

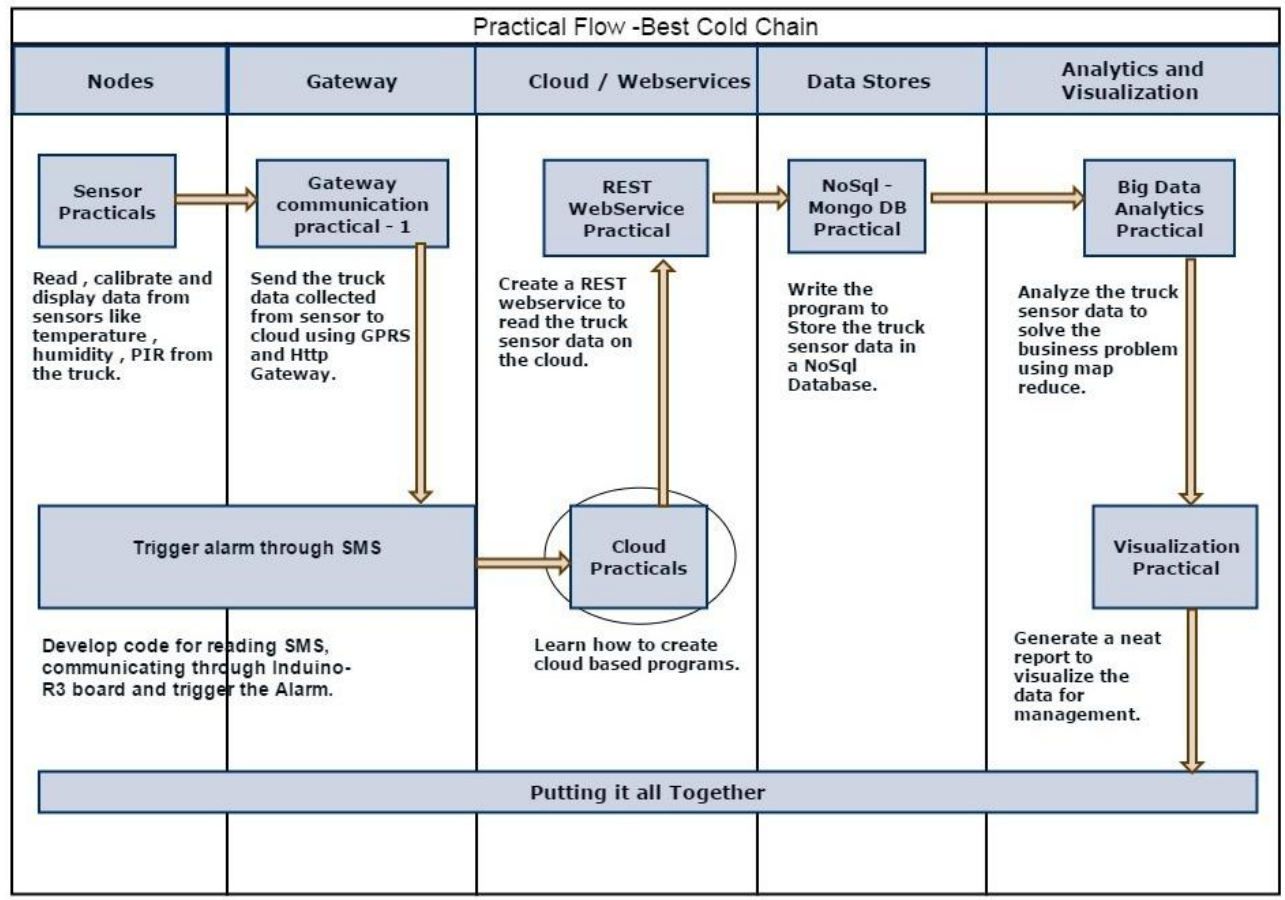
User Manual on

Amazon Web Services (AWS)

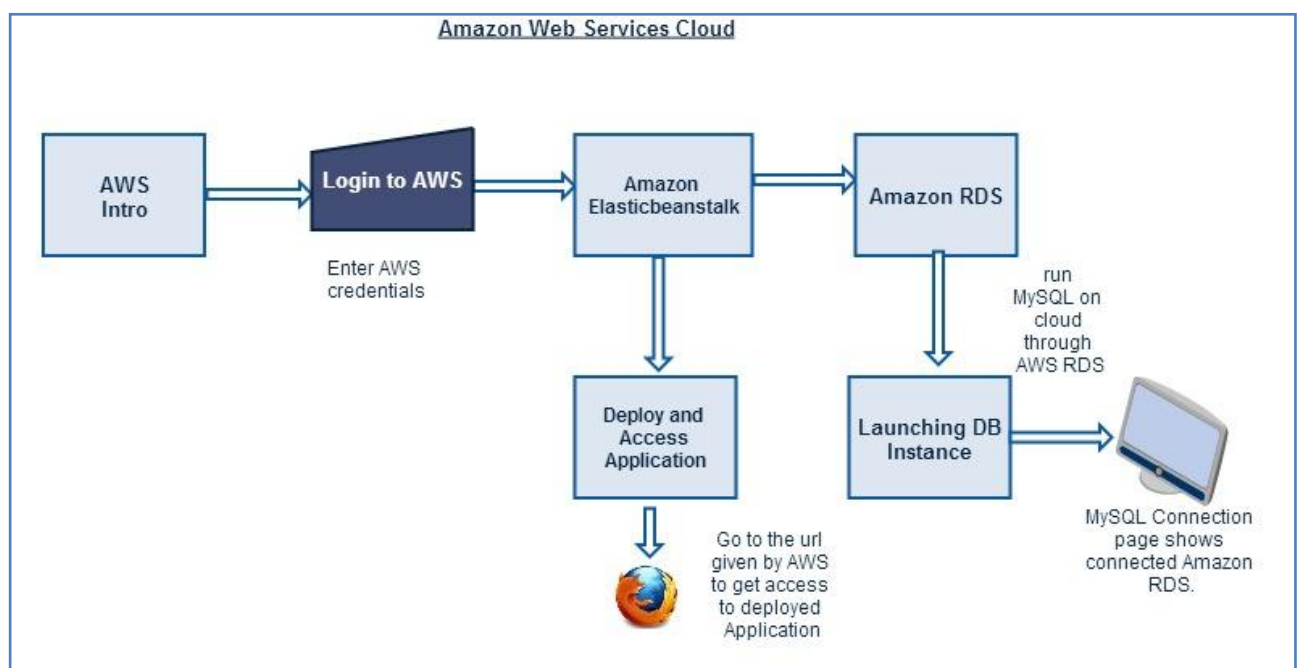
Document Revision and Approval History**Title:** User Manual on AWS Practice Labs**ID :****Effective:** 06-Jun-2014

Edition No.	Release Date	Author's Name	Software Version	Reason for Change / Description of Changes
1	06/06/2014	Raghavendra		
2	03/10/2014	Raghavendra		

Complete End-End IoT Diagram:



Amazon Web Services Cloud flow Diagram:



Introduction

1. **About Amazon Web Services (AWS)**
2. **Run Qwik Lab (AWS Training Environment)**
3. **Amazon Elastic Beanstalk**
4. **Amazon RDS**

1. About Amazon Web Services

Amazon Web Services (AWS):

- Amazon Web Services (AWS) is a collection of computing infrastructure services that developers can leverage when developing their applications. The services include computing, storage, database, and application synchronization (messaging and queuing). AWS uses a pay-as-you-go service model. You are charged only for the services that you—or your applications—use. Also, to make AWS more approachable as a platform for prototyping and experimentation, AWS offers a free usage tier. On this tier, services are free below a certain level of usage. For more information about AWS costs and the free tier, go to [AWS Free Usage Tier](#).
- You can run nearly anything on AWS that you would run on physical hardware: websites, applications, databases, mobile apps, email campaigns, distributed data analysis, media storage, and private networks. The services we provide are designed to work together so that you can build complete solutions. There are currently dozens of services, with more being added each year.

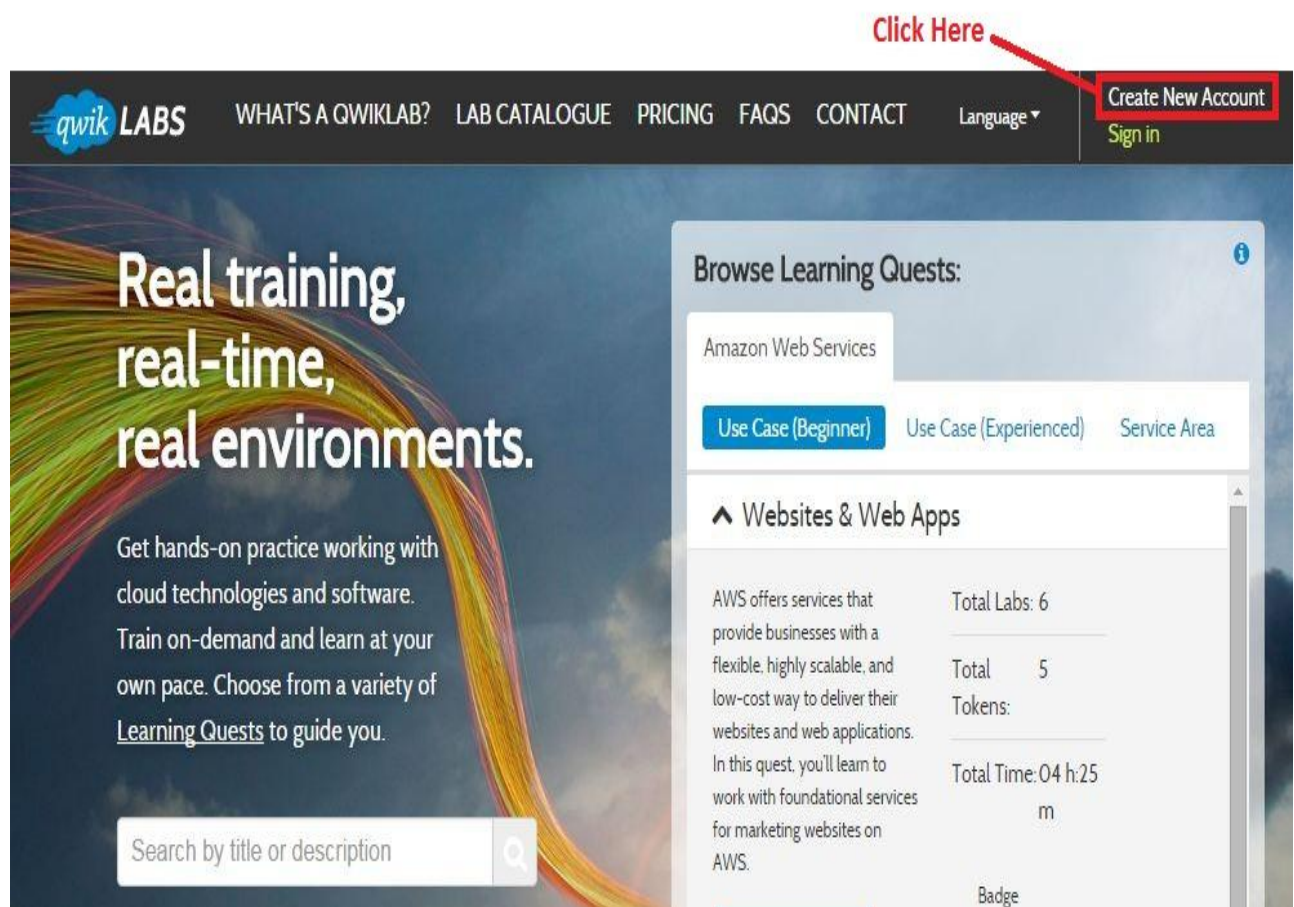
2. Run Qwik Lab (AWS Training Environment)

