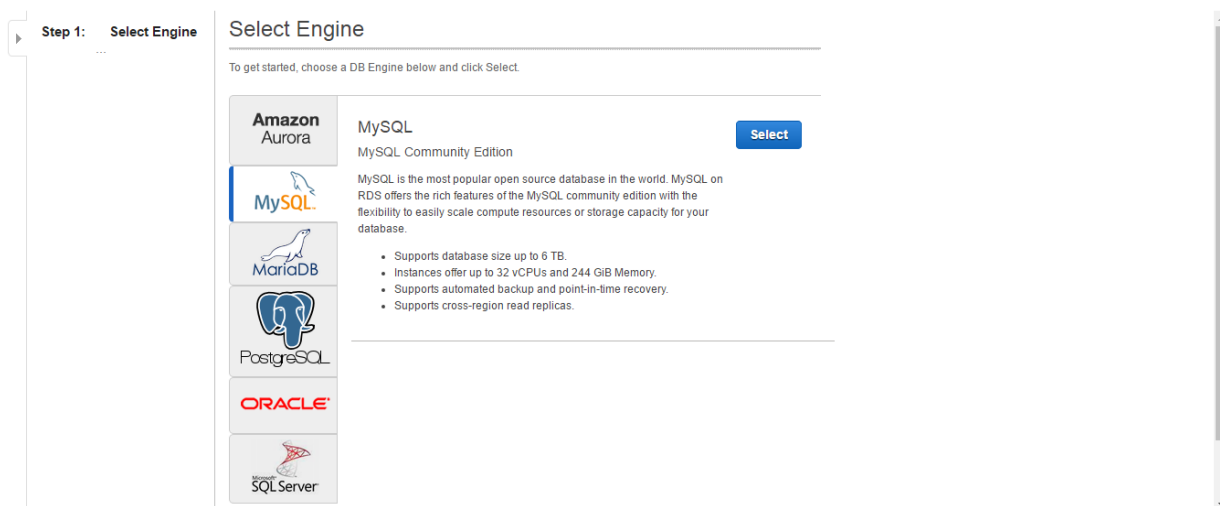
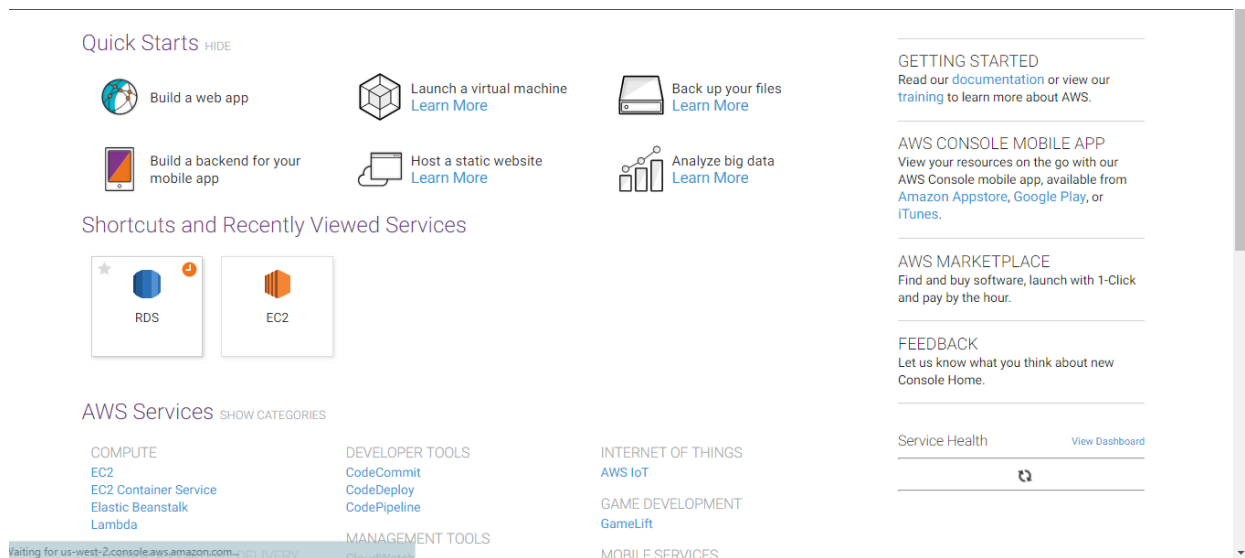
Practical Number: Lab 3

Date of Submission: 30/07/2016

In this capture it is going to describe how to create Amazon Relational Database Services (RDS) using amazon web services.

