Experiment No.7.

Aim: Categorize Amazon Web Service (AWS) and implement its various cloud entities using its Cloud Toolbox support.

Theory:

Amazon Web Services offers a broad set of global cloud-based products including compute, storage, databases, analytics, networking, mobile, developer tools, management tools, IoT, security and enterprise applications. These services help organizations move faster, lower IT costs, and scale. AWS is trusted by the largest enterprises and the hottest start-ups to power a wide variety of workloads including: web and mobile applications, game development, data processing and warehousing, storage, archive, and many others.

Featured Services (Different Categories)

- Analytics
- Application Integration
- AWS Cost Management
- Blockchain
- Business Applications
- Compute
- Containers
- Customer Engagement
- Database
- Developer Tools
- End User Computing
- Front-End Web & Mobile
- Game Tech
- Internet of Things
- Machine Learning
- Management & Governance
- Media Services
- Migration & Transfer
- Networking & Content Delivery
- Quantum Technologies
- Robotics
- Satellite
- Security, Identity, & Compliance
- Serverless
- Storage
- VR & AR

Compute:

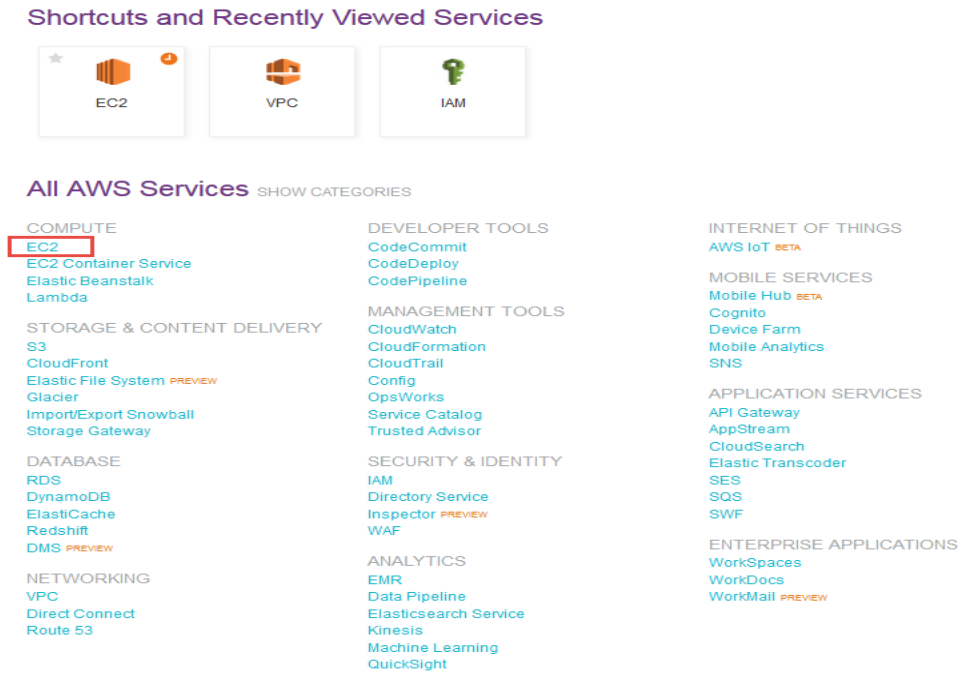
- Amazon Elastic Compute Cloud (EC2)
- Amazon EC2 Spot
- Amazon EC2 Autoscaling
- Amazon Light sail
- AWS Batch
- Amazon Elastic Compute Cloud (EC2)

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers. Amazon EC2's simple web service interface allows you to obtain and configure capacity with minimal friction. It provides you with complete control of your computing resources and lets you run on Amazon's proven computing environment.