Objective:

- Get hands-on knowledge of working on AWS cloud platform
- Understand different services provided by AWS like EBS, RDS, etc

To get hands-on practice on AWS by using run.qwiklab.com

- Go to <https://run.qwiklab.com>
- To sign in to QwikLabs first click **Create New Account**.



- Fill the details required, check the **I agree to the Terms of Service** and click **Create a New Account**.

Create a New Account

* First Name	<input type="text" value="Run"/>
* Last Name	<input type="text" value="QuickLabs"/>
* Company Name	<input type="text" value="Run Quick Labs"/>
* E-mail	<input type="text" value="runquicklabs@gmail.com"/>
* Password	<input type="password" value="....."/>
* Password Confirmation	<input type="password" value="....."/>
I agree to the Terms of Service	<input checked="" type="checkbox"/>

Create a New Account

[Sign in](#)

[Forgot your password?](#)

[Didn't receive confirmation instructions?](#)

- Note:** You may receive e-mail conformation.
- Log-in into RunQwikLabs.

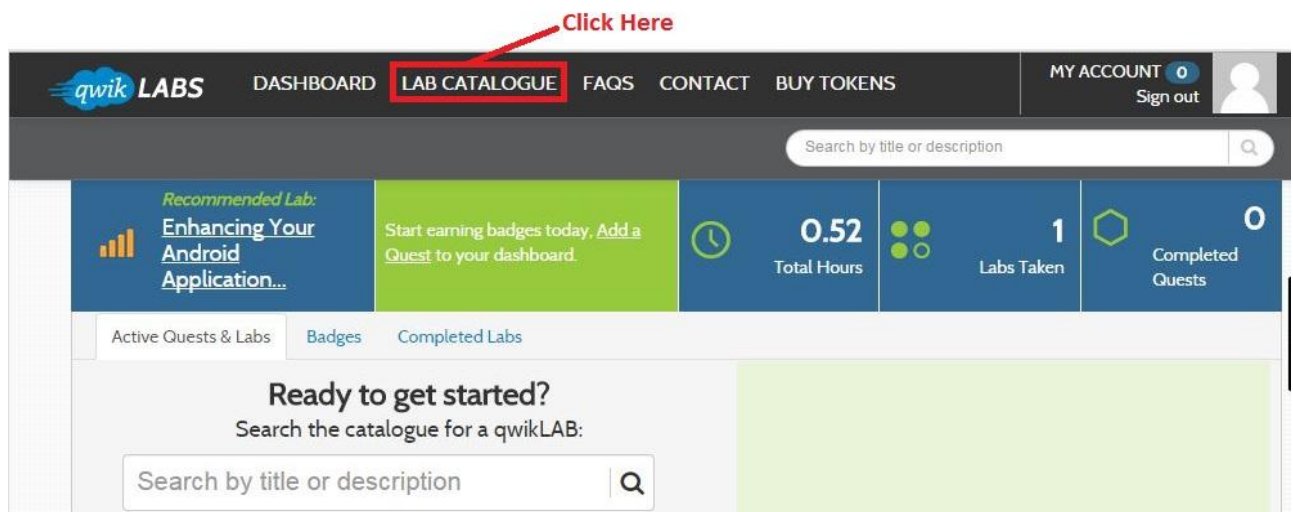
3. Amazon Elasticbeanstalk

Objective:

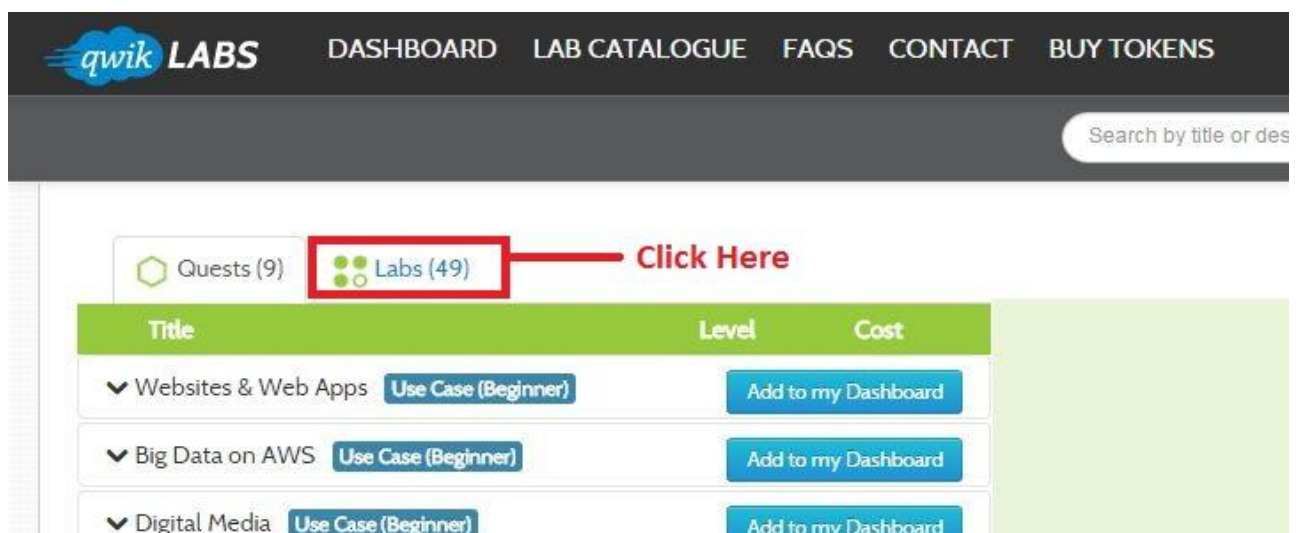
This document helps you to deploy and access your application on cloud through AWS Elastic Beanstalk. It is a quick and simple way to deploy your application to AWS. Within minutes, your application will be ready to use without any infrastructure or resource configuration work on your part. However, with Elastic Beanstalk, you retain full control over the AWS resources powering your application. If you decide you want to take over some (or all) of the elements of their infrastructure, you can do so seamlessly by using Elastic Beanstalk's management capabilities.

Deploying an Application to AWS:

- Login into run.qwiklab.com to get hands-on-work on AWS with your Run QwikLab credentials.
- Click **Lab Catalogue**.



- Click **Labs** Tab.



- Select **Introduction to AWS Elastic Beanstalk** and click **Select**.

The screenshot shows the Axelta Labs interface. At the top, there is a search bar with the text "Search by title or description". Below the search bar, there are two tabs: "Quests (9)" and "Labs (49)". A table lists various labs, with the last one, "Introduction to AWS Elastic Beanstalk", highlighted in green. To the right of the table, a detailed view of the selected lab is shown. It includes a title "Introduction to AWS Elastic Beanstalk", a "Select" button (highlighted with a red box and a red arrow labeled "Click Here"), a "FREE" label, a description, a user count of 1724, a 5-star rating, and details for Duration (00 h:20 m), Access Time (00 h:30 m), Setup Time (00 h:01 m), Levels (Introductory), and Tags (Beanstalk, spl72, introduction, free lab).

Title	Level	Cost
Introduction to Amazon DynamoDB	Introductory	FREE
Introduction to Amazon Elastic Block Store (EBS)	Introductory	FREE
Introduction to Amazon Elastic Compute Cloud (EC2)	Introductory	FREE
Introduction to Amazon Elastic MapReduce	Introductory	FREE
Introduction to Amazon Relational Database Service (RDS)	Introductory	FREE
Introduction to Amazon Simple Storage Service (S3)	Introductory	FREE
Introduction to AWS Elastic Beanstalk	Introductory	FREE

Introduction to AWS Elastic Beanstalk

This lab will teach you about AWS Elastic Beanstalk and lead you through the steps to launch an application using the AWS Management Console.

1724 ★★★★★

Duration: 00 h:20 m

Access Time: 00 h:30 m

Setup Time: 00 h:01 m

Levels: Introductory

Tags: Beanstalk, spl72, introduction, free lab

- Now click **Start Lab**.

The screenshot shows the lab page for "Introduction to AWS Elastic Beanstalk". At the top, there is a title bar with the lab name, a "Rate Lab:" section with five stars, and a "TIME REMAINING:" section showing "00:30:00". Below the title bar, there is a blue bar with a "Start Lab" button (highlighted with a red box and a red arrow labeled "Click Here"), a text input field, and two buttons: "CONNECTION" and "ADDL. INFO".