Launch an instance - create the DB instance to go to database section in home page and select RD

Select any database type – In this lab MySQL is use database as select engine



Select MySQL database for production purpose. In this select MySQL RDS free usage tier

Step 1: [Select Engine](#)

Step 2: Production?

Step 3: Specify DB Details

Step 4: Configure Advanced Settings

Do you plan to use this database for production purposes?

Production

☐ Amazon Aurora

Recommended

MySQL-compatible, enterprise-class database at 1/10th the cost of commercial databases.

☐ MySQL

Use [Multi-AZ Deployment](#) and [Provisioned IOPS Storage](#) as defaults for high availability and fast, consistent performance.

Dev/Test

☒ MySQL

This instance is intended for use outside of production or under the [RDS Free Usage Tier](#).

Billing is based on [RDS pricing](#)

Cancel

Previous

Next Step

Step 1: [Select Engine](#)

Step 2: Production?

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Cancel

Previous

Next Step

Specify DB Details – We can select any DB instance class, can allocate any storage type and storage size.

Step 1: [Select Engine](#)
Step 2: [Production?](#)
Step 3: Specify DB Details
Step 4: [Configure Advanced Settings](#)

1 Your current selection is eligible for the free tier.
[Learn More.](#)

1 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: 5.6.19a

Review the Known Issues/Limitations to learn about potential compatibility issues with specific database versions.

DB Instance Class: db.t2.micro — 1 vCPU, 1 GiB RAM
Multi-AZ Deployment: - Select One -
Storage Type: General Purpose (SSD)
Allocated Storage*: 5 GB

Provisioning less than 100 GB of General Purpose (SSD) storage for high throughput workloads could result in higher latencies upon exhaustion of the initial General Purpose (SSD) IO credit balance. [Click here](#) for more details.

Settings

- General Purpose (SSD) storage is suitable for a broad range of database workloads. Provides baseline of 3 IOPS/GB and ability to burst to 3,000 IOPS.
- Provisioned IOPS (SSD) storage is suitable for I/O-intensive database workloads. Provides flexibility to provision I/O ranging from 1,000 to 30,000 IOPS.
- Magnetic storage may

We can create “DB Instance Identifier”, “Master Username” and “Master Password” option, and want to remember DB instance name and password to connect workbench with instance.

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

DB Instance Class: db.t2.micro — 1 vCPU, 1 GiB RAM
Multi-AZ Deployment: - Select One -
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Provisioning less than 100 GB of General Purpose (SSD) storage for high throughput workloads could result in higher latencies upon exhaustion of the initial General Purpose (SSD) IO credit balance. [Click here](#) for more details.

Settings

DB Instance Identifier*: hasitha123
Master Username*: hasitha
Master Password*:
Confirm Password*:

Retype the value you specified for Master Password.

* Required [Cancel](#) [Previous](#) [Next Step](#)

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

DB Instance Class:

Multi-AZ Deployment:

Storage Type:

Allocated Storage*: GB

Warning Provisioning less than 100 GB of General Purpose (SSD) storage for high throughput workloads could result in higher latencies upon exhaustion of the initial General Purpose (SSD) IO credit balance. [Click here](#) for more details.

Settings

DB Instance Identifier*:

Master Username*:

Master Password*:

Confirm Password*:

Retype the value you specified for Master Password.

* Required

Configure Advanced Setting - We can give any name to the DB and keep in other information as default.

Step 1: [Select Engine](#)

Step 2: [Production?](#)

Step 3: [Specify DB Details](#)

Step 4: Configure Advanced Settings

Configure Advanced Settings

Network & Security

VPC*:

Subnet Group:

Publicly Accessible:

Availability Zone:

VPC Security Group(s):

Database Options

Database Name:

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

Database Port:

DB Parameter Group:

Specify a string of up to 64 alpha-numeric characters that define the name given to a database that Amazon RDS creates when it creates the DB instance, as in "mydb". If you do not specify a database name, Amazon RDS does not create a database when it creates the DB instance.

Click “Launch DB Instance” button.

