

Create Scalable Storage(8EB) using Storage Gateway

← → ↻

ap-southeast-2.console.aws.amazon.com/storagegateway/create/gateway?region=ap-southeast-2

aws

Services ▾ Resource Groups ▾ ★

🔔 admin

Create gateway

Select gateway type

Select host platform

Select service endpoint

Connect to gateway

Activate gateway

Configure local disks

Configure logging

Select gateway type

☒ **File gateway**
Store files as objects in Amazon S3, with a local cache for low-latency access to your most recently used data.

☐ **Volume gateway**
Block storage in Amazon S3 with point-in-time backups as Amazon EBS snapshots.

☐ **Tape gateway**
Back up your data to Amazon S3 and archive in Amazon S3 Glacier using your existing tape-based processes.

Cancel

Next

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☐ **VMware ESXi**

☐ **Microsoft Hyper-V 2012R2/2016**

☐ **Linux KVM**

☒ **Amazon EC2** [Launch instance](#)

▶ Set up instructions for Amazon EC2

Cancel

Previous

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Create the Storage Gateway VPC Endpoint

Create Endpoint Actions

Filter by tags and attributes or search by keyword

Name	Endpoint ID	VPC ID	Service name	Endpoint type	Status	Creation time	Network Interfaces
SGW	vpce-016650c59c...	vpc-01a349bca0f...	com.amazonaws.ap-southeast-...	Interface	available	May 25, 2020 at 2:57:19 PM UTC	3 Network Interfaces
Data-Syn-E...	vpce-04498f7e77b...	vpc-01a349bca0f...	com.amazonaws.ap-southeast-...	Interface	available	May 25, 2020 at 12:06:40 PM UTC	3 Network Interfaces

Details Subnets Security Groups Notifications Tags

Manage Subnets

Subnet ID	Availability Zone	IPv4 Addresses	IPv6 Addresses	Network Interface ID	Outpost ID
subnet-08c5c9b9531d599e0	ap-southeast-2a (apse2-az1)	10.0.1.143	-	eni-01d55d3f257cbfd57	-
subnet-00338656c118d4ef	ap-southeast-2b (apse2-az3)	10.0.3.138	-	eni-051bd8e2758bf25d4	-
subnet-010b96490ad29df87	ap-southeast-2c (apse2-az2)	10.0.2.66	-	eni-057f9a76168fb128f	-

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Create an Storage Gateway Appliance in the same VPC as the end point we created in previous step.

<input type="checkbox"/>	Data-Syn-Ap...	i-0d064d217187d4e...	m4.xlarge	ap-southeast-2a	running	2/2 checks ...	None	ec2-3-25-59-179.ap-so...	3.25.59.179	-
<input checked="" type="checkbox"/>	SGW	i-0d93ebd74dfb5dbd0	m4.xlarge	ap-southeast-2a	running	2/2 checks ...	None	-	-	-
<input type="checkbox"/>	Windows-SCT	i-0f3530b8ae65e7852	c5.large	ap-southeast-2a	running	2/2 checks ...	None	ec2-13-54-198-161.ap-...	13.54.198.161	-

Private DNS ip-10-0-1-232.ap-southeast-2.compute.internal

Private IPs 10.0.1.232

Secondary private IPs

VPC ID vpc-01a349bca0f45e462 (VPC-Test)

Subnet ID subnet-08c5c9b9531d599e0 (Test-1a)

Network interfaces eth0

Source/dest check True

T2/T3 Unlimited -

EBS-optimized True

Root device type ebs

Availability zone ap-southeast-2a

Security groups launch-wizard-30, view inbound rules, view outbound rules

Scheduled events No scheduled events

AMI ID aws-storage-gateway-1587630017 (ami-0585431c6db9956c1)

Platform -

IAM role

Key pair name

Owner

Launch time May 25, 2020 at 3:02:32 PM UTC (less than one hour)

Termination protection False

Inbound rules for SGW appliance

Inbound rules				
Inbound rules				
Type	Protocol	Port range	Source	Description
HTTP	TCP	80	0.0.0.0/0	-
SSH	TCP	22	0.0.0.0/0	-
SMB	TCP	445	0.0.0.0/0	-
NFS	TCP	2049	0.0.0.0/0	-