Introduction to AWS Elastic Beanstalk

Rate Lab: ★★★★★

TIME REMAINING: 00:30:00

Start Lab

CONNECTION **ADDL. INFO**

- Under AWS Management Console, copy the **password** to your clipboard.

- Click **Open Console**.

- A new window will appear, enter the username as **awsstudent** and paste password from your clipboard in required fields respectively and click **Sign In**.



Account: 856851591685

User Name: awsstudent

Password:

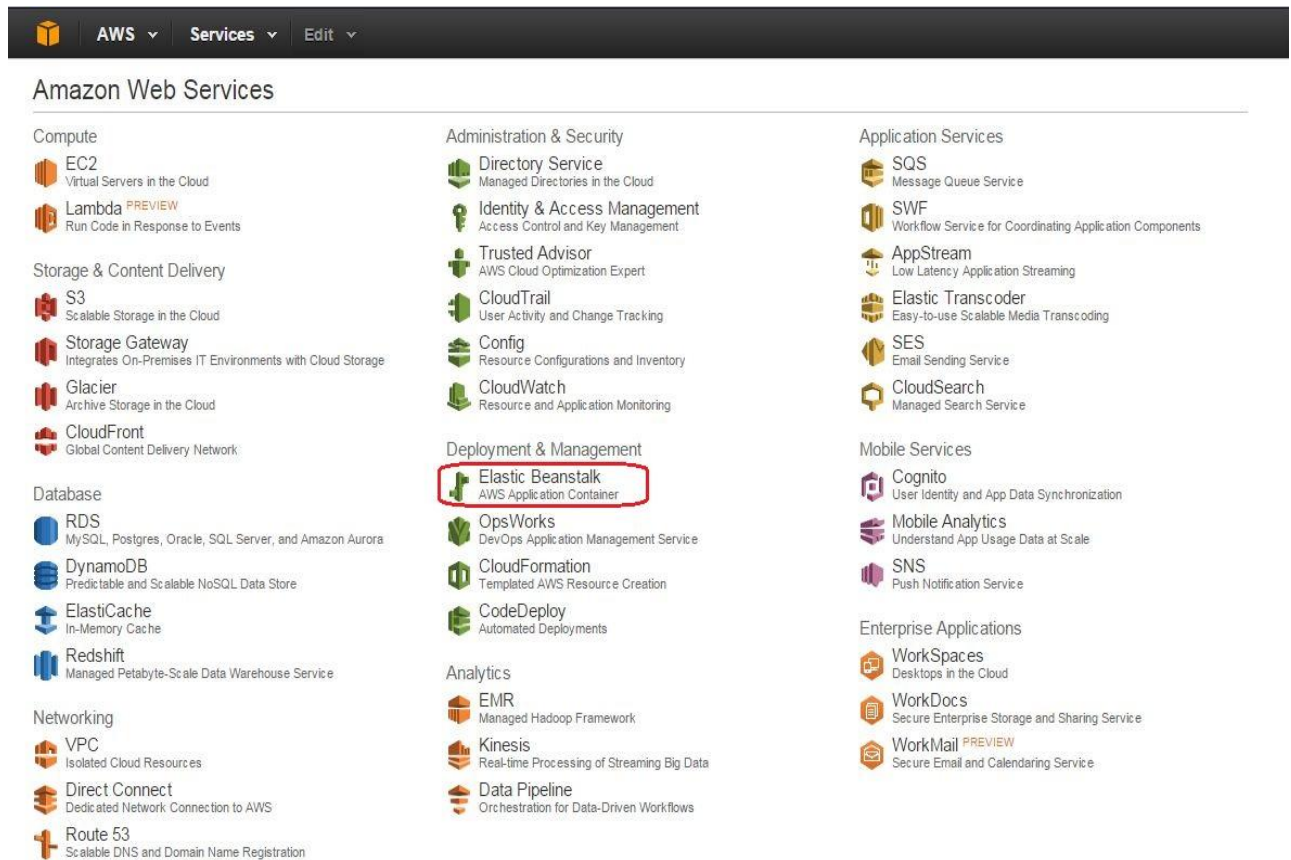
☐ I have an MFA Token ([more info](#))

Sign In

[Sign-in using root account credentials](#)

[Terms of Use](#) [Privacy Policy](#) © 1996-2014, Amazon Web Services, Inc. or its affiliates.

- Under Amazon Web Services select **Elastic Beanstalk**.



- Click **Create New Application**.
- Enter **Application name** and click **Next**.

Application Information

To create a new application, enter the details of your application. [Learn more.](#)

Application name:

Must be less than 100 characters and cannot contain a /

Description:

Optional.

Cancel

Next

- Click **Create Web Server**.

Application Info
New Environment

New Environment

AWS Elastic Beanstalk has two types of environment tiers to support different types of web applications. Web servers are standard applications that listen for and then process HTTP requests, typically over port 80. Workers are specialized applications that have a background processing task that listens for messages on an Amazon SQS queue. Worker applications post those messages to your application by using HTTP.

Web Server Environment

Provides resources for an AWS Elastic Beanstalk web server in either a single instance or load-balancing, auto scaling environment. [Learn more.](#)

Create web server

Worker Environment*

Provides resources for an AWS Elastic Beanstalk worker application in either a single instance or load-balancing, auto scaling environment. [Learn more.](#)

Create worker

** Worker environments require additional permissions to access other AWS services. [Learn more.](#)*

- A Permission popup appears. Select **Create an IAM role and Instance profile** and click **Next**.

Permissions

Web server environments require permissions to save logs to Amazon S3 and publish metrics to Amazon CloudWatch. Select an existing IAM instance profile with the appropriate permissions or create a new one. [Learn more.](#)

Select an IAM profile:

☒ Create an IAM role and instance profile.
☐ Select an existing IAM instance profile.

Profile name

Filter:

No instance profiles were found.

Cancel

Next

- Now choose predefined configuration as **Tomcat**, Environment type as **Single Instance** and click **Next**.

Application Info
New Environment
Environment Type
Application Version
Environment Info
Additional Resources
Configuration Details
Environment Tags
Review Information

Environment Type

Choose the platform and type of environment to launch.

Predefined configuration: Tomcat ▼ [Looking for a different platform? Let us know.](#)

AWS Elastic Beanstalk will create an environment running Tomcat 8 Java 8 on 64bit Amazon Linux 2014.09 v1.2.0. [Change platform version.](#)

Environment type: Single instance ▼ [Learn more](#)

Cancel
Previous
Next

- Now check your choice.
 - If you choose **Sample Application**, a sample application will be created by amazon.
 - If you choose **Upload your own**, click **Choose File** and select the file of your upload.
 - If you choose **S3 URL**, you must enter the url where the file is stored in amazon S3.
- Click **Next**

Application Version

Select a source for your application version.

Source: ☒ Sample application

☐ Upload your own ([Learn more](#))

Browse... No file selected.

☐ S3 URL

(e.g. <https://s3.amazonaws.com/s3Bucket/s3Key>)

Cancel
Previous
Next

- Enter **Environment Name** and **Environment URL**, Environment URL will be the url for your project and click **Next**.

Environment Information

Enter your environment information. [Learn more.](#)

Environment name:

Environment URL: Check availability

Description: Optional: 200 character maximum

[Cancel](#)

[Previous](#)

[Next](#)

- No "Additional Resources" are required, click **Next**.
- Select Instance Type as **t1.micro** and EC2 key pair as **qwikLABS-xxx**, and click **Next**

[Application Info](#)

[New Environment](#)

[Environment Type](#)

[Application Version](#)

[Environment Info](#)

[Additional
Resources](#)

**Configuration
Details**


[Environment Tags](#)

[Review Information](#)

Configuration Details

Modify the following settings or click Next to accept the default configuration. [Learn more.](#)

Instance type: [▼](#)
Determines the processing power of the servers in your environment.

EC2 key pair: [Refresh](#) 
Optional: Enables remote login to your instances.

Email address:
Optional: Get notified about any major changes to your environment.

Root Volume (Boot Device)

Root volume type: [▼](#)
Determines the type of storage volume to attach to instances.

Root volume size: ☐ Enables you to specify the size of the root volume.
 [GiB](#)
Number of gibibytes of the root volume attached to each instance. Must be between 10 and 1024 for Provisioned IOPS (SSD) root volumes and between 8 and 1024 for other root volumes.

[Cancel](#)

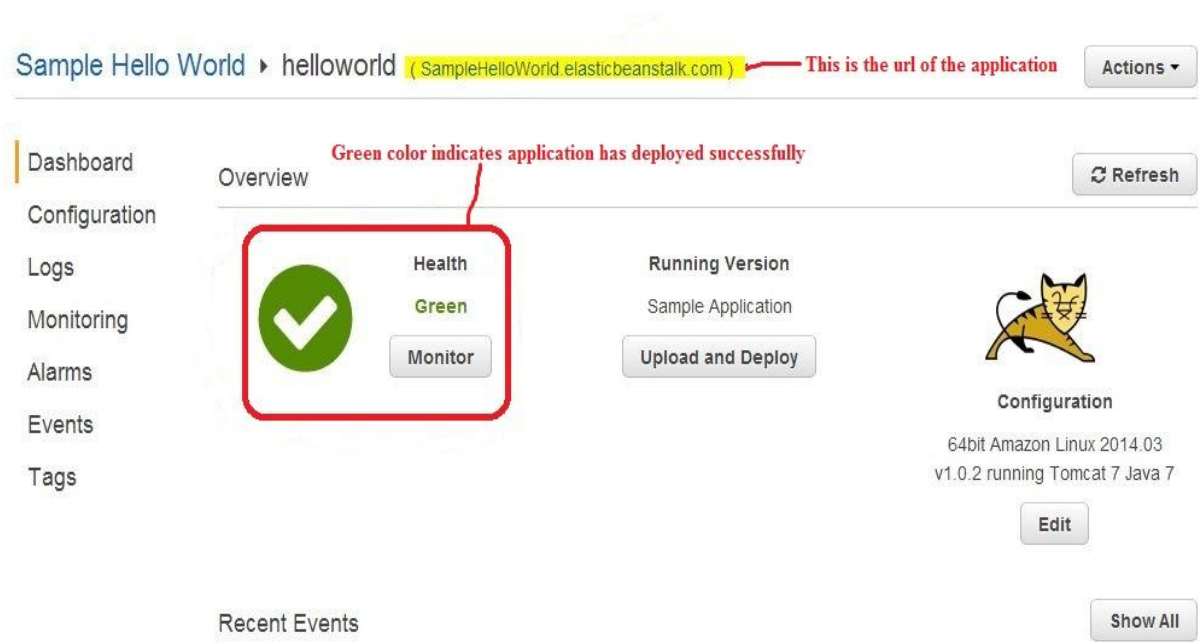
[Previous](#)

[Next](#)

- Skip "Environment Tags" as this is optional, click **Next**.
- A **Review** page appears. Review the information and click **Launch**.
- Now your application getting deployed on AWS, when **Health** becomes to green your application is ready to use. It might take a few minutes.