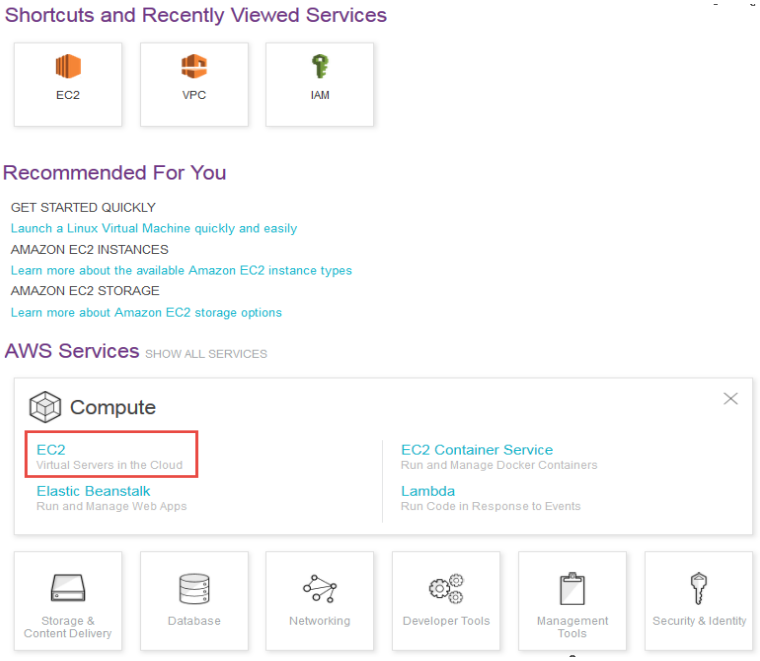
Step 1: Launch an Amazon EC2 Instance

To launch an EC2 instance

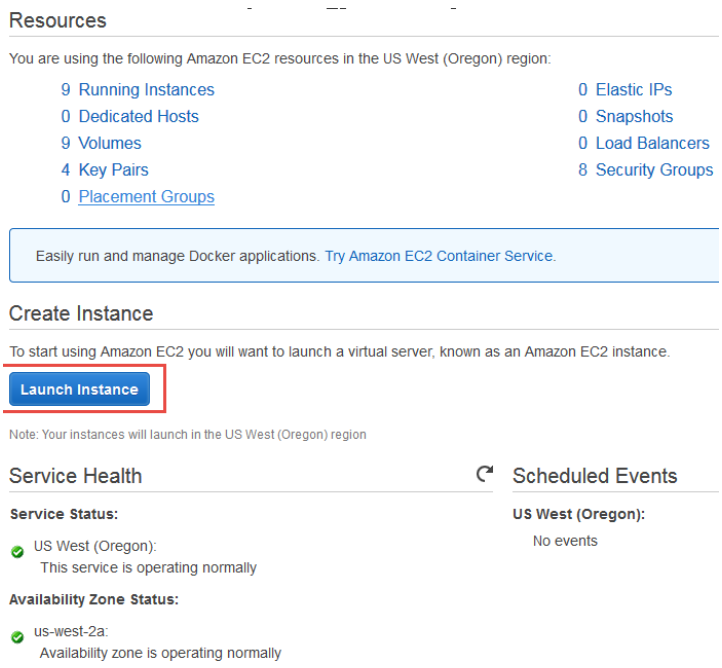
1. Sign in to the preview version of the AWS Management Console
2. Open the Amazon EC2 console by choosing **EC2** under **Compute**.



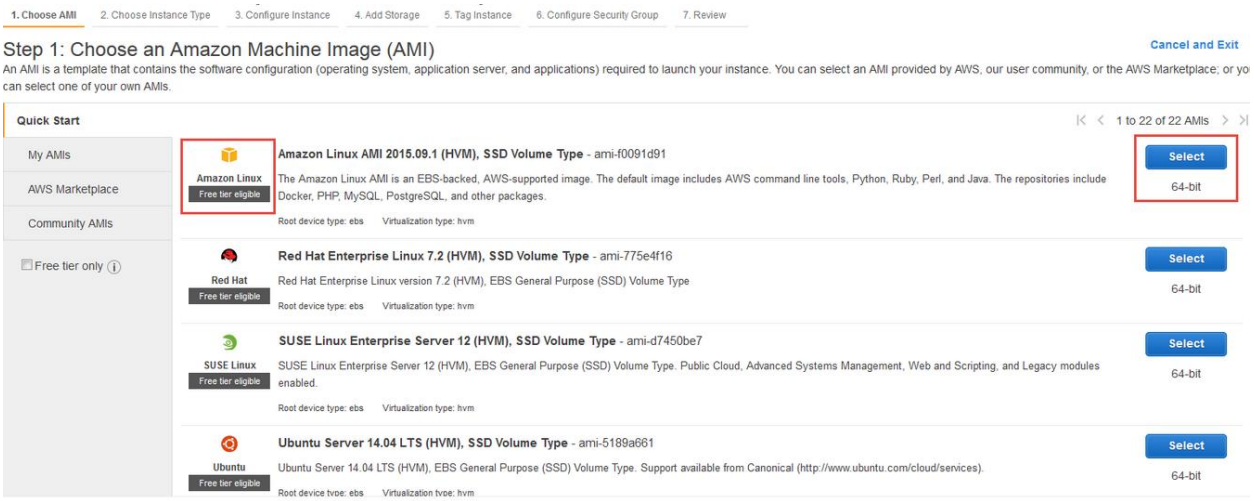
If you are using the **Show Categories** view, your screen looks like this with **Compute** expanded:



From the Amazon EC2 dashboard, choose Launch Instance.



