

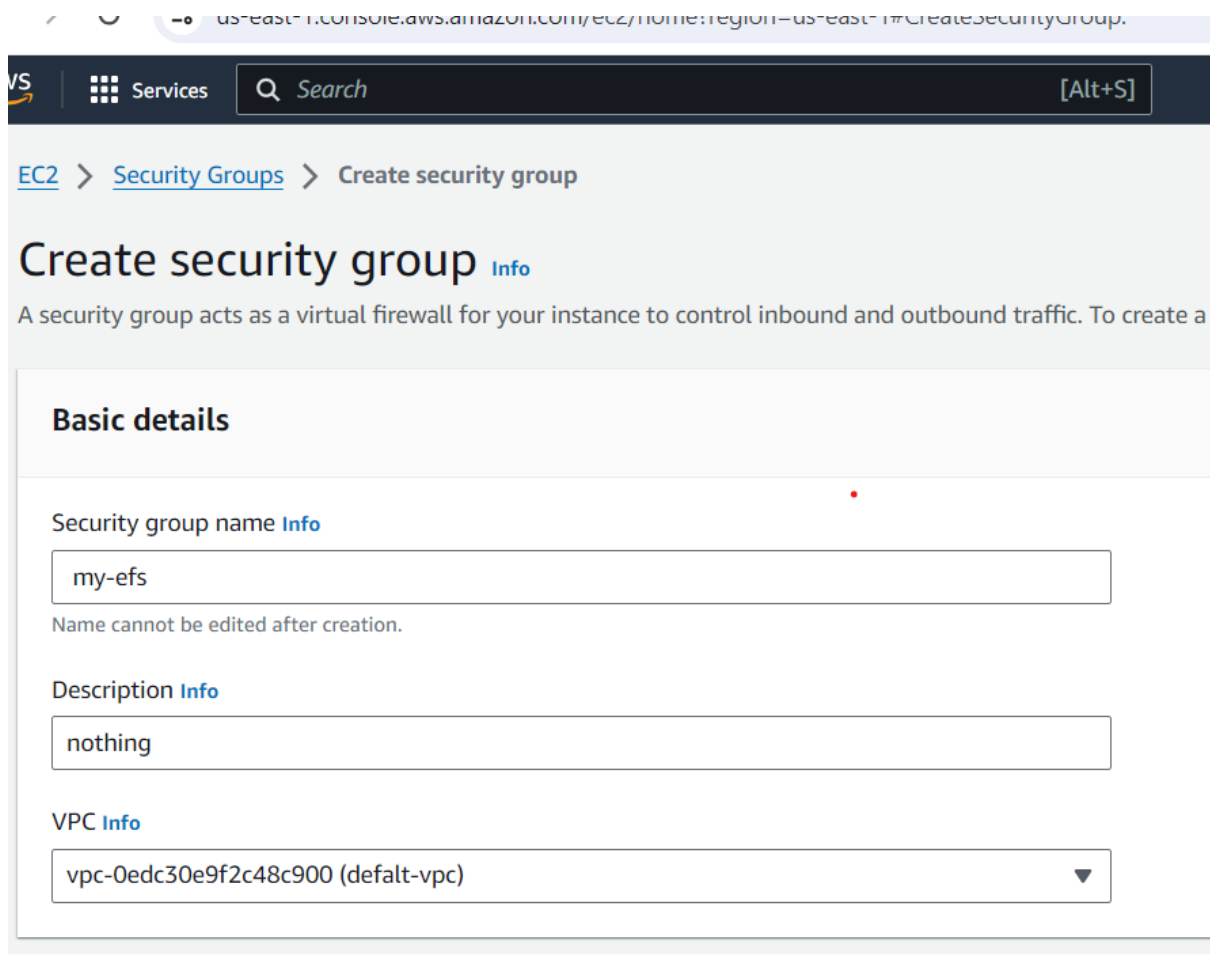
EBS and EFS

create an EFS and attach to two EC2 instance. create an EBS and attach it to EC2 instance.

1)EFS:

Step 1:

Create security group



The screenshot shows the AWS Management Console interface for creating a security group. The breadcrumb navigation at the top reads: [EC2](#) > [Security Groups](#) > [Create security group](#). The main heading is "Create security group" with an "Info" link. Below the heading is a descriptive sentence: "A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a".

The "Basic details" section contains three fields:

- Security group name** (Info): A text input field containing "my-efs". Below the field is a note: "Name cannot be edited after creation."
- Description** (Info): A text input field containing "nothing".
- VPC** (Info): A dropdown menu showing "vpc-0edc30e9f2c48c900 (default-vpc)".