Note: First health turns to red and then to green.

- Click the url given by AWS to get access to the created Sample Application.



- Congratulations, you have created and deployed a new sample application with AWS Elastic Beanstalk.

End Your Lab

- In the navigation bar of the AWS Management Console, click **awsstudent@<AccountNumber>**, and then click **Sign out**.
- On the qwikLABS page, click **End Lab**.
 1. In the conformation message, click **OK**



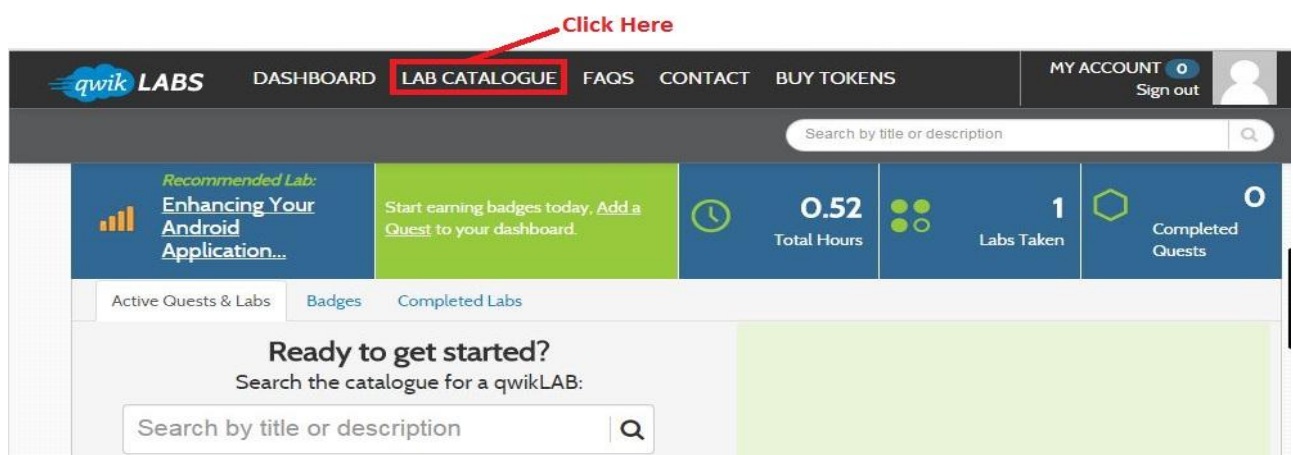
4. Amazon RDS

Objective :

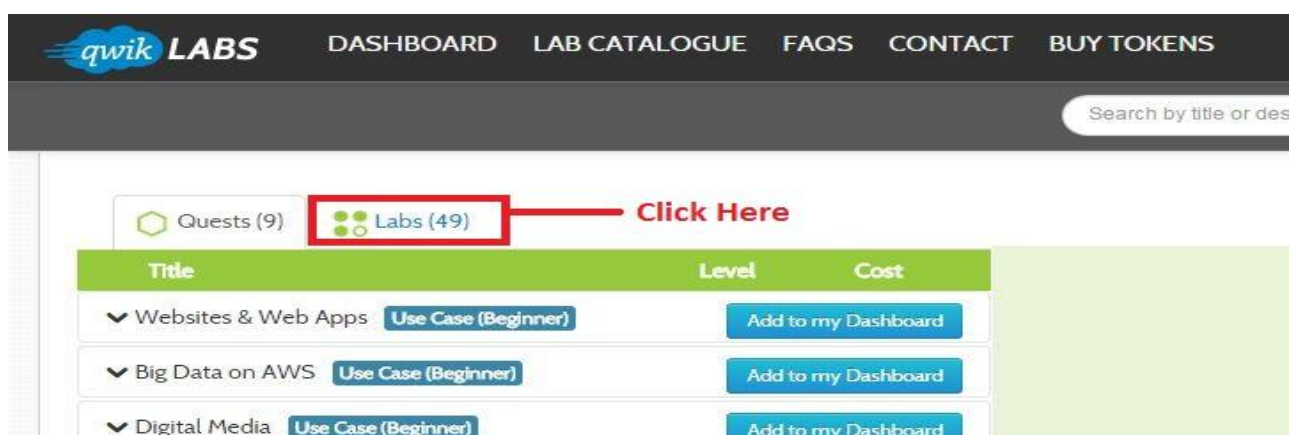
This document helps you to run MySQL on cloud through AWS RDS. Amazon RDS for MySQL gives you access to the capabilities of a familiar MySQL database engine. Amazon RDS makes it easy to set up, operate, and scale MySQL deployments in the cloud. Amazon RDS frees you up to focus on application development by managing time-consuming database administration tasks including backups, software patching, monitoring, scaling and replication. With Amazon RDS, you can deploy scalable MySQL deployments in minutes with cost-efficient and resizable hardware capacity.

Deploying an Application to AWS :

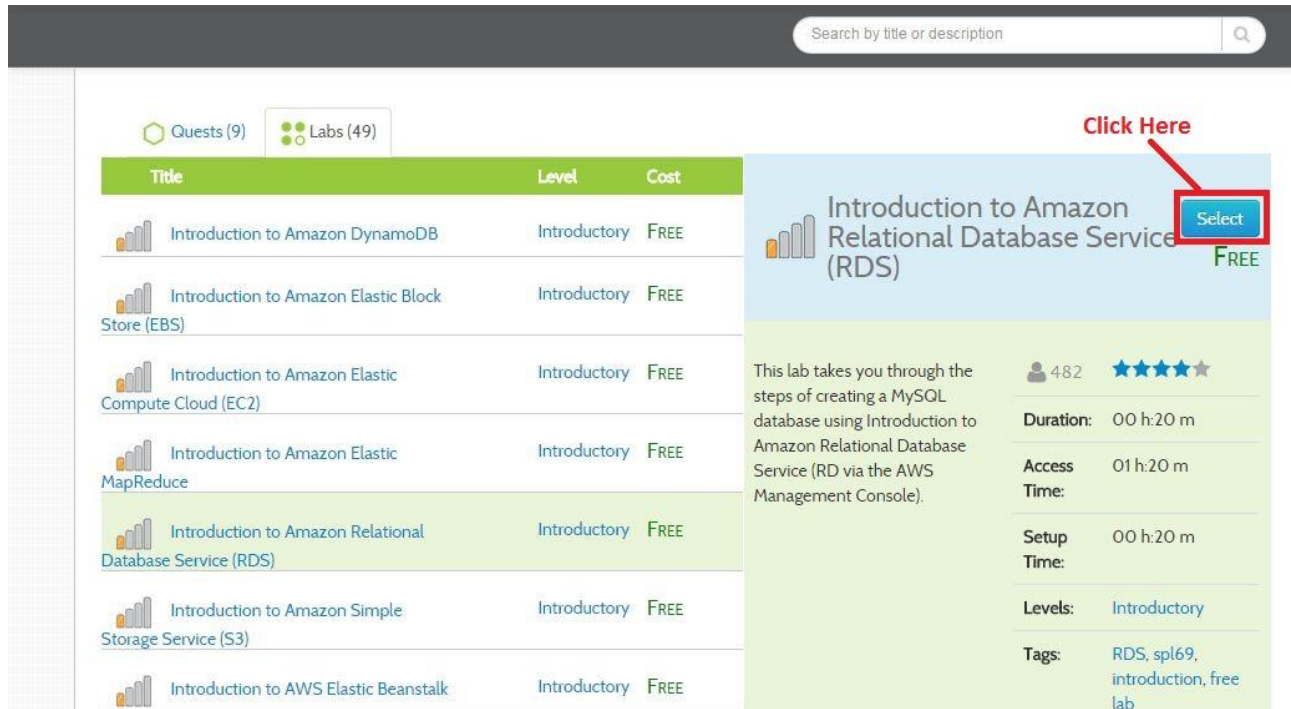
- Login into run.qwiklab.com to get hands-on-work on AWS with your Run QwikLab credentials.
- Click **Lab Catalogue**.



- Click **Labs** Tab.



- Select **Introduction to Amazon Relational Database Service (RDS)** and click **Select**.



Search by title or description

Quests (9) Labs (49)

Title	Level	Cost
Introduction to Amazon DynamoDB	Introductory	FREE
Introduction to Amazon Elastic Block Store (EBS)	Introductory	FREE
Introduction to Amazon Elastic Compute Cloud (EC2)	Introductory	FREE
Introduction to Amazon Elastic MapReduce	Introductory	FREE
Introduction to Amazon Relational Database Service (RDS)	Introductory	FREE
Introduction to Amazon Simple Storage Service (S3)	Introductory	FREE
Introduction to AWS Elastic Beanstalk	Introductory	FREE

Click Here

Select

Introduction to Amazon Relational Database Service (RDS)

FREE

This lab takes you through the steps of creating a MySQL database using Introduction to Amazon Relational Database Service (RDS) via the AWS Management Console.