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

Number of instances

1

Launch into Auto Scaling Group

Purchasing option

☐ Request Spot instances

Network

vpc-01a349bca0f45e462 | VPC-Test

Create new VPC

Subnet

subnet-08c5c9b9531d599e0 | Test-1a | ap-southeast-1

Create new subnet

Auto-assign Public IP

Use subnet setting (Disable)

Placement group

☐ Add instance to placement group

Capacity Reservation

Open

Create new Capacity Reservation

IAM role

None

Create new IAM role

CPU options

☐ Specify CPU options

Shutdown behavior

Stop

Stop - Hibernate behavior

☐ Enable hibernation as an additional stop behavior

Enable termination protection

☐ Protect against accidental termination

Monitoring

☐ Enable CloudWatch detailed monitoring

EBS-optimized instance

☒ Launch as EBS-optimized instance

Tenancy

Shared - Run a shared hardware instance

Add 150GB for buffer

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

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	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/xvda	snap-0c8558e9e99cea7d1	80	General Purpose SSD (gp2)	240 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted
EBS	/dev/sdb	Search (case-insensit)	150	General Purpose SSD (gp2)	450 / 3000	N/A	<input type="checkbox"/>	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.

Open SMB and NFS ports

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 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:

Description:

Type ⁱ	Protocol ⁱ	Port Range ⁱ	Source ⁱ
<input type="text" value="SSH"/>	<input type="text" value="TCP"/>	<input type="text" value="22"/>	<input type="text" value="Anywhere 0.0.0.0/0, ::/0"/>
<input type="text" value="HTTP"/>	<input type="text" value="TCP"/>	<input type="text" value="80"/>	<input type="text" value="Anywhere 0.0.0.0/0, ::/0"/>
<input type="text" value="SMB"/>	<input type="text" value="TCP"/>	<input type="text" value="445"/>	<input type="text" value="Anywhere 0.0.0.0/0, ::/0"/>
<input type="text" value="NFS"/>	<input type="text" value="TCP"/>	<input type="text" value="2049"/>	<input type="text" value="Anywhere 0.0.0.0/0, ::/0"/>

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.

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

Step 7: Review Instance Launch

AMI Details



aws-storage-gateway-1587630017 - ami-0585431c6db9956c1

AWS Thinstaller

Root Device Type: ebs

Virtualization type: hvm

Instance Type

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
m4.xlarge	13	4	16	EBS only	Yes	High

Security Groups

Security group name

launch-wizard-30

Description

launch-wizard-30 created 2020-05-26T01:01:35.049+10:00

Type ⁱ	Protocol ⁱ	Port Range ⁱ	Source ⁱ	Description ⁱ
SSH	TCP	22	0.0.0.0/0	
SMB	TCP	445	0.0.0.0/0	
NFS	TCP	2049	0.0.0.0/0	

Instance Details

Storage

Tags

Storage Gateway EC2 Appliance(SGA) must have public IP

If we don't assign a public IP to the Storage Gateway Appliance, we will get stuck in the **updating state** in process of file share creation.

For connecting Storage Gateway Appliance with Storage Gateway endpoint, we need to assign the SGA to the default VPC security group which was allowed to send inbound traffic to the end point.

Select the right time zone

Create gateway

- Select gateway type
- Select host platform
- Select service endpoint
- Connect to gateway
- Activate gateway**
- Configure local disks
- Configure logging

Activate gateway

Activation securely associates your gateway with your AWS account. [Learn more](#)
Storage and data transfer pricing applies when you start using your gateway. [Learn more](#)

Gateway type	File storage
Endpoint type	VPC
VPC endpoint	10.0.1.143
AWS Region	Asia Pacific (Sydney)
Gateway time zone	GMT +10:00 Eastern Australia, Gua... ▼
Gateway name	SGW001



Add tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = DatabaseBackups.

Key	Value
(128 characters maximum)	(256 characters maximum)
<input type="text"/>	<input type="text"/>



(Up to 50 tags maximum)

[Cancel](#) [Activate gateway](#)

 Gateway is now active 

Configure local disks

Choose the local disks on your gateway VM to use for upload cache storage.
[Learn more](#)



Disk ID	Capacity	Allocated to
/dev/sdb	150 GiB	Cache ▼

[Exit](#) [Configure logging](#)

Edit SMB settings set up the password for Guest

✓ Successfully created gateway
Next step is to create a file share.

