

Step 1  
Select file system type

Step 2  
Specify file system details

Step 3  
Review and create



**Did you know?**

With Amazon FSx for Lustre, you can reduce storage costs by 50% using Data Compression.  
[Learn more about this capability.](#)



# Create file system

## File system details

File system name - optional [Info](#)

MyLustreFileSystem

Maximum of 256 Unicode letters, whitespace, and numbers, plus + = \_ : /

Deployment and storage type [Info](#)

Select a deployment type and storage type to fit your workload requirements

- ☒ Persistent, SSD
  - ☒ with SSD cache
- ☐ Persistent, HDD
- ☐ Scratch, SSD

☐ Persistent, HDD

☒ with SSD cache

☒ Scratch, SSD

Throughput per unit of storage [Info](#)

Throughput (MB/s) per unit of storage (TiB)

☐ 50 MB/s/TiB

☐ 100 MB/s/TiB

☒ 200 MB/s/TiB

Storage capacity [Info](#)

1.2 TiB

Supported sizes: 1.2 TiB or increments of 2.4 TiB

Throughput capacity [Info](#)

Throughput capacity = Storage capacity (TiB) \* 200 MB/s/TiB

0 MB/s

Data compression type [Info](#)

Data compression reduces the physical disk space needed to store file data. Select LZ4 to enable data compression

NONE ▼

Lustre version

2.12

## Network & security

### Virtual Private Cloud (VPC) [Info](#)

Specify the VPC from which your file system is accessible.

Default VPC | vpc-3ab53747 ▼

### VPC Security Groups [Info](#)

Specify VPC Security Groups to associate with your file system's network interface.

Choose VPC security group(s) ▼

sg-0362179d88cdcee19 (SSH SG) ✕

The VPC Security Groups associated with your file system's network interfaces must allow inbound Lustre traffic (TCP ports 988, 1021-1023).

### Subnet [Info](#)

Specify the subnet in which your file system's network interface resides.

subnet-87d3aea6 (us-east-1c) ▼

## Encryption

For scratch file systems, data is encrypted at rest with keys managed by FSx using an XTS-AES-256 block cipher. Data in-transit is encrypted automatically when accessed from [supported instance types](#) in [supported regions](#).

- AMIs New
- AMI Catalog
- ▼ Elastic Block Store
  - Volumes New
  - Snapshots New
  - Lifecycle Manager New
- ▼ Network & Security
  - Security Groups
  - Elastic IPs
  - Placement Groups
  - Key Pairs
  - Network Interfaces
- ▼ Load Balancing
  - Load Balancers
  - Target Groups New

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

✕

### Inbound rules (7)

Manage tags Edit inbound rules

< 1 >

	Protocol	Port range	Source	Description
s	TCP	443	0.0.0.0/0	–
	TCP	22	0.0.0.0/0	–
s	TCP	443	::/0	–
	TCP	80	0.0.0.0/0	–
ffic	All	All	0.0.0.0/0	–
	TCP	80	::/0	–
ffic	All	All	::/0	–

```
  _|  ( _|_ )  
  _|  ( _|_ /  Amazon Linux 2 AMI  
  _|\_|_|_|
```

```
https://aws.amazon.com/amazon-linux-2/  
3 package(s) needed for security, out of 14 available  
Run "sudo yum update" to apply all updates.  
[ec2-user@ip-172-31-91-103 ~]$ sudo su  
[root@ip-172-31-91-103 ec2-user]# yum update
```

Amazon FSx

File systems

Volumes

Backups

ONTAP

Storage virtual machines

OpenZFS

Snapshots

Windows File Server

Lustre

Data repository tasks

FSx on Service Quotas

FSx > File systems > fs-0adac8ee9496063d1

Did you know?

With Amazon FSx for Lustre, you can reduce storage costs by 50% using Data Compression.  
[Learn more about this capability.](#)

MyLustreFileSystem (fs-0adac8ee9496063d1)

Attach

Actions

Summary

File system ID	Storage type	Lustre version
fs-0adac8ee9496063d1	SSD	2.12
Lifecycle state	Storage capacity	Availability Zones
Available	1.2 TiB	us-east-1c
File system type	Throughput per unit of storage	Creation time

## Attach file system

### From Linux instances (Amazon EC2, Amazon WorkSpaces, VMware Cloud on AWS)

#### ▼ Prerequisites

1. Create or select your Linux EC2 instance in the same AWS VPC as your file system.
2. Open an SSH client and connect to your EC2 instance. ( [Find out how to connect.](#) )
3. [Install the open-source Lustre client](#) , which is supported on most Linux distributions.

