Using EC2 Instances:

Start by creating an instance in EC2.
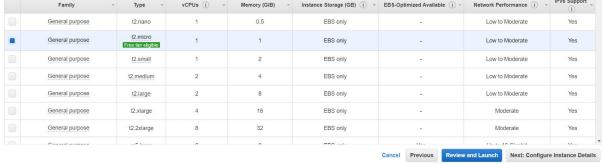
Create Instance
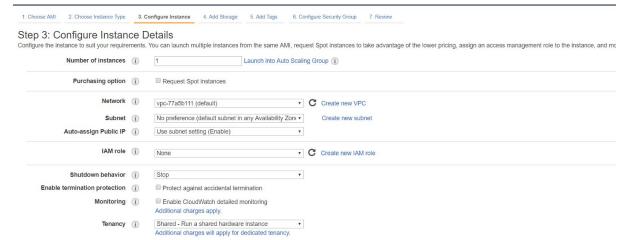
To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.
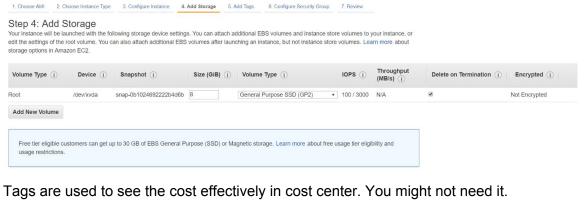
Launch Instance ▼

Note: Your instances will launch in the US West (Oregon) region

|◁ ◁ 1 to 36 of 36 AMIs ▷ ▷|

Amazon Linux AMI 2017.09.1 (HVM), SSD Volume Type - ami-d874e0a0

Amazon Linux
Free tier eligible

The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root device type: ebs   Virtualization type: hvm   ENA Enabled: Yes

Select

64-bit

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. Learn more about instance types and how they can meet your computing needs.

Filter by: All instance types ▼   Current generation ▼   Show/Hide Columns

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family ▲	Type ▲	vCPUs ⓘ ▲	Memory (GiB) ▲	Instance Storage (GB) ⓘ ▲	EBS-Optimized Available ⓘ ▲	Network Performance ⓘ ▲	IPv6 Support ⓘ ▲
☐	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
☑	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
☐	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
☐	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
☐	General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes
☐	General purpose	t2.xlarge	4	16	EBS only	-	Moderate	Yes
☐	General purpose	t2.2xlarge	8	32	EBS only	-	Moderate	Yes

Cancel   Previous   **Review and Launch**   Next: Configure Instance Details

1. Choose AMI   2. Choose Instance Type   3. Configure Instance   4. Add Storage   5. Add Tags   6. Configure Security Group   7. Review

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and mo

Number of instances ⓘ	1	Launch into Auto Scaling Group ⓘ
Purchasing option ⓘ	☐ Request Spot instances	
Network ⓘ	vpc-77a5b111 (default) ▼	↻ Create new VPC
Subnet ⓘ	No preference (default subnet in any Availability Zone ▼	Create new subnet
Auto-assign Public IP ⓘ	Use subnet setting (Enable) ▼	
IAM role ⓘ	None ▼	↻ Create new IAM role
Shutdown behavior ⓘ	Stop ▼	
Enable termination protection ⓘ	☐ Protect against accidental termination	
Monitoring ⓘ	☐ Enable CloudWatch detailed monitoring Additional charges apply.	
Tenancy ⓘ	Shared - Run a shared hardware instance ▼ Additional charges will apply for dedicated tenancy.	

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. Learn more about storage options in Amazon EC2.

Volume Type (i)	Device (i)	Snapshot (i)	Size (GiB) (i)	Volume Type (i)	IOPS (i)	Throughput (MB/s) (i)	Delete on Termination (i)	Encrypted (i)
Root	/dev/xvda	snap-0b1024692222b4d6b	8	General Purpose SSD (GP2) ▾	100 / 3000	N/A	☑	Not Encrypted

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. Learn more about free usage tier eligibility and usage restrictions.