The screenshot shows the 'Launch DB Instance' configuration page in the AWS Management Console. On the left, a sidebar contains a navigation pane with a right-pointing arrow. The main content area is divided into sections: 'DB Parameter Group' (set to 'default.mysql5.6'), 'Option Group' (set to 'default.mysql-5-6'), 'Copy Tags To Snapshots' (unchecked), and 'Enable Encryption' (set to 'No'). Below these is the 'Backup' section, which includes a note about automated backups for InnoDB storage engine only, a 'Backup Retention Period' of 7 days, and a 'Backup Window' of 'No Preference'. The 'Monitoring' section has 'Enable Enhanced Monitoring' set to 'No'. The 'Maintenance' section has 'Auto Minor Version Upgrade' set to 'Yes' and a 'Maintenance Window' of 'No Preference'. At the bottom, there are three buttons: 'Cancel', 'Previous', and 'Launch DB Instance' (highlighted in blue). A small asterisk and the text '* Required' are located to the left of the 'Cancel' button.

Launch the DB Instance, after that click “View Your DB Instance” button.

The screenshot shows the 'View Your DB Instance' page in the AWS Management Console. On the left, a sidebar contains a navigation pane with a right-pointing arrow and four steps: 'Step 1: Select Engine', 'Step 2: Production?', 'Step 3: Specify DB Details', and 'Step 4: Configure Advanced Settings'. The main content area features a green success message: 'Your DB Instance is being created.' with a green checkmark icon. Below this is a note: 'Note: Your instance may take a few minutes to launch.' The section 'Connecting to your DB Instance' contains a warning: 'You will be unable to connect to your database instance unless you have previously authorized access on your chosen security group.' and a link 'Go to the Security Groups Page'. The 'Related AWS Services' section includes 'Amazon ElastiCache' with a description and a link 'Click here to learn more and launch your Cache Cluster'. At the bottom, there is a blue button labeled 'View Your DB Instances'.

View the details of the instance.

RDS Dashboard

Instances

Clusters

Reserved Purchases

RDS Da

Instances

Clusters

Reserved I

Snapshots

Security G

Parameter

Option Grc

Subnet Grn

Events

Event Sub:

Notificator

Launch DB Instance

Show Monitoring

Instance Actions

Filter: All Instances

Search DB Instances...

Viewing 1 of 1 DB Instances

Engine

DB Instance

Status

CPU

Current Activity

Maintenance

Class

VPC

Multi-AZ

Replica

MySQL

hasitha123

available

1.69%

0 Connections

None

db.t2.micro

vpc-fcb9c198

No

Endpoint: hasitha123.cgoxj8jobbir.us-west-2.rds.amazonaws.com:3306 (authorized)

Alarms and Recent Events

Monitoring

TIME (UTC+5:30)	EVENT	CURRENT VALUE	THRESHOLD	LAST HOUR	CURRENT VALUE	LAST HOUR
Jul 30 2:50 PM	Finished DB Instance backup	CPU	1.69%		Read IOPS	0.725/sec
Jul 30 2:47 PM	Backing up DB instance	Memory	555 MB		Write IOPS	0.467/sec
Jul 30 2:46 PM	DB instance created	Storage	4,540 MB		Swap Usage	0 MB
Jul 30 2:45 PM	DB instance restarted					

Instance Actions

Tags

Logs

RDS Dashboard

Instances

Clusters

Reserved Purchases

Snapshots

Security Groups

Parameter Groups

Option Groups

Subnet Groups

Events

Event Subscriptions

Notifications

Launch DB Instance

Show Monitoring

Instance Actions

Filter: All Instances

Search DB Instances...

Viewing 1 of 1 DB Instances

Engine

DB Instance

Status

CPU

Current Activity

Maintenance

Class

VPC

Multi-AZ

Replication Role

MySQL

hasitha123

backing-up

None

db.t2.micro

vpc-fcb9c198

No

Endpoint: hasitha123.cgoxj8jobbir.us-west-2.rds.amazonaws.com:3306 (authorized)

Alarms and Recent Events

Monitoring

TIME (UTC+5:30)	EVENT	CURRENT VALUE	THRESHOLD	LAST HOUR	CURRENT VALUE	LAST HOUR
No Recent Events		CPU	No Data		Read IOPS	12/sec
		Memory	561 MB		Write IOPS	64.6/sec
		Storage	4,540 MB		Swap Usage	0 MB

Instance Actions

Tags

Logs