Create gatewayCreate file shareCreate file share

sgw-CC8D65A5

Name

SGW001

Details

Tags

Monitoring

Name

SGW001 (sgw-CC8D65A5)

Gateway type

File

Gateway time zone

GMT+10:00

Edit SMB settings

SMB security settings

Security level

☒ Enforce encryption

☐ Enforce signing

☐ Client negotiated

Learn more

Active Directory settings

Domain name

Join gateway to domain

Active Directory status

Detached

Guest access settings

Guest password

.....

Cancel

Save

Close

Create file share

Configure file share settings

Amazon S3 bucket name

devopssync

Access objects using

☐ Network File System (NFS)

☒ Server Message Block (SMB)

Gateway

SGW001 (sgw-CC8D65A5)

Audit logs

☒ Disable logging

☐ Create a new log group

☐ Use an existing log group

Learn more

Add tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = DatabaseBackups.

Key (128 characters maximum)	Value (256 characters maximum)	
Name	ElasticStorage	✕

(Up to 50 tags maximum)

Cancel

Next

Create file share

File share settings

Storage

Review

Review

Gateway	SGW001 (sgw-CC8D65A5)
Amazon S3 bucket name	devopssync
Storage class for new objects	<p>S3 Intelligent-Tiering</p> <p>⚠ Choose Intelligent-Tiering to optimize storage costs by automatically moving data to the most cost-effective storage access tier.</p> <p>Objects stored in the Intelligent-Tiering storage class can incur additional charges for overwriting, deleting, or retrieving. Consider how often these objects change, how long you plan to keep these objects, and how often you need to access them.</p> <p>Objects less than 128 KB are not eligible for autotiering in the Intelligent-Tiering storage class. These objects are stored in Standard.</p> <p>Learn more</p>
Access objects using	SMB
Guess MIME type	Yes
Give bucket owner full control	Yes
Enable requester pays	No
Access to your S3 bucket	Create a new IAM role. Learn more
Encryption	S3-Managed Keys (SSE-S3)
Audit logs	Disable logging

SMB share settings

Select authentication method Guest access

Export as ☒ Read-write ☐ Read-only

File/directory access controlled by ☐ Windows Access Control Lists. [Learn more](#) ☒ POSIX permissions

Close

Configure how files are stored in Amazon S3

Amazon S3 bucket name [devopssync](#)

Storage class for new objects S3 Intelligent-Tiering

⚠ Choose Intelligent-Tiering to optimize storage costs by automatically moving data to the most cost-effective storage access tier.

Objects stored in the Intelligent-Tiering storage class can incur additional charges for overwriting, deleting, or retrieving. Consider how often these objects change, how long you plan to keep these objects, and how often you need to access them.

Objects less than 128 KB are not eligible for autotiering in the Intelligent-Tiering storage class. These objects are stored in Standard.

[Learn more](#)

Object metadata ☒ Guess MIME type ☒ Give bucket owner full control. [Learn more](#) ☐ Enable requester pays

Access to your S3 bucket ☒ Create a new IAM role. [Learn more](#) ☐ Use an existing IAM role

Encryption ☒ S3-Managed Keys (SSE-S3) ☐ KMS-Managed Keys (SSE-KMS) [Learn more](#)

Cancel

Previous

Next

Create file share

Actions

Filter by file share,

File share ID	Type	S3 bucket	Gateway
share-268E785F	SMB	devopssync	SGW001

Details

Tags

File share ID

share-268E785F

Gateway

SGW001

S3 bucket

devopssync

Default storage class

S3 Intelligent-Tiering

Guess MIME type

Yes

Bucket owner full control

Yes

Requester pays

No

IAM role

StorageGatewayBucketAccessRolec88be3b9-1b1c-4759-9365-3ea39313ab

Encryption

S3-Managed Keys (SSE-S3)

Status

Available

Metrics

Cloudwatch

Audit logs

Not Enabled

Export path

/devopssync

Export as

Read-write

Authentication method

Guest access

Access control

POSIX permissions

Configure log group

To connect to this file share you can use the following example command.

On Microsoft Windows:

net use [WindowsDriveLetter]: \\10.0.1.232\devopssync /user:sgw-CC8D65A5\smbguest

Storage Gateway

Gateways

File shares

Volumes

Tape Library

Pools

Tapes

Successfully created file share share-268E785F.