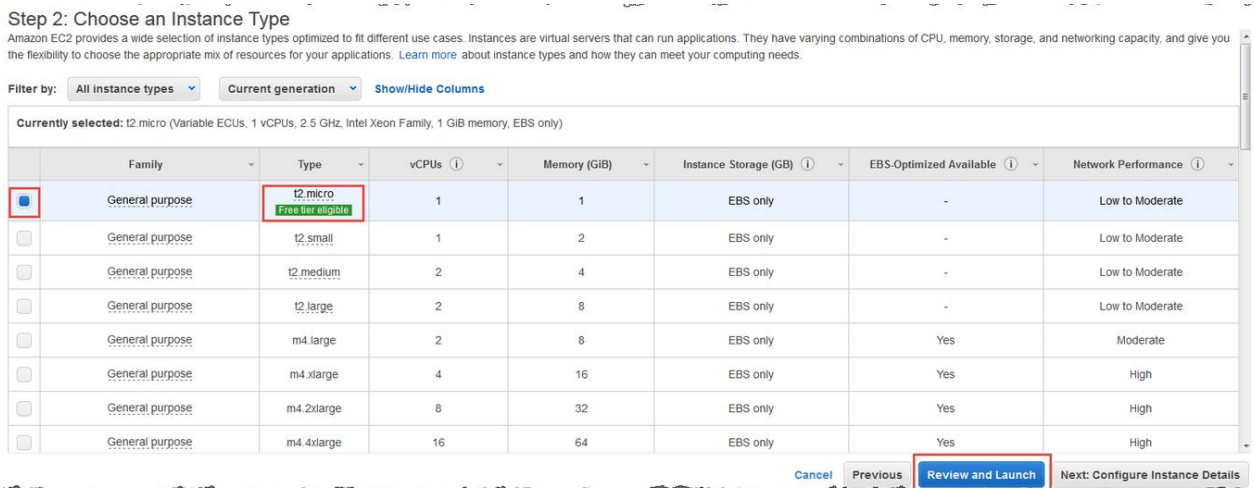
- Choose an Amazon Machine Image (AMI) page displays a list of basic configurations called Amazon Machine Images (AMIs) that serve as templates for your instance. Select the HVM edition of the Amazon Linux AMI. Notice that this configuration is marked Free tier eligible.



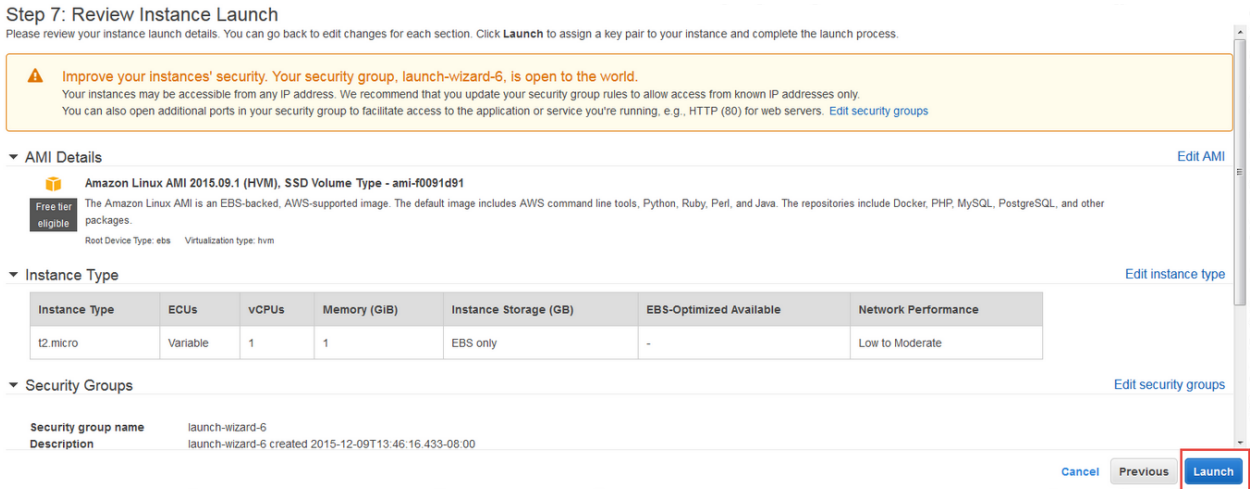
Choose an Instance Type page, choose **t.2micro** as the hardware configuration of your instance and **Review and Launch**.

Note

T2 instances, such as **t2.micro**, must be launched into a virtual private cloud (VPC). If you don't have a VPC, you can let the wizard create one for you. For more information, see step 6 in Launching an Instance.



On the **Review Instance Launch** page, choose **Launch**.



