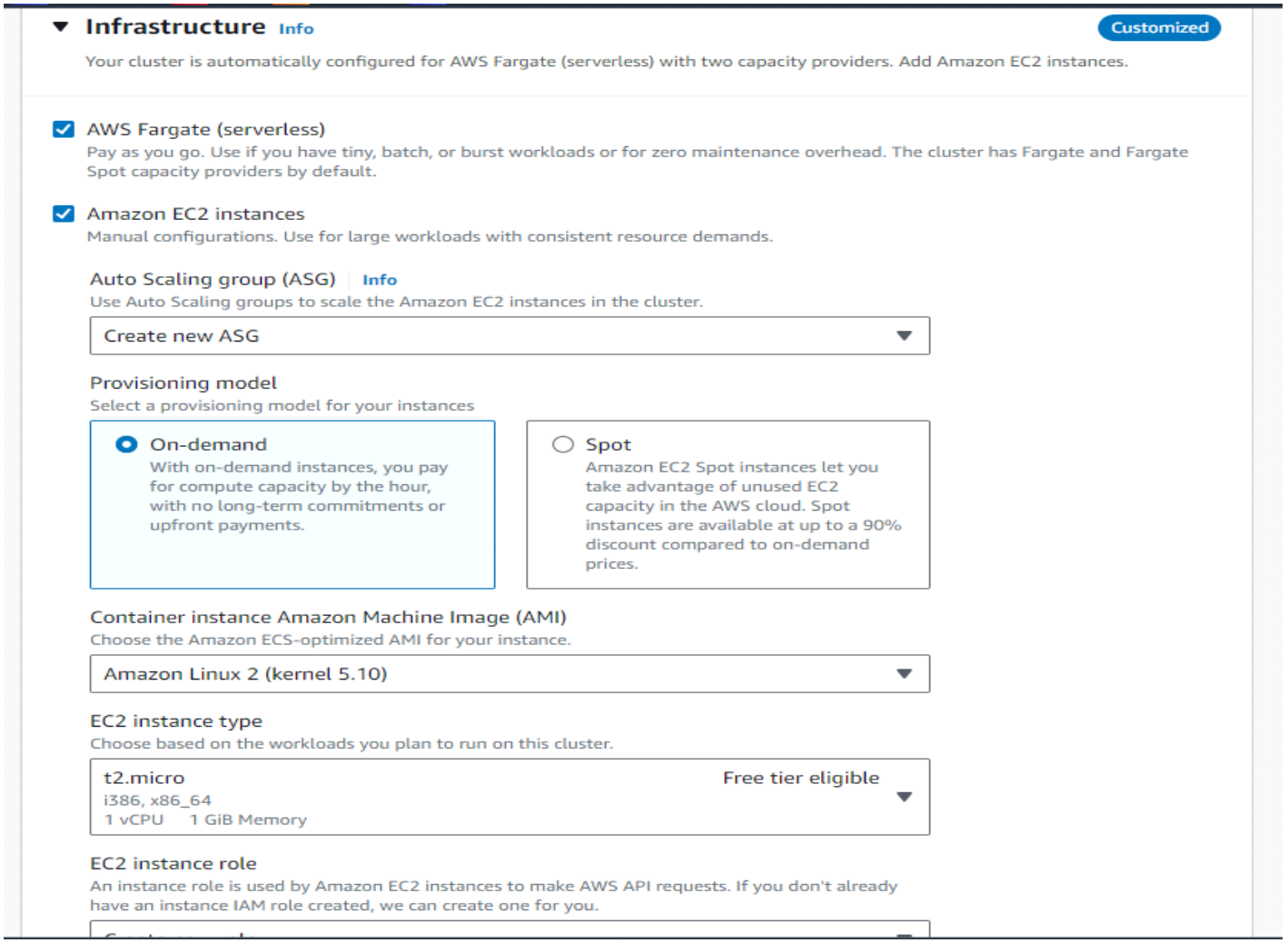
Lab 1: Setting Up Your ECS Cluster

1. **Login to AWS Console**: Navigate to the ECS Console.
2. Create a Cluster:
   - In the ECS Dashboard, click **Clusters** > **Create Cluster**.
   - Choose **EC2 Linux + Networking** (or **Networking only** for Fargate).
   - Provide a name for the cluster.
   - Configure instance type, number of instances, and networking settings (VPC, subnets, security groups).
   - Select the appropriate EC2 AMI (Amazon Linux 2 recommended) and key pair for SSH access if needed.