Create file share

Actions

share-268E785F

File share ID	Status	Type	S3 bucket	Gateway
share-268E785F	Available	SMB	devopssync	SGW001

Details

Tags

File share ID

share-268E785F

Gateway

SGW001

S3 bucket

devopssync

Default storage class

S3 Intelligent-Tiering

Guess MIME type

Yes

Bucket owner full control

Yes

Requester pays

No

IAM role

StorageGatewayBucketAccessRolec88be3b9-1b1c-4759-9365-3ea39313ab

Encryption

S3-Managed Keys (SSE-S3)

Status

Available

Metrics

Cloudwatch

Audit logs

Not Enabled

Export path

/devopssync

Export as

Read-write

Authentication method

Guest access

Access control

POSIX permissions

Configure log group

To connect to this file share you can use the following example command.

On Microsoft Windows:

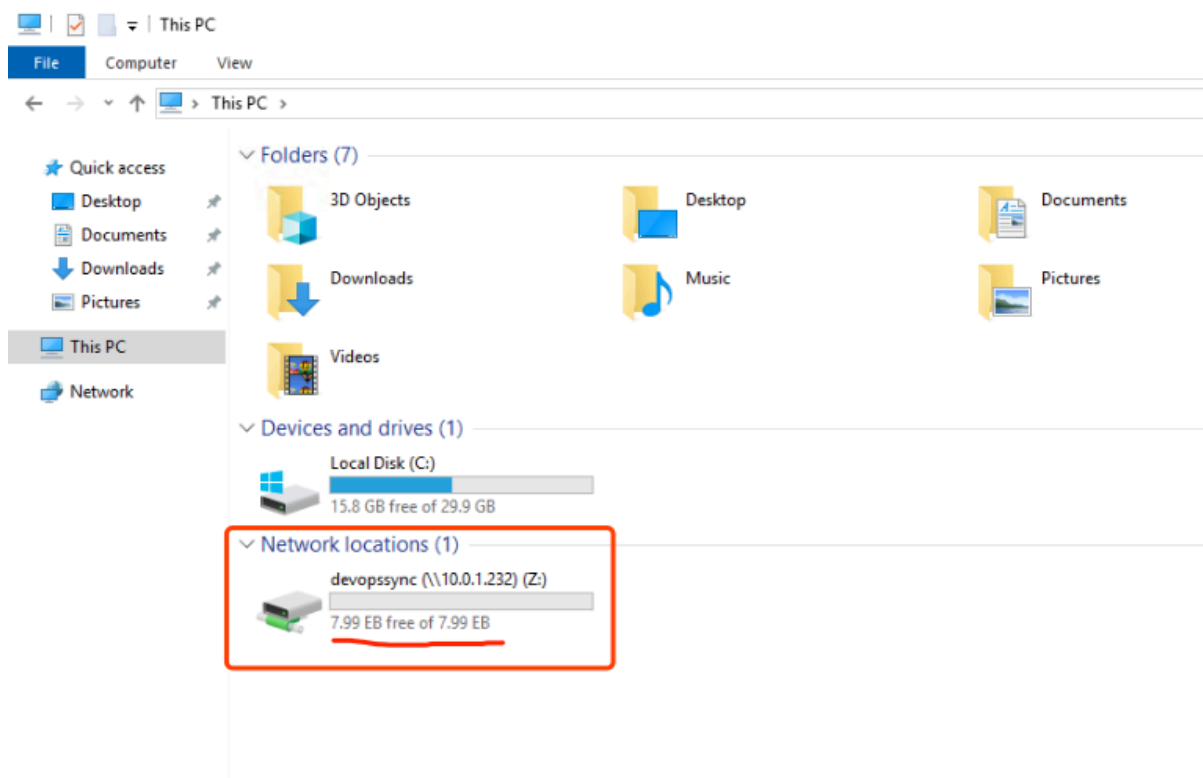
net use [WindowsDriveLetter]: \\10.0.1.232\devopssync /user:sgw-CC8D65A5\smbguest

Mount it in windows

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.17763.1217]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>net use Z: \\10.0.1.232\devopssync /user:sgw-CC8D65A5\smbguest
Enter the password for 'sgw-CC8D65A5\smbguest' to connect to '10.0.1.232':
The command completed successfully.

C:\Users\Administrator>
```



Now we have 8EB storage which we can call it unlimited storage.