482 ★★★★★

Duration: 00 h:20 m

Access Time: 01 h:20 m

Setup Time: 00 h:20 m

Levels: Introductory

Tags: RDS, spl69, introduction, free lab

- Now click **Start Lab**.



Introduction to AWS Elastic Beanstalk

Rate Lab: ★★★★★

TIME REMAINING: 00:30:00

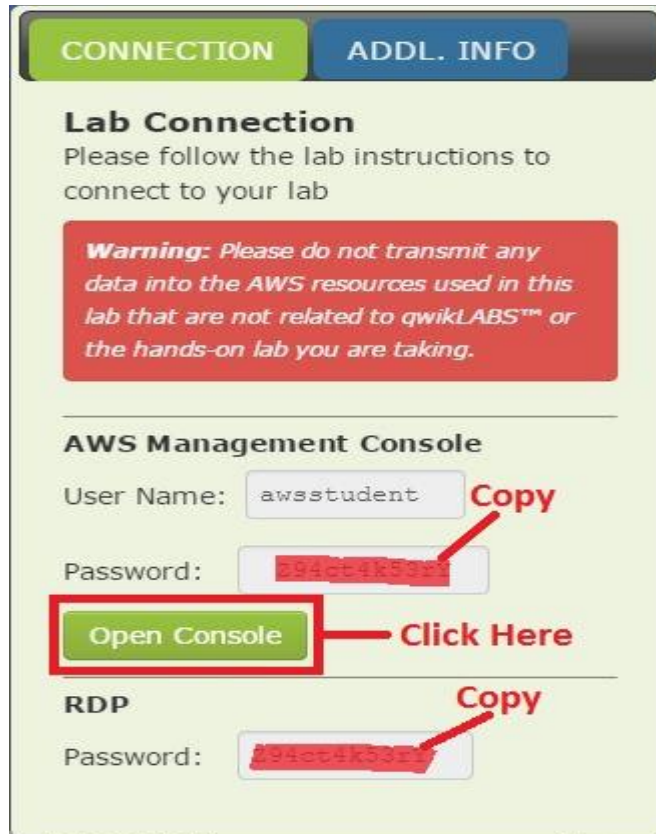
Click Here

Start Lab

CONNECTION ADDL. INFO

- Under AWS Management Console, copy the **password** to your clipboard.
- Under RDP, copy the password to your clipboard.

- Click **Open Console**.



CONNECTION **ADDL. INFO**

Lab Connection
Please follow the lab instructions to connect to your lab

Warning: Please do not transmit any data into the AWS resources used in this lab that are not related to qwikLABS™ or the hands-on lab you are taking.

AWS Management Console
User Name: **Copy**
Password: **Copy**
Open Console **Click Here**

RDP
Password: **Copy**

- A new window will appear, enter the username as **awsstudent** and paste password (AWS Management Console) from your clipboard in required fields respectively and click **Sign In**.



Account:

User Name:

Password:

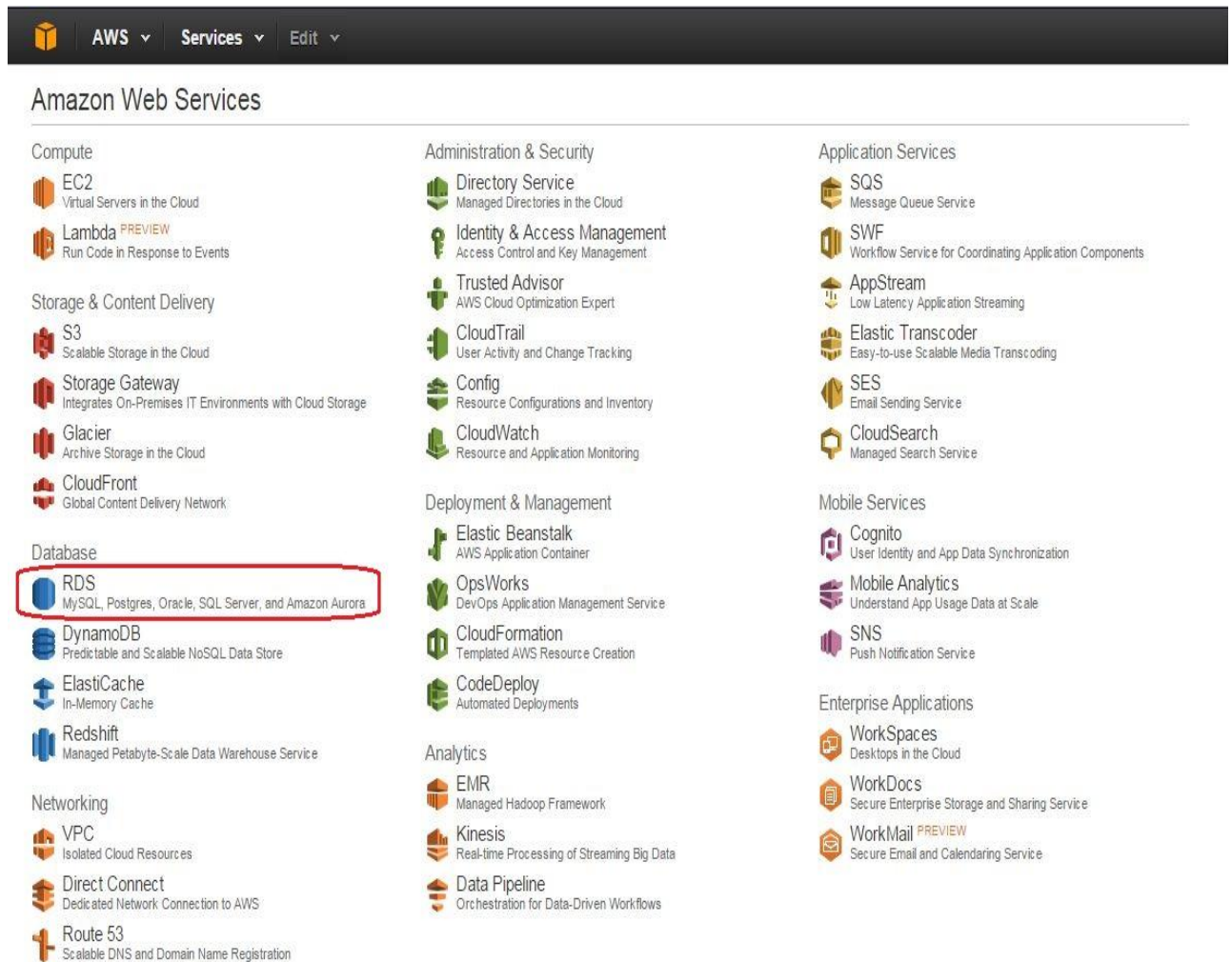
☐ I have an MFA Token (more info)

Sign In

[Sign-in using root account credentials](#)

[Terms of Use](#) [Privacy Policy](#) © 1996-2014, Amazon Web Services, Inc. or its affiliates.

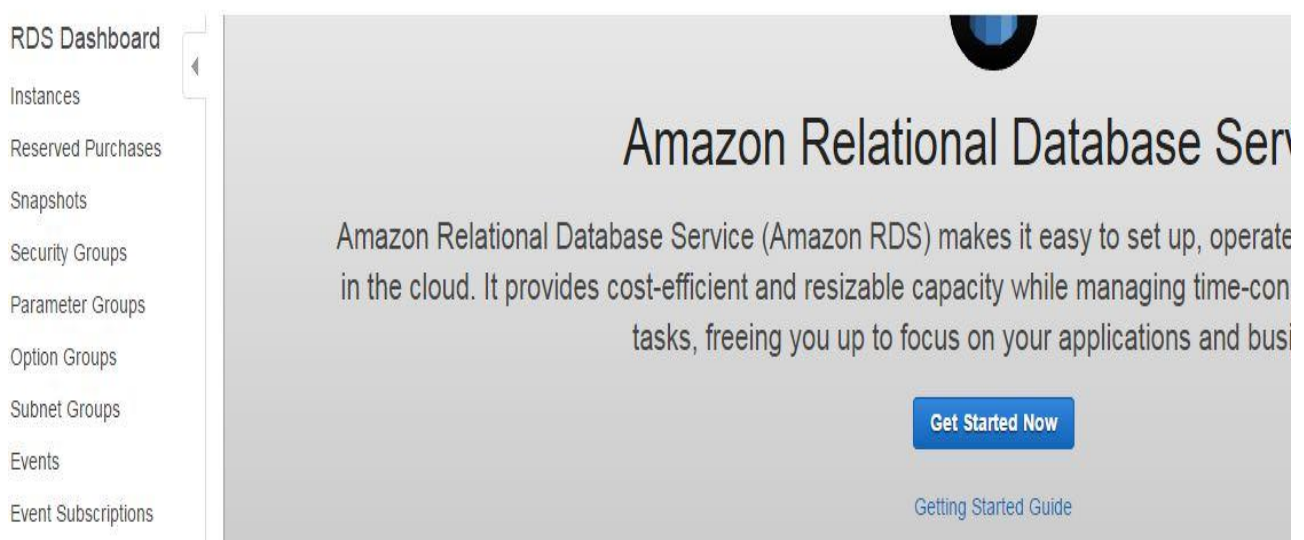
- Under Amazon Web Services select **RDS**.