Amazon Elastic Container Service > Create cluster

Create cluster Info

An Amazon ECS cluster groups together tasks, and services, and allows for shared capacity and common configurations. All of your tasks, services, and capacity must belong to a cluster.

Cluster configuration

Cluster name

ecs-cluster-1

Cluster name must be 1 to 255 characters. Valid characters are a-z, A-Z, 0-9, hyphens (-), and underscores (_).

Default namespace - *optional*

Select the namespace to specify a group of services that make up your application. You can overwrite this value at the service level.

ecs-cluster-1

Infrastructure Info

Customized

Your cluster is automatically configured for AWS Fargate (serverless) with two capacity providers. Add Amazon EC2 instances.

AWS Fargate (serverless)

Pay as you go. Use if you have tiny, batch, or burst workloads or for zero maintenance overhead. The cluster has Fargate and Fargate

Container instance Amazon Machine Image (AMI)

Choose the Amazon ECS-optimized AMI for your instance.

Amazon Linux 2 (kernel 5.10)

EC2 instance type

Choose based on the workloads you plan to run on this cluster.

t2.micro — Free tier eligible
i386, x86_64
1 vCPU 1 GiB Memory

EC2 instance role

An instance role is used by Amazon EC2 instances to make AWS API requests. If you don't already have an instance IAM role created, we can create one for you.

Create new role

Desired capacity

Specify the number of instances to launch in your cluster.

Minimum: 2

Maximum: 5

SSH Key pair

If you do not specify a key pair, you can't connect to the instances via SSH unless you choose an AMI that is configured to allow users another way to log in.