#### ▼ Attach instruction - using the default DNS name

1. Open a terminal
2. Create a new directory on your EC2 instance, for example `/fsx`
  - `sudo mkdir /fsx`
3. `sudo mount -t lustre -o noatime,flock fs-0adac8ee9496063d1.fsx.us-east-1.amazonaws.com@tcp:/fc35hbm /fsx`

### From Amazon Elastic Kubernetes Service (EKS) use the Amazon

Close

```
[root@ip-172-31-91-103 ec2-user]# sudo mkdir /fsx
sudo: mkdir /fsx: command not found
[root@ip-172-31-91-103 ec2-user]# mkdir /fsx
[root@ip-172-31-91-103 ec2-user]# mount -t lustre -o noatime,flock fs-0adac8ee9496063d1.fsx.us-east-1.amazonaws.com@tcp:/fc35hbmV /fsx
[root@ip-172-31-91-103 ec2-user]# █
```



Last login: Wed Feb 23 17:28:26 2022 from ec2-18-206-107-26.compute-1.amazonaws.com

```
 _ | _ | _ )
 _ | ( _ | /
 _ | \ _ | _ |
Amazon Linux 2 AMI
```

<https://aws.amazon.com/amazon-linux-2/>

[ec2-user@ip-172-31-91-103 ~]\$ lsblk

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINT
xvda	202:0	0	8G	0	disk	
└─xvda1	202:1	0	8G	0	part	/

[ec2-user@ip-172-31-91-103 ~]\$ df -T

Filesystem	Type	1K-blocks	Used	Available	Use%	Mounted on
devtmpfs	devtmpfs	485568	0	485568	0%	/dev
tmpfs	tmpfs	494340	0	494340	0%	/dev/shm
tmpfs	tmpfs	494340	400	493940	1%	/run
tmpfs	tmpfs	494340	0	494340	0%	/sys/fs/cgroup
/dev/xvda1	xfs	8376300	1593156	6783144	20%	/
172.31.83.125@tcp://fc35hbm	lustre	1168351232	7936	1168341248	1%	/fsx
tmpfs	tmpfs	98872	0	98872	0%	/run/user/1000

[ec2-user@ip-172-31-91-103 ~]\$ █

```
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [23.7 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse Translation-en [7312 B]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 c-n-f Metadata [580 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main amd64 Packages [42.0 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main Translation-en [10.0 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/main amd64 c-n-f Metadata [864 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/restricted amd64 c-n-f Metadata [116 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [22.0 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe Translation-en [15.2 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/universe amd64 c-n-f Metadata [728 B]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:31 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [1265 kB]
Get:32 http://security.ubuntu.com/ubuntu focal-security/main Translation-en [221 kB]
Get:33 http://security.ubuntu.com/ubuntu focal-security/main amd64 c-n-f Metadata [9624 B]
Get:34 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [764 kB]
Get:35 http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en [109 kB]
Get:36 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 c-n-f Metadata [504 B]
Get:37 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [679 kB]
Get:38 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [116 kB]
Get:39 http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata [13.1 kB]
Get:40 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [20.7 kB]
Get:41 http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en [5196 B]
Get:42 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata [500 B]
Fetched 21.9 MB in 4s (5687 kB/s)
Reading package lists... Done
root@ip-172-31-83-241:/home/ubuntu#
```

```
Get:35 http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en [109 kB]
Get:36 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 c-n-f Metadata [504 B]
Get:37 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [679 kB]
Get:38 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [116 kB]
Get:39 http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata [13.1 kB]
Get:40 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [20.7 kB]
Get:41 http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en [5196 B]
Get:42 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata [500 B]
Fetched 21.9 MB in 4s (5687 kB/s)
Reading package lists... Done
root@ip-172-31-83-241:/home/ubuntu# wget -O - https://fsx-lustre-client-repo-public-keys.s3.amazonaws.com/fsx-ubuntu-public-key.asc | su
do apt-key add -
--2022-02-23 17:48:13-- https://fsx-lustre-client-repo-public-keys.s3.amazonaws.com/fsx-ubuntu-public-key.asc
Resolving fsx-lustre-client-repo-public-keys.s3.amazonaws.com (fsx-lustre-client-repo-public-keys.s3.amazonaws.com)... 52.216.114.195
Connecting to fsx-lustre-client-repo-public-keys.s3.amazonaws.com (fsx-lustre-client-repo-public-keys.s3.amazonaws.com)|52.216.114.195|:
443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3819 (3.7K) [text/plain]
Saving to: 'STDOUT'

-
100%[=====] 3.73K --.-KB/s in 0s

2022-02-23 17:48:13 (175 MB/s) - written to stdout [3819/3819]

OK
root@ip-172-31-83-241:/home/ubuntu#
```

```
--2022-02-23 17:48:13-- https://fsx-lustre-client-repo-public-keys.s3.amazonaws.com/fsx-ubuntu-public-key.asc
Resolving fsx-lustre-client-repo-public-keys.s3.amazonaws.com (fsx-lustre-client-repo-public-keys.s3.amazonaws.com)... 52.216.114.195
Connecting to fsx-lustre-client-repo-public-keys.s3.amazonaws.com (fsx-lustre-client-repo-public-keys.s3.amazonaws.com)|52.216.114.195|:
443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3819 (3.7K) [text/plain]
Saving to: 'STDOUT'

-          100%[=====>]   3.73K  --.-KB/s    in 0s

2022-02-23 17:48:13 (175 MB/s) - written to stdout [3819/3819]

OK
root@ip-172-31-83-241:/home/ubuntu# sudo bash -c 'echo "deb https://fsx-lustre-client-repo.s3.amazonaws.com/ubuntu focal main" > /etc/ap
t/sources.list.d/fsxlustreclientrepo.list && apt-get update'
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
Get:4 https://fsx-lustre-client-repo.s3.amazonaws.com/ubuntu focal InRelease [3274 B]
Hit:5 http://security.ubuntu.com/ubuntu focal-security InRelease
Get:6 https://fsx-lustre-client-repo.s3.amazonaws.com/ubuntu focal/main amd64 Packages [13.3 kB]
Fetched 16.5 kB in 0s (36.1 kB/s)
Reading package lists... Done
root@ip-172-31-83-241:/home/ubuntu# uname -r
5.11.0-1022-aws
root@ip-172-31-83-241:/home/ubuntu#
```

```
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  lustre-utils
The following NEW packages will be installed:
  lustre-client-modules-5.11.0-1022-aws lustre-utils
0 upgraded, 2 newly installed, 0 to remove and 75 not upgraded.
Need to get 25.8 MB of archives.
After this operation, 172 MB of additional disk space will be used.
Get:1 https://fsx-lustre-client-repo.s3.amazonaws.com/ubuntu focal/main amd64 lustre-client-modules-5.11.0-1022-aws amd64 2.10.8-1fsx9 [
25.3 MB]
Get:2 https://fsx-lustre-client-repo.s3.amazonaws.com/ubuntu focal/main amd64 lustre-utils amd64 2.10.8-1fsx9 [484 kB]
Fetched 25.8 MB in 1s (20.5 MB/s)
Selecting previously unselected package lustre-client-modules-5.11.0-1022-aws.
(Reading database ... 63895 files and directories currently installed.)
Preparing to unpack .../lustre-client-modules-5.11.0-1022-aws_2.10.8-1fsx9_amd64.deb ...
Unpacking lustre-client-modules-5.11.0-1022-aws (2.10.8-1fsx9) ...
Selecting previously unselected package lustre-utils.
Preparing to unpack .../lustre-utils_2.10.8-1fsx9_amd64.deb ...
Unpacking lustre-utils (2.10.8-1fsx9) ...
Setting up lustre-utils (2.10.8-1fsx9) ...
Setting up lustre-client-modules-5.11.0-1022-aws (2.10.8-1fsx9) ...
Processing triggers for systemd (245.4-4ubuntu3.13) ...
Processing triggers for man-db (2.9.1-1) ...
```

```
lustre-utils
The following NEW packages will be installed:
  lustre-client-modules-5.11.0-1022-aws lustre-utils
0 upgraded, 2 newly installed, 0 to remove and 75 not upgraded.
Need to get 25.8 MB of archives.
After this operation, 172 MB of additional disk space will be used.
Get:1 https://fsx-lustre-client-repo.s3.amazonaws.com/ubuntu focal/main amd64 lustre-client-modules-5.11.0-1022-aws amd64 2.10.8-1fsx9 [
25.3 MB]
Get:2 https://fsx-lustre-client-repo.s3.amazonaws.com/ubuntu focal/main amd64 lustre-utils amd64 2.10.8-1fsx9 [484 kB]
Fetched 25.8 MB in 1s (20.5 MB/s)
Selecting previously unselected package lustre-client-modules-5.11.0-1022-aws.
(Reading database ... 63895 files and directories currently installed.)
Preparing to unpack .../lustre-client-modules-5.11.0-1022-aws_2.10.8-1fsx9_amd64.deb ...
Unpacking lustre-client-modules-5.11.0-1022-aws (2.10.8-1fsx9) ...
Selecting previously unselected package lustre-utils.
Preparing to unpack .../lustre-utils_2.10.8-1fsx9_amd64.deb ...
Unpacking lustre-utils (2.10.8-1fsx9) ...
Setting up lustre-utils (2.10.8-1fsx9) ...
Setting up lustre-client-modules-5.11.0-1022-aws (2.10.8-1fsx9) ...
Processing triggers for systemd (245.4-4ubuntu3.13) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
root@ip-172-31-83-241:/home/ubuntu# mkdir /fsx
bash: mkdir /fsx: No such file or directory
root@ip-172-31-83-241:/home/ubuntu# mkdir fsx
root@ip-172-31-83-241:/home/ubuntu#
```

```
root@ip-172-31-83-241:/home/ubuntu# mount -t lustre -o noatime,flock fs-0adac8ee9496063d1.fsx.us-east-1.amazonaws.com@tcp:/fc35hbmV fsx
root@ip-172-31-83-241:/home/ubuntu# █
```

```
root@ip-172-31-83-241:/home/ubuntu# df -T
Filesystem                Type      1K-blocks    Used   Available Use% Mounted on
/dev/root                  ext4       8065444 1819452    6229608 23% /
devtmpfs                  devtmpfs   489496      0      489496 0% /dev
tmpfs                     tmpfs      496100      0      496100 0% /dev/shm
tmpfs                     tmpfs      99224      812      98412 1% /run
tmpfs                     tmpfs       5120      0       5120 0% /run/lock
tmpfs                     tmpfs      496100      0      496100 0% /sys/fs/cgroup
/dev/loop1                squashfs   56832      56832      0 100% /snap/core18/2253
/dev/loop3                squashfs   68864      68864      0 100% /snap/lxd/21835
/dev/loop2                squashfs   63360      63360      0 100% /snap/core20/1242
/dev/loop0                squashfs   25600      25600      0 100% /snap/amazon-ssm-agent/4046
/dev/loop4                squashfs   43264      43264      0 100% /snap/snapd/14066
tmpfs                     tmpfs      99220      0       99220 0% /run/user/1000
172.31.83.125@tcp:/fc35hbm lustre     1168351232 7936 1168341248 1% /home/ubuntu/fsx
root@ip-172-31-83-241:/home/ubuntu#
```



```
root@ip-172-31-83-241:/home/ubuntu# cd fsx
root@ip-172-31-83-241:/home/ubuntu/fsx# ls
file.txt
root@ip-172-31-83-241:/home/ubuntu/fsx# █
```

Endpoint groups (2)

View details

Edit

Remove

Add endpoint group

Find endpoint groups

< 1 > ⚙

	Endpoint group ID	Region	Traffic dial
<input type="radio"/>	arn...1b316d298002	us-east-1	100%
<input checked="" type="radio"/>	arn...75924bcac00a	ap-south-1	100%

Endpoints (1)

Edit

Remove

Add endpoint

Find endpoints

< 1 > ⚙

<input type="checkbox"/>	Endpoint ID ▲	Endpoint type ▼	Client IP address	Health status ▼	Weight ▼
<input type="checkbox"/>	i-0fe5711fccf4f67c9 <a href="#">🔗</a>	EC2	Enabled	✔ Healthy	128

Port overrides

Edit



Listener: 80 TCP

Global Accelerator routes traffic that arrives on these ports to endpoints in regional endpoint groups. All endpoints for an endpoint group must be in the same Region.

▼ Endpoint group: us-east-1

Traffic dial: 100%

Endpoint type [Info](#)

Endpoint [Info](#)

Weight [Info](#)

EC2 instance ▼

i-0dfcf2baef... ▼

128

A number from 0 to 255.

Preserve client IP address [Info](#)

Global Accelerator preserves the client IP address for internet-facing Application Load Balancers unless you clear the check box to disable the feature. All internal Application Load Balancers and EC2 instances automatically preserve the client IP address. Make sure that your endpoints are configured to accept traffic from the preserved client IP addresses.

☒ Preserve client IP address

Cancel

Save