The screenshot shows the AWS Management Console interface. At the top, there's a navigation bar with 'AWS', 'Services', and 'Edit' dropdowns. Below this, the 'Amazon Web Services' page is displayed, categorized into several groups:

- Compute:** EC2 (Virtual Servers in the Cloud), Lambda **PREVIEW** (Run Code in Response to Events).
- Storage & Content Delivery:** S3 (Scalable Storage in the Cloud), Storage Gateway (Integrates On-Premises IT Environments with Cloud Storage), Glacier (Archive Storage in the Cloud), CloudFront (Global Content Delivery Network).
- Database:** RDS (MySQL, Postgres, Oracle, SQL Server, and Amazon Aurora) is highlighted with a red rectangle. Other services include DynamoDB (Predictable and Scalable NoSQL Data Store), ElastiCache (In-Memory Cache), and Redshift (Managed Petabyte-Scale Data Warehouse Service).
- Networking:** VPC (Isolated Cloud Resources), Direct Connect (Dedicated Network Connection to AWS), Route 53 (Scalable DNS and Domain Name Registration).
- Administration & Security:** Directory Service (Managed Directories in the Cloud), Identity & Access Management (Access Control and Key Management), Trusted Advisor (AWS Cloud Optimization Expert), CloudTrail (User Activity and Change Tracking), Config (Resource Configurations and Inventory), CloudWatch (Resource and Application Monitoring).
- Deployment & Management:** Elastic Beanstalk (AWS Application Container), OpsWorks (DevOps Application Management Service), CloudFormation (Templated AWS Resource Creation), CodeDeploy (Automated Deployments).
- Analytics:** EMR (Managed Hadoop Framework), Kinesis (Real-time Processing of Streaming Big Data), Data Pipeline (Orchestration for Data-Driven Workflows).
- Application Services:** SQS (Message Queue Service), SWF (Workflow Service for Coordinating Application Components), AppStream (Low Latency Application Streaming), Elastic Transcoder (Easy-to-use Scalable Media Transcoding), SES (Email Sending Service), CloudSearch (Managed Search Service).
- Mobile Services:** Cognito (User Identity and App Data Synchronization), Mobile Analytics (Understand App Usage Data at Scale), SNS (Push Notification Service).
- Enterprise Applications:** WorkSpaces (Desktops in the Cloud), WorkDocs (Secure Enterprise Storage and Sharing Service), WorkMail **PREVIEW** (Secure Email and Calendaring Service).

- Click **Get Started Now**.



The screenshot shows the Amazon RDS Dashboard. On the left, there's a sidebar with navigation links: RDS Dashboard, Instances, Reserved Purchases, Snapshots, Security Groups, Parameter Groups, Option Groups, Subnet Groups, Events, and Event Subscriptions. The main content area has a large heading 'Amazon Relational Database Service' and a descriptive paragraph: 'Amazon Relational Database Service (Amazon RDS) makes it easy to set up, operate in the cloud. It provides cost-efficient and resizable capacity while managing time-consuming tasks, freeing you up to focus on your applications and business.' Below this text is a blue button labeled 'Get Started Now' and a link for 'Getting Started Guide'.

- In Select Engine page select MySQL and click **Select**

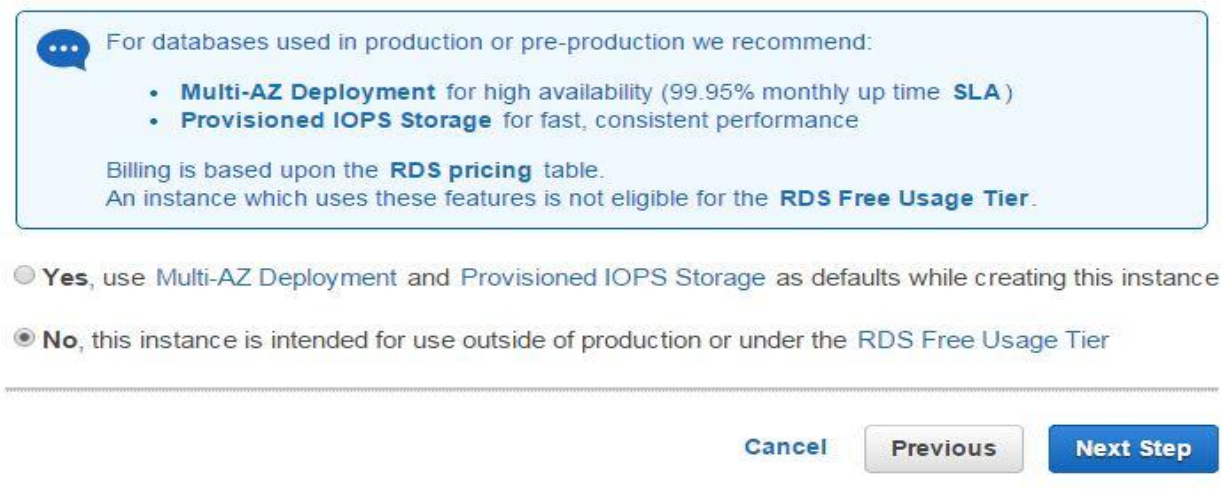
Select Engine

To get started, choose the DB Engine below and click Select



- Check " No, this instance is intended for use outside of production or under the [RDS Free Usage Tier](#)" Radio button and click **Next Step**

Do you plan to use this database for production purposes?



- Select "Specify DB Details" as below and click **Next Step**

Db Instance Class	db.t2.micro - 1 vCPU, 1GB RAM
Multi-AZ Deployment	No
Storage Type	General Purpose (SSD)
Allocated Storage	5
Db Instance Identifier	SampleDB
Master Username	root
Master Password	root1234

Step 2: Production?

Step 3: Specify DB Details

Step 4: Configure Advanced Settings

Step 3: Specify DB Details

Your current selection is eligible for the free tier.

[Learn More.](#)

Instance Specifications

DB Engine

mysql

License Model

general-public-license

DB Engine Version

5.6.19b

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

No

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

DB Instance Identifier*

SampleDb

Master Username*

root

Master Password*

.....

Confirm Password*

.....

Retype the value you specified for Master Password.

* Required

Cancel

Previous

Next Step

© 2008 - 2015, Amazon Web Services, Inc. or its affiliates. All rights reserved. [Privacy Policy](#) [Terms of Use](#)

[Feedback](#)

- Select VCP Security Group(s) as **default (VCP)**

Configure Advanced Settings

Network & Security

VPC*

Default VPC (vpc-c1242fa3)

Subnet Group

default

Publicly Accessible

Yes

Availability Zone

No Preference

VPC Security Group(s)

Create new Security Group

default (VPC)

qlstack2-labinstance-103154-2909c36

Database Options

Database Name

SampleDB

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:mysql-5-6

Enable Encryption

No

The selected Engine or DB Instance Class does not support storage encryption

Select the DB parameter group that defines the configuration settings you want applied to this DB instance. [Learn More.](#)

- Enter Database Name as **SampleDB** and click **Launch DB Instance**

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 days
Backup Window


Maintenance

Auto Minor Version Upgrade
Maintenance Window

* Required

[Cancel](#)
[Previous](#)
[Launch DB Instance](#)

- Click **View Your DB Instances**.



Your DB Instance is being created.

Note: Your instance may take a few minutes to launch.

Connecting to your DB Instance

You will be unable to connect to your database instance unless you have previously authorized access on your chosen security group.

[Go to the Security Groups Page](#)

Related AWS Services

Amazon ElastiCache

Add a managed Memcached or Redis-compatible in-memory cache to speed up your database access.

[Click here to learn more and launch your Cache Cluster](#)

[View Your DB Instances](#)

- RDS Instance page appears for creating RDS instance it takes few minutes.
- After status becomes from "creating" to "available", it is now available for creating database.
- Click on the instance to get details of the instance.

- Note the **Endpoint** for login into MySQL Workbench.

Launch DB Instance Show Monitoring Instance Actions

Filter: All Instances Search DB Instances... Viewing 1 of 1 DB Instances

DB Instance Identifier	VPC ID	Multi-AZ	Class	Status	Storage	Security Groups	Engine
sampledb	vpc-f5656e97	No	db.t1.micro	available	5 GB	default (active)	mysql

Endpoint: sampledb.cx8orgzjxtk.us-west-2.rds.amazonaws.com:3306 (No Inbound Permissions)

Configuration Details

Engine: mysql (5.6.13)
 DB Name: SampleDB
 Username: root
 Option Group(s): default:mysql-5-6 (in-sync)
 Parameter Group: default:mysql5.6 (in-sync)

Security and Network

Availability Zone: us-west-2b
 VPC ID: vpc-f5656e97
 Subnet Group: default (Complete)
 Publicly Accessible: Yes
 Subnets: subnet-aa1642ec, subnet-68456f1c, subnet-81979fe3
 Security Groups: default (sg-7ddacf1f) (active)
 Port: 3306

Instance and IOPS

Instance Class: db.t1.micro
 IOPS: disabled
 Storage: 5GB

Availability and Durability

DB Instance Status: available
 Multi AZ: No
 Automated Backups: Enabled (1 Day)
 Latest Restore Time: June 6, 2014 7:59:53 PM UTC+5:30

Maintenance Details

Auto Minor Version Upgrade: Yes
 Maintenance Window: wed:12:28-wed:1
 Backup Window: 09:29-09:59

Instance Actions Events Tags Logs

- Here if you see "No Inbound Permissions" which represents we can't access RDS from anywhere, to get access to RDS from anywhere click exclamation symbol . If you see "authorized" [.amazonaws.com:3306 \(authorized\)](#) then skip below 5 steps.
- Click Edit Security Group.

Security Group Configuration Does Not Allow Inbound Connections

The VPC security group associated with this DB Instance does not have sufficient inbound permission entries to allow connections to the instance. You will not be able to connect to this DB Instance until you edit the security group.

Edit Security Group

Connection Information

Publicly Accessible: Yes
 Master Username: root

Security Group Rules:

Security Group	Type	Rule
None		

- Click **Inbound Tab**

Filter: All security groups

Name	Group ID	Group Name	VPC ID
	sg-60746002	default	vpc-33323951

Security Group: sg-60746002 **Click here**

Description **Inbound** Outbound Tags

Group name default

Group ID sg-60746002

- Click **Edit**
- Select "Type" as **MYSQL** and "Source" as **Anywhere** and click **save**

Edit inbound rules

Type	Protocol	Port Range	Source
MYSQL	TCP	3306	Anywhere

Add Rule Cancel Save

- Now "No Inbound Permissions" changes to "authorized"
- Now RDS is authorized and can be accessed from anywhere.

.amazonaws.com:3306 (**authorized**)

Note: While you were creating database, an instance of Windows Server was being created for you.

- Click **Service**, under **compute** select **EC2**.