ecs-cluster-1-key

Create a new key pair

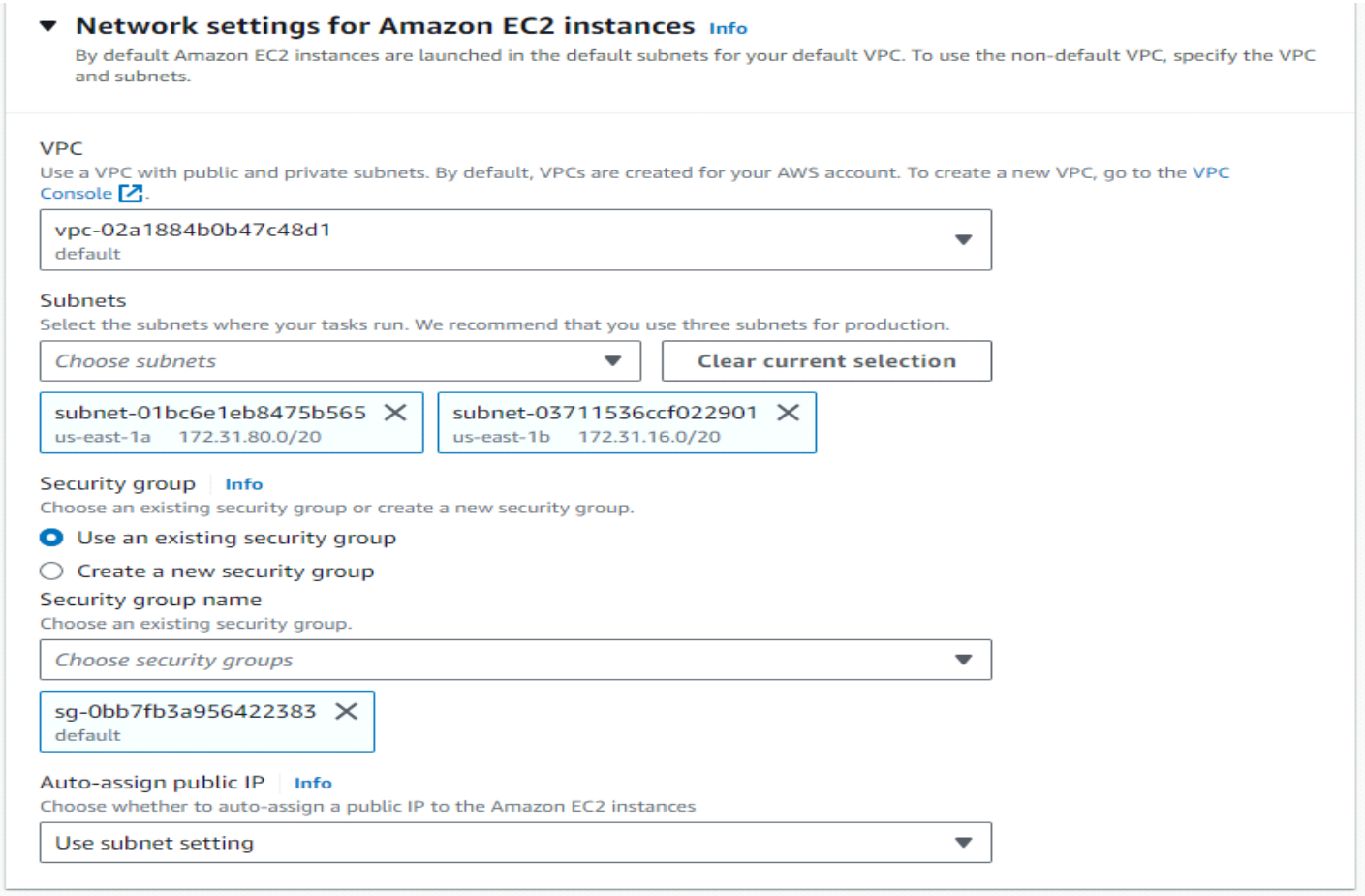
Root EBS volume size

You can increase the size of the root EBS volume to allow for greater image and container storage.

