Elastic Volume Service

Getting Started

 Issue
 03

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HUAWEI CLOUD COMPUTING TECHNOLOGIES CO., LTD.

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Huawei Cloud Computing Technologies Co., Ltd.

Address: Huawei Cloud Data Center Jiaoxinggong Road Qianzhong Avenue Gui'an New District Gui Zhou 550029 People's Republic of China

Website: https://www.huaweicloud.com/intl/en-us/

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1 Quickly Buying an EVS Disk and Using It on