Services Edit

awsstudent @ 971175

History

- Console Home
- RDS
- EC2
- Elastic Beanstalk

All AWS Services

- Compute**
- Storage & Content Delivery
- Database
- Networking

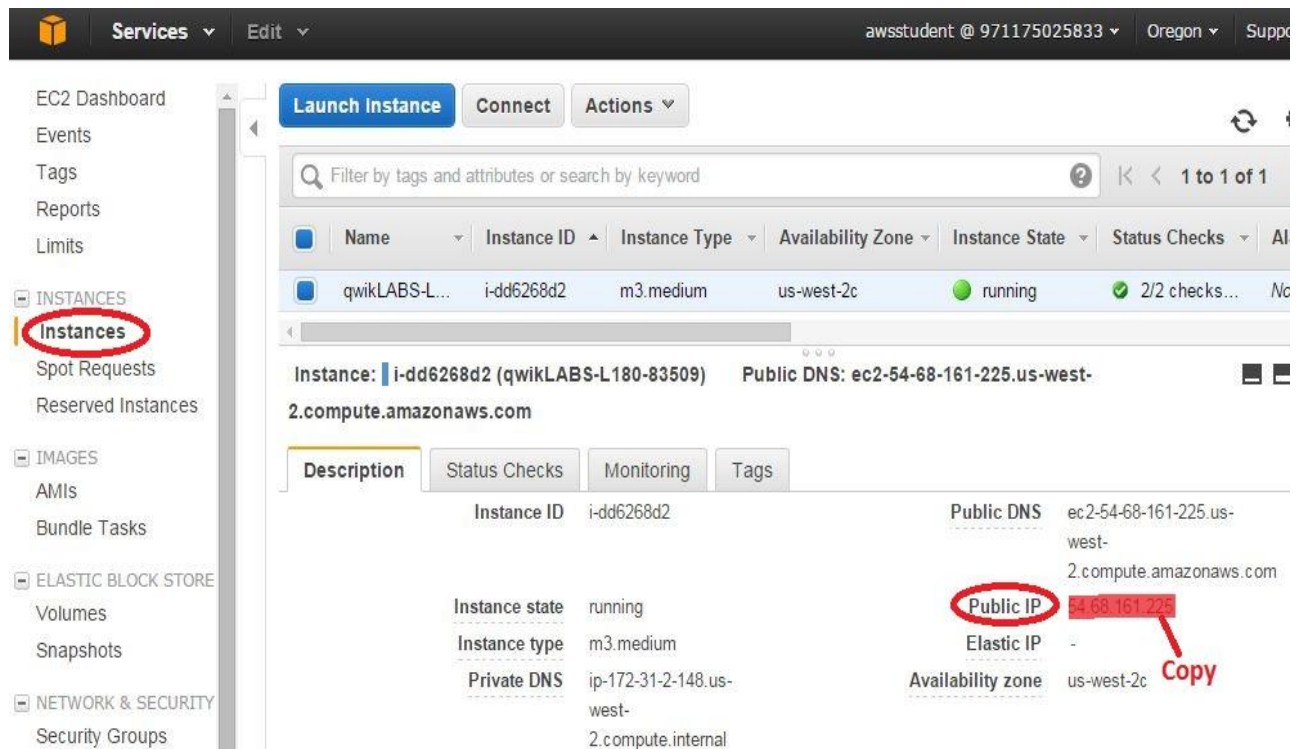
EC2

Amazon Elastic Compute Cloud (EC2) provides resizable compute capacity in the cloud.

Lambda

AWS Lambda is a co that runs your code events and automat the compute resour

- In the left panel, click **Instances**.
- In the bottom panel, under description tab, copy the **Public IP** to your clipboard.



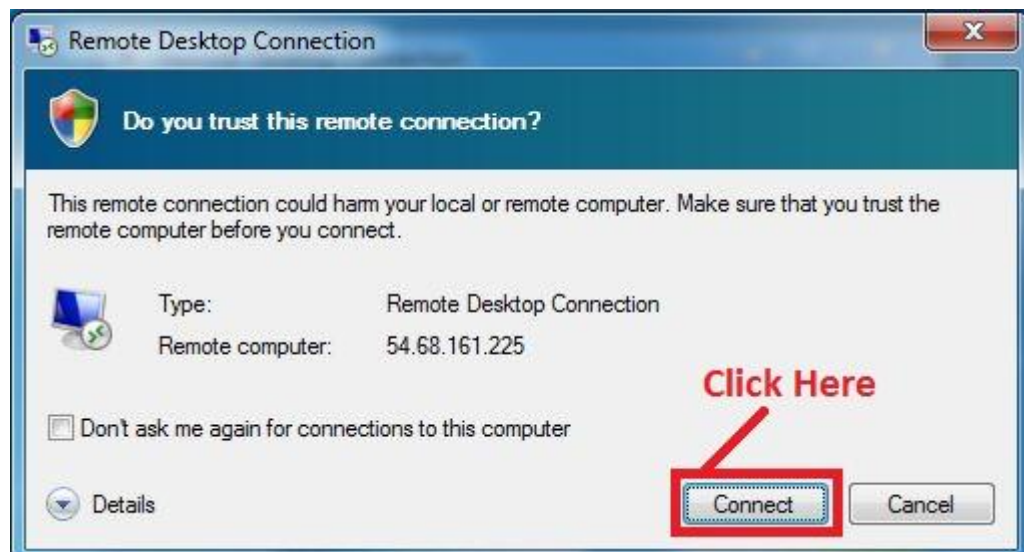
The screenshot shows the AWS Management Console interface. On the left, the 'Instances' link is highlighted in the navigation pane. The main area displays a table of instances with one instance listed: 'qwikLABS-L180-83509' (ID: i-dd6268d2, Type: m3.medium, State: running). Below the table, the 'Description' tab is active, showing instance details. The 'Public IP' field is circled in red, and a red arrow points to the 'Copy' button next to it.

Connecting to Development Instance and RDS

- Open **Start** menu and enter **mstsc** (Microsoft Terminal Service Client). This will Open your **Remote Desktop Connection**.
- Paste the copied **Public IP**, click **Connect**.



- A trust window appears, click Connect.



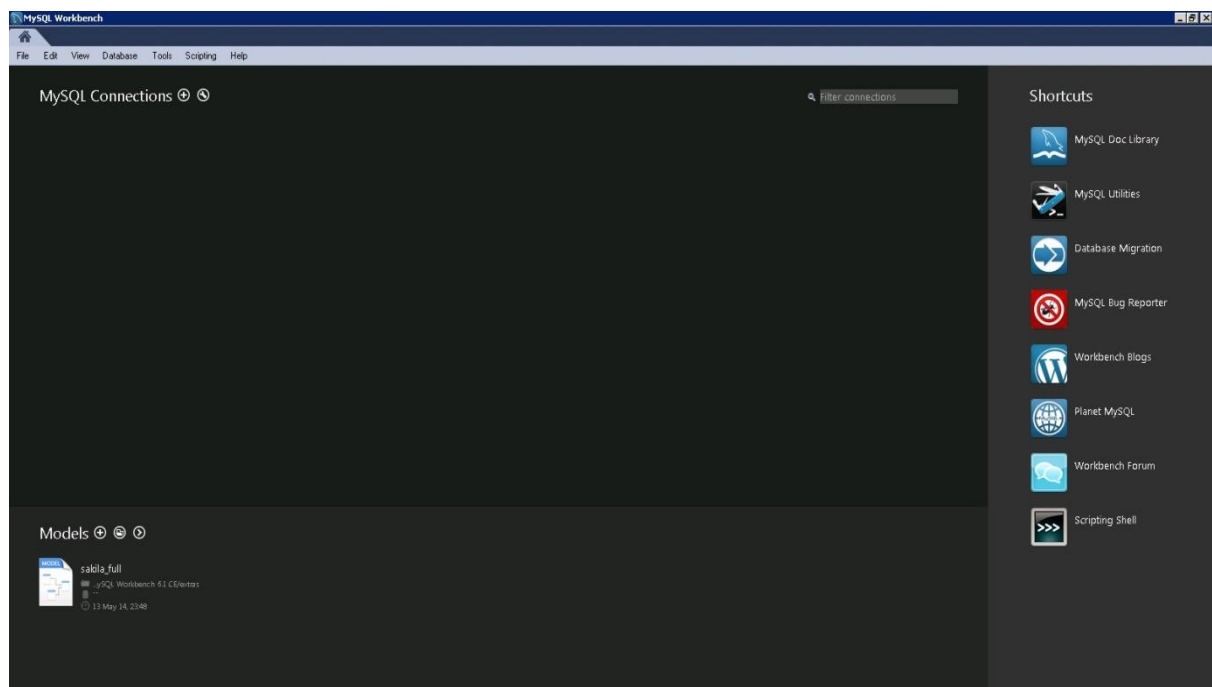
- If you see username as **Administrator**, paste the copied **RDS password** in the required field and click **ok**.
- Else click **Use another account** enter username as **Administrator**, paste the copied **RDS password** in the required field and click **ok**.



- Click **Yes** if you get a security warning.