Tags are used to see the cost effectively in cost center. You might not need it.

Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.
A copy of a tag can be applied to volumes, instances or both.
Tags will be applied to all instances and volumes. Learn more about tagging your Amazon EC2 resources.

Key (127 characters maximum)	Value (255 characters maximum)	Instances (i)	Volumes (i)	
DockerInstance	Docker-Tomcat	☑	☑	✕

Add another tag (Up to 50 tags maximum)

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. Learn more about Amazon EC2 security groups.

Assign a security group: ⦿ Create a **new** security group
                          ◯ Select an **existing** security group

Security group name: launch-wizard-2
Description: launch-wizard-2 created 2018-03-31T20:52:36.644-07:00

Type (i)	Protocol (i)	Port Range (i)	Source (i)		Description (i)	
SSH ▾	TCP	22	Custom ▾	0.0.0.0/0	e.g. SSH for Admin Desktop	✕
HTTP ▾	TCP	80	Anywhere ▾	0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop	✕

Add Rule

⚠ **Warning**
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel   Previous   **Review and Launch**

It will give a warning ignore it and click on launch

Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

> ⚠ Improve your instances' security. Your security group, MyWebDMZ, is open to the world.
> Your instances may be accessible from any IP address. We recommend that you update your security group rules to allow access from known IP addresses only.
> You can also open additional ports in your security group to facilitate access to the application or service you're running, e.g., HTTP (80) for web servers. Edit security groups

▼ AMI Details   Edit AMI

🗋 **Amazon Linux AMI 2017.09.1 (HVM), SSD Volume Type - ami-d874e0a0**

Free tier eligible   The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root Device Type: ebs   Virtualization type: hvm

▼ Instance Type   Edit instance type

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

▼ Security Groups   Edit security groups

Cancel   Previous   **Launch**

Select an existing key pair or create a new key pair   ✕

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.

    Choose an existing key pair   ▼
    Select a key pair
    MyEC2KeyPair   ▼

    ☑ I acknowledge that I have access to the selected private key file (MyEC2KeyPair.pem), and that without this file, I won't be able to log into my instance.

                                                    Cancel   **Launch Instances**

Download the above keypair. Its used for accessing shell. How to use it is out of scope of this document.

Run the following command in shell of AWS
sudo yum update -y
sudo yum install -y docker
sudo service docker start
sudo docker login -u USERNAME -p PASSWORD
sudo docker run -p 3306:3306 --name db -d jatin10arora/mysql:db
sudo docker run -p 80:8080 --name tom --link db -d jatin10arora/javaapp:db

Use highlighted ip address or DNS

Instance: i-0994be1a74fc20883   Public DNS: ec2-52-27-68-157.us-west-2.compute.amazonaws.com

| Description | Status Checks | Monitoring | Tags |

Instance ID   i-0994be1a74fc20883   Public DNS (IPv4)   ec2-52-27-68-157.us-west-2.compute.amazonaws.com

Instance state   running   IPv4 Public IP   52.27.68.157
Instance type   t2.micro   IPv6 IPs   -
Elastic IPs   Private DNS   ip-172-31-26-252.us-west-2.compute.internal
Availability zone us-west-2b   Private IPs   172.31.26.252

← → C   ⓘ Not secure | 52.27.68.157/login/loginprocess.jsp

::: Apps   ⚡ Web Slice Gallery   📄 New Tab   📁 Japanese

Sorry, email or password error
Email: [_____]

Password: [_____]

[login]

← → C   ⓘ 52.27.68.157/login/loginprocess.jsp?email=demo%40email.com&pass=demopassword

::: Apps   ⚡ Web Slice Gallery   📄 New Tab   📁 Japanese

You r successfully logged in

Don't forget to terminate your instance after you are done.

To Configure with ECS:
https://www.ybrikman.com/writing/2015/11/11/running-docker-aws-ground-up/