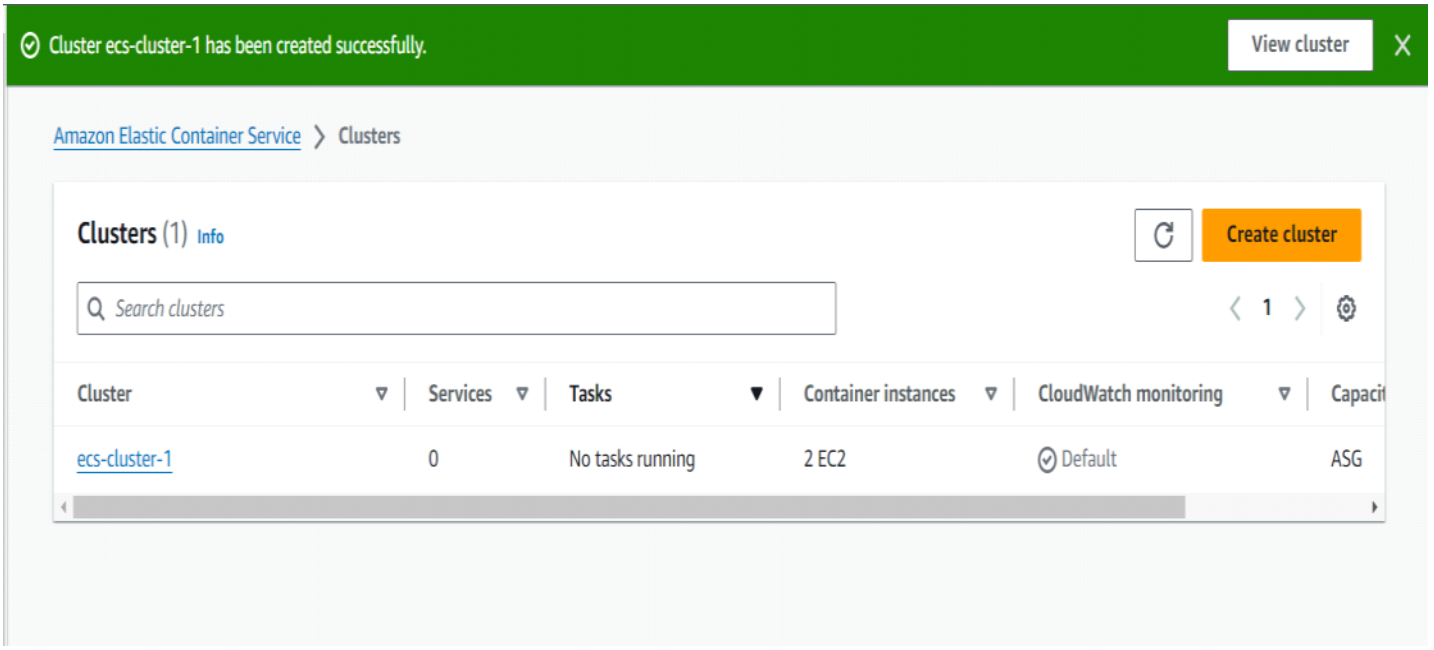
30

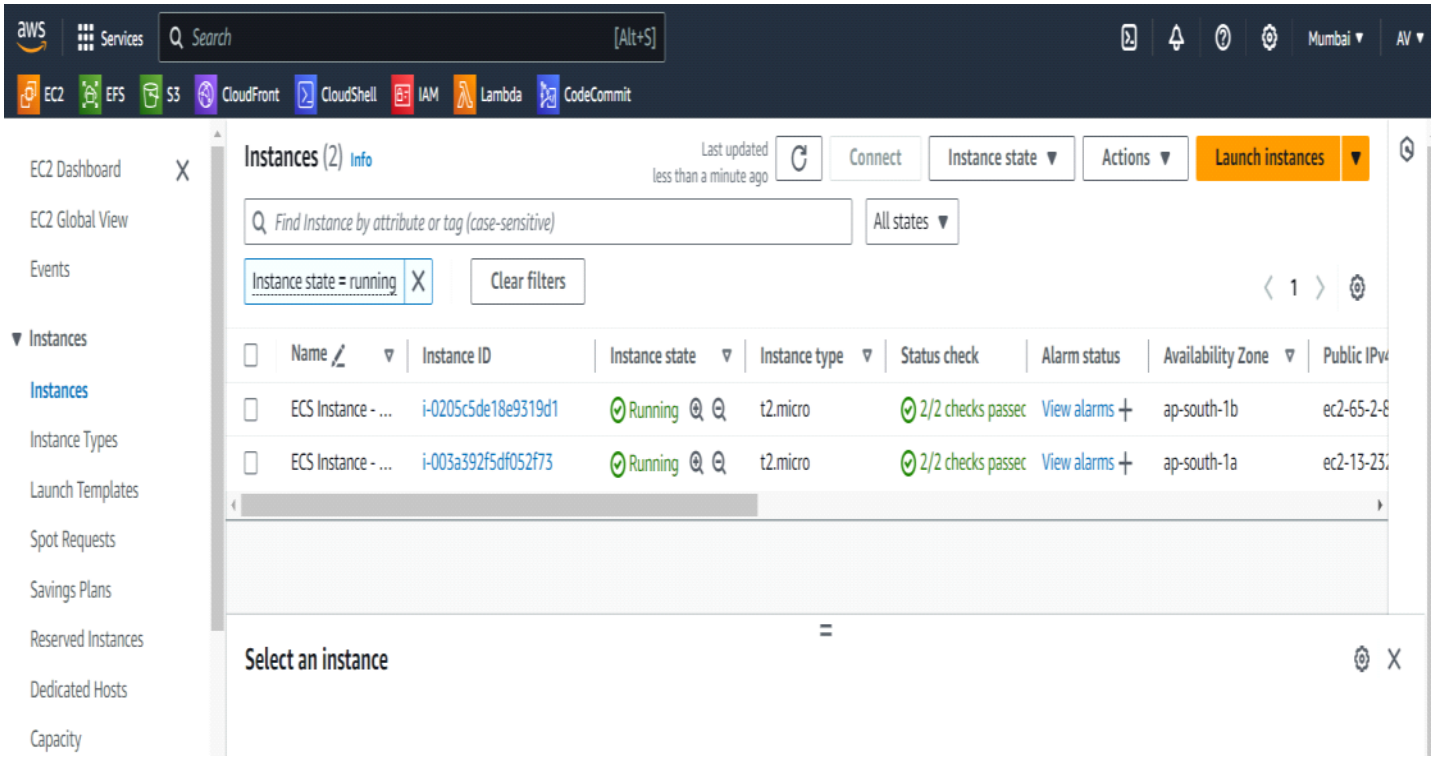
A min of 30 GiB and a max of 16,384 GiB is allowed.

External instances using **ECS Anywhere** can be registered after cluster creation is complete.



Click **Create** to provision the cluster.




Services
Search
[Alt+S]
Mumbai
AV
EC2
EFS
S3
CloudFront
CloudShell
IAM
Lambda
CodeCommit
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity
Instances (2) Info
Last updated
less than a minute ago
Connect
Instance state
Actions
Launch instances
Find Instance by attribute or tag (case-sensitive)
All states
Instance state = running
Clear filters
1
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv4
ECS Instance - ...
i-0205c5de18e9319d1
Running
t2.micro
2/2 checks passed
View alarms
ap-south-1b
ECS Instance - ...
i-003a392f5df052f73
Running
t2.micro
2/2 checks passed
View alarms
ap-south-1a
Select an instance