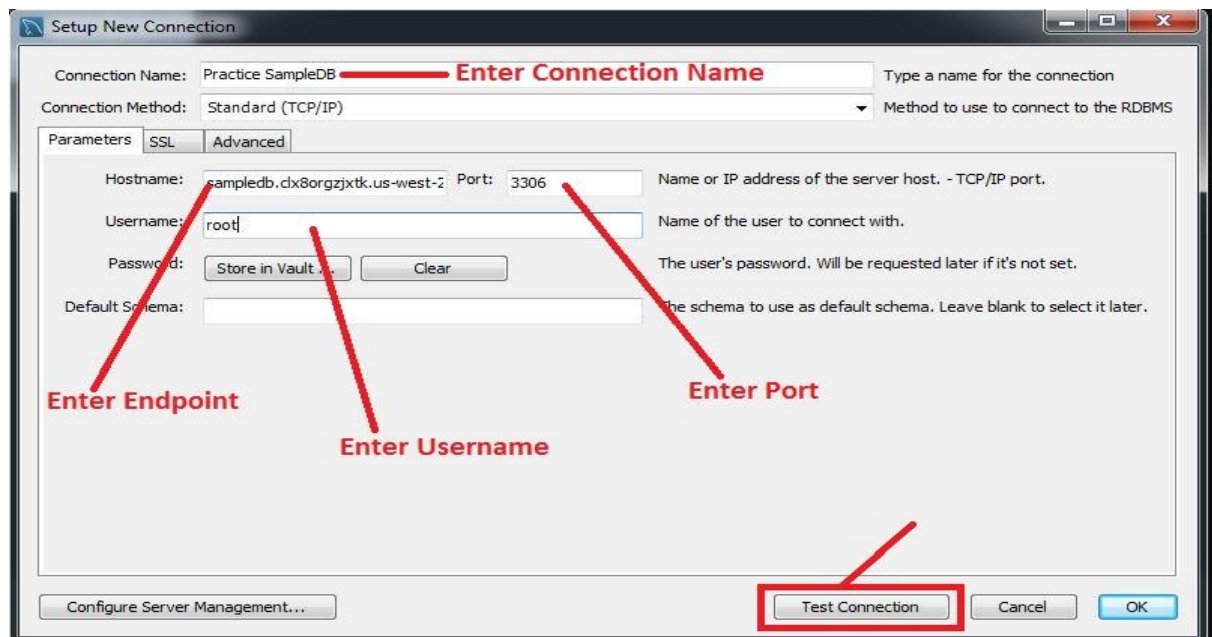


- After Login into Virtual Machine, click **Start -> All Programs -> MySQL -> MySQL Workbench** to launch Workbench.
- In MySQL workbench, select **Databases -> Manage Connections** then click **New**.

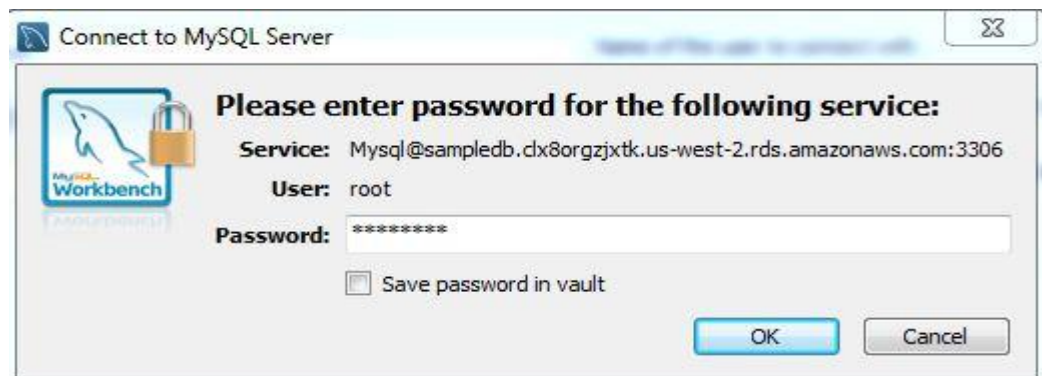


- Enter Connection Name as **Practice SampleDB**.

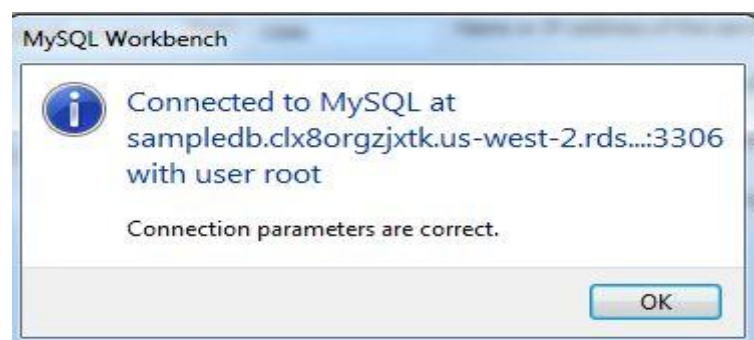
- Enter noted Endpoint in Host name without port number as port number in Port field.
- Enter port number in required field.
- Enter User name and click **Test Connection**.



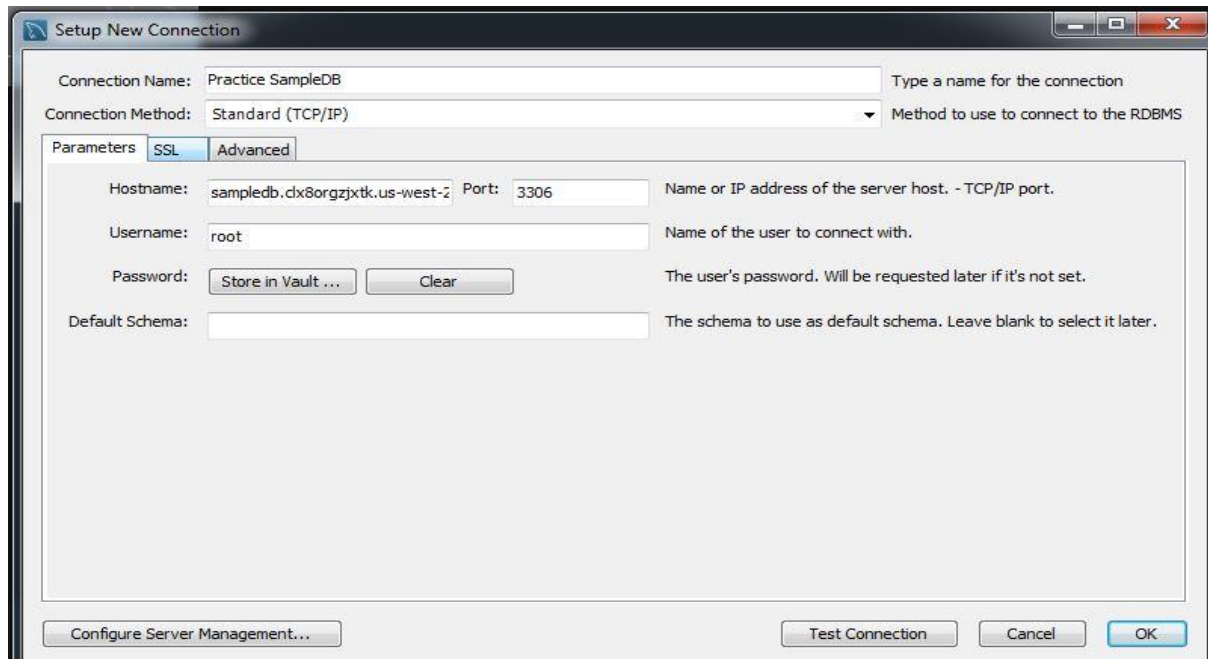
- Enter password in the field as **root1234** and click OK.



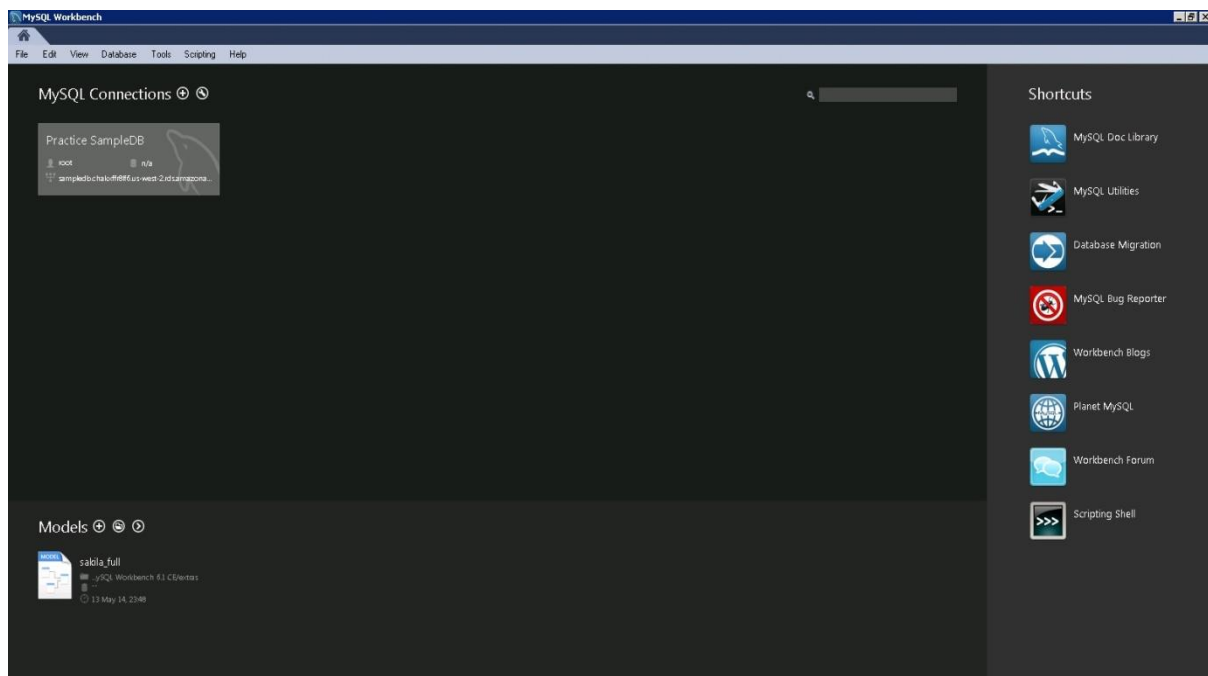
- A window alert as "connection parameters are correct", this alert represents connection is successful, click **OK**.



- Now click **OK** on "Setup New Connection" window.
- Now you're connected to Amazon RDS MySQL.



- MySQL Connection page shows connected Amazon RDS.



- Click on created RDS a SQL Editor window opens, showing a successful connection to your database.

End Your Lab

- In the navigation bar of the AWS Management Console, click **awsstudent@<AccountNumber>**, and then click **Sign out**.
- On the qwikLABS page, click **End**.
 2. In the conformation message, click **OK**