Security group (sg-09c52c2b89908ba | my-efs) was created successfully

Details

EC2 > Security Groups > sg-09c52c2b89908ba - my-efs

sg-09c52c2b89908ba - my-efs

Actions

Details

Security group name my-efs	Security group ID sg-09c52c2b89908ba	Description nothing	VPC ID vpc-0edc30e9f2c48c900
Owner 058264302028	Inbound rules count 0 Permission entries	Outbound rules count 1 Permission entry	

Step 2: create EFS

Create file system

Create an EFS file system with recommended settings. [Learn more](#)

Name - optional
Name your file system.

efs

Name can include letters, numbers, and +-=._:/ symbols, up to 256 characters.

Virtual Private Cloud (VPC)
Choose the VPC where you want EC2 instances to connect to your file system.

vpc-0edc30e9f2c48c900
default

Cancel Customize Create

File system settings

General

Name - *optional*

Name your file system.

efs

File system type

Choose to either store data across multiple Availability Zones or within a single Availability Zone. [Learn more](#)

☒ Regional

Offers the highest levels of availability and durability by storing file system data across multiple Availability Zones within an AWS Region.

☐ One Zone

Provides continuous availability to data within a single Availability Zone within an AWS Region.

Automatic backups

Automatically backup your file system data with AWS Backup using recommended settings. Additional pricing applies. [Learn more](#)

☒ Enable automatic backups

Customize security group that we created

Mount targets

A mount target provides an NFSv4 endpoint at which you can mount an Amazon EFS file system. We recommend creating one mount target per Availability Zone. [Learn more](#)

Availability zone	Subnet ID	IP address	Security groups	
us-east-1a	subnet-060af02a40dbb08d1	Automatic	Choose security groups sg-09c52c2c2b89908ba my-efs	Remove
us-east-1b	subnet-0954da2842cd7688c	Automatic	Choose security groups sg-09c52c2c2b89908ba my-efs	Remove
us-east-1c	subnet-00c838dc6e610beea	Automatic	Choose security groups sg-09c52c2c2b89908ba my-efs	Remove
us-east-1d	subnet-08b3896b9217119ed	Automatic	Choose security groups sg-09c52c2c2b89908ba my-efs	Remove
us-east-1f	subnet-0766ee7d97c7b9a08	Automatic	Choose security groups sg-09c52c2c2b89908ba my-efs	Remove

Success!

File system (fs-0bb570bb49e77d5b7) is available.

View file system

Amazon EFS

File systems

File systems (1)

Filter by property values

< 1 >

Name

File system ID

Encryption

Total size

Size in Standard

Size in IA

Size in Archive

Provisioned Throughput (MiB/s)

[efs](#)

[fs-0bb570bb49e77d5b7](#)

Encrypt

d

6.00 KiB

6.00 KiB

0 Bytes

0 Bytes

-

Step 3: launch instance

Name and tags

Info

Name

ec1

Add additional tags

Application and OS Images (Amazon Machine Image)

Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Search our full catalog including 1000s of application and OS images

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Linux

SUS

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI

Free tier eligible

ami-04e5276ebb8451442 (64-bit (x86), uefi-preferred) / ami-09e060bed64ca0c04 (64-bit (Arm), uefi)

Virtualization: hvm ENA enabled: true Root device type: ebs

▼ Network settings Info

VPC - required Info

vpc-0edc30e9f2c48c900 (default-vpc) (default) 172.31.0.0/16

Subnet Info

subnet-060af02a40dbb08d1 VPC: vpc-0edc30e9f2c48c900 Owner: 058264302028 Availability Zone: us-east-1a IP addresses available: 4090 CIDR: 172.31.16.0/20

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create security group

☒ Select existing security group

Common security groups Info

Select security groups

my-efs sg-09c52c2c2b89908ba X VPC: vpc-0edc30e9f2c48c900

Compare security group rules

File systems Hide details

☒ EFS

☐ FSx

▼ Shared file system 1 Remove

File system Info

fs-0bb570bb49e77d5b7 Name: efs Availability: Regional

Mount point Info

/mnt/efs/fs1

EC2 > Instances > Launch an instance

Success Successfully initiated launch of instance (i-00d5d760c9a9ae42)

Launch log

Step 4: ec1 instance connect to web

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)

Name

ec2

Add additional tags

▼ Application and OS Images (Amazon Machine Image) [Info](#)

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Recents

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aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Linux

SUSE

Q

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Key pair name - *required*

vcube



Create new key pair

▼ Network settings [Info](#)

VPC - *required* [Info](#)

vpc-0edc30e9f2c48c900 (default-vpc)
172.31.0.0/16

(default) ▼



Subnet [Info](#)

subnet-0954da2842cd7688c

VPC: vpc-0edc30e9f2c48c900 Owner: 058264302028 Availability Zone: us-east-1b
IP addresses available: 4090 CIDR: 172.31.32.0/20



Create new subnet [↗](#)

Auto-assign public IP [Info](#)

Enable ▼



Additional charges apply when outside of free tier allowance

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create security group

☒ Select existing security group

Common security groups [Info](#)

Select security groups ▼

my-efs sg-09c52c2c2b89908ba ✕
VPC: vpc-0edc30e9f2c48c900



Compare security group rules

Security groups that you add or remove here will be added to or removed from all your network interfaces.