Note

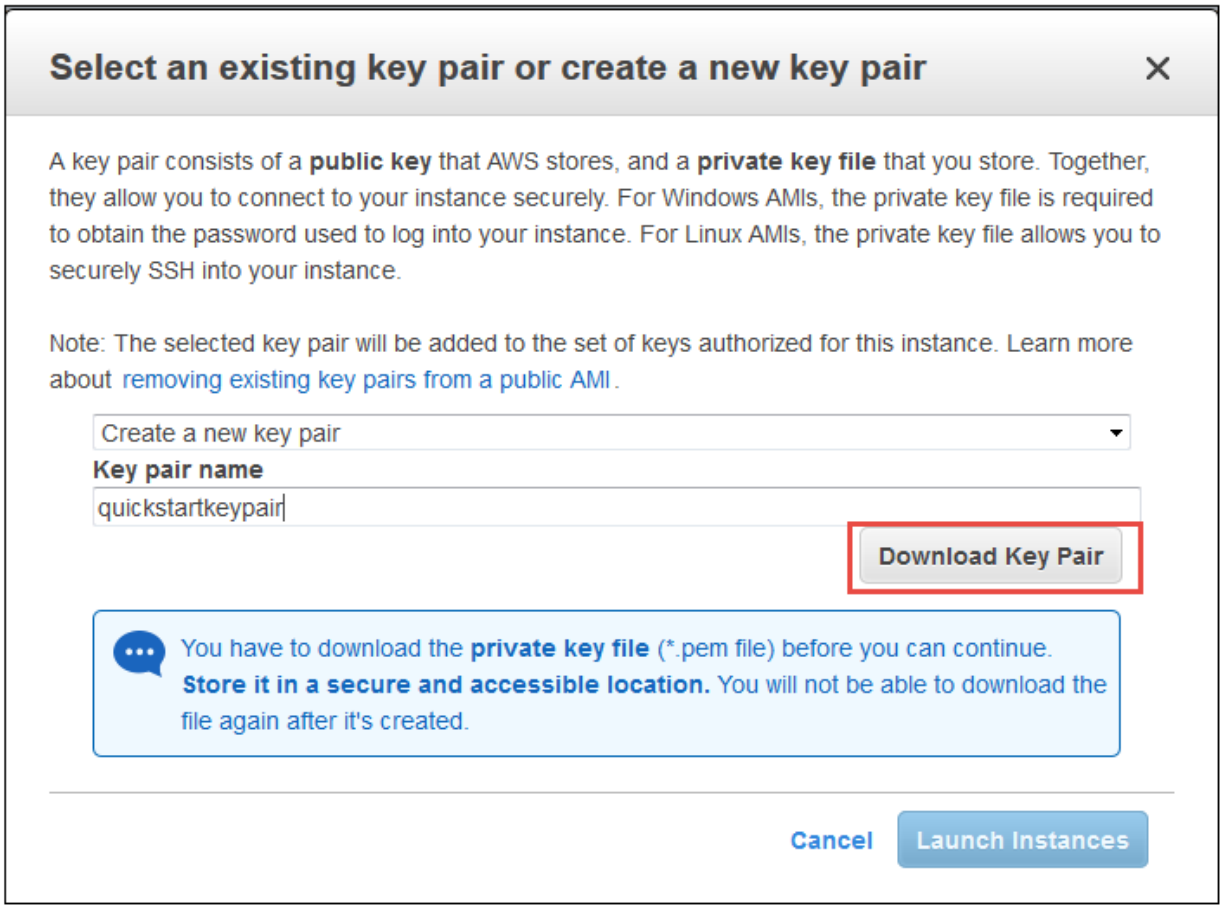
On the **Review Instance Launch** page, under **Security Groups**, you see that the wizard created and selected a security group for you. For the purposes of this quick start, no further action than what is described in step 6 above is necessary. For more information about how to create or configure a security group and define firewall rules for your instance, see step 9 in Launching an Instance.

In the **Select an existing key pair or create a new key pair** dialog box, choose **create a new key pair**, enter a name for the key pair, and then choose **Download Key Pair**. This is the only chance for you to save the private key file, so be sure to download it. Save the private key file in a safe place. You can use C:\user\yourusername\.ssh\myfirstkey.pem if you are on a Windows machine, and ~/.ssh/myfirstkey.pem if you are on a Mac or Linux machine. You need to provide the name of your key pair when you launch an instance, and the corresponding private key each time you connect to the instance.

Note

A key pair enables you to connect to a Linux instance through SSH. If you launch your instance without a key pair, then you can't connect to it. We recommend against choosing the **Proceed without a key pair** option.

When you are ready, select the acknowledgment check box, and then choose **Launch Instances**.



1. A confirmation page lets you know that your instance is launching. Choose View Instances to close the confirmation page and return to the console.

- On the Instances page, you can view the status of your instance. It takes a short time for an instance to launch. When you launch an instance, its initial state is pending. After the instance starts, its state changes to running, and it receives a public DNS name. (If the Public DNS column is hidden, choose the Show/Hide icon.)

Conclusion:

Hence, I have Categorize Amazon Web Service (AWS) into different domains and launched an Amazon EC2 Instance.