2)EBS:

Elastic Block Storage

Create an amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

Step 1: create and launch instance

[EC2](#) > [Instances](#) > Launch an instance

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)


Name


[Add additional tags](#)

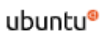
▼ Application and OS Images (Amazon Machine Image) [Info](#)


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Quick Start


Amazon Linux



macOS


Ubuntu


Windows


Red Hat


SUSE L



[Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

[EC2](#) > [Instances](#) > Launch an instance

✔ **Success**

Successfully initiated launch of instance ([i-00986bdebf65e997f](#))

Step 2: create volume

Create volume [Info](#)

Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

Volume settings

Volume type [Info](#)

Provisioned IOPS SSD (io1) ▼

Size (GiB) [Info](#)

100

Min: 4 GiB, Max: 16384 GiB. The value must be an integer.

IOPS [Info](#)

300

Min: 100 IOPS, Max: 5000 IOPS (up to 50 IOPS per GiB)

Throughput (MiB/s) [Info](#)

Not applicable

Availability Zone [Info](#)

us-east-1a ▼

✓ Successfully created volume vol-04f553bb2a2c27783.

Step 3: attach volume to ec2 instance

[EC2](#) > [Volumes](#) > [vol-04f553bb2a2c27783](#) > **Attach volume**

Attach volume [Info](#)

Attach a volume to an instance to use it as you would a regular physical hard disk drive.

Basic details

Volume ID

 [vol-04f553bb2a2c27783](#)

Availability Zone

us-east-1a

Instance [Info](#)

i-00986bdebf65e997f ▼



Only instances in the same Availability Zone as the selected volume are displayed.

Device name [Info](#)

/dev/sdf ▼

Recommended device names for Linux: /dev/xvda for root volume. /dev/sd[f-p] for data volumes.

✔ Successfully attached volume [vol-04f553bb2a2c27783](#) to instance [i-00986bdebf65e997f](#).

Step 4: ec2 instance connect to web

Connect to instance [Info](#)

Connect to your instance i-00986bdebf65e997f (vmr) using any of these options

EC2 Instance Connect

Session Manager

SSH client

EC2 serial console

Instance ID

 i-00986bdebf65e997f (vmr)

Connection Type

- ☒ **Connect using EC2 Instance Connect**
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.


- ☐ **Connect using EC2 Instance Connect Endpoint**
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address


 34.229.157.70

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ec2-user.

 ec2-user



 **Note:** In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

Connect

PublicIPs: 34.229.157.70 PrivateIPs: 172.31.27.22

```
aws | Services | Search [Alt+S]
sunit=value|su=num,sectsize=num,lazy-count=0|1]
/* label */ [-L label (maximum 12 characters)]
/* naming */ [-n size=num,version=2|ci,ftype=0|1]
/* no-op info only */ [-N]
/* prototype file */ [-p fname]
/* quiet */ [-q]
/* realtime subvol */ [-r extsize=num,size=num,rtdev=xxx]
/* sectorsize */ [-s size=num]
/* version */ [-V]
devicename
<devicename> is required unless -d name=xxx is given.
<num> is xxx (bytes), xxxs (sectors), xxxb (fs blocks), xxxk (xxx KiB),
xxxm (xxx MiB), xxxg (xxx GiB), xxxt (xxx TiB) or xxxp (xxx PiB).
<value> is xxx (512 byte blocks).
[root@ip-172-31-27-22 ~]# file -s /dev/xvdf
/dev/xvdf: SGI XFS filesystem data (blksz 4096, inosz 512, v2 dirs)
[root@ip-172-31-27-22 ~]# mkdir -p madhu/vcube122
[root@ip-172-31-27-22 ~]# mount /dev/xvdf madhu/vcube122
mount: /root/madhu/vcube122: /dev/xvdf already mounted on /root/madhu/vcube122.
[root@ip-172-31-27-22 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M   0  4.0M   0% /dev
tmpfs           475M   0  475M   0% /dev/shm
tmpfs           190M  2.9M  188M   2% /run
/dev/xvda1       8.0G  1.5G   6.5G  19% /
tmpfs           475M   0  475M   0% /tmp
/dev/xvda128     10M   1.3M   8.7M  13% /boot/efi
/dev/xvdf       100G  746M  100G   1% /root/madhu/vcube122
tmpfs           95M   0   95M   0% /run/user/1000
[root@ip-172-31-27-22 ~]# cd madhu/vcube122
[root@ip-172-31-27-22 vcube122]# ls
file1
[root@ip-172-31-27-22 vcube122]#
```

i-00986bdebf65e997f (vmr)

PublicIPs: 34.229.157.70 PrivateIPs: 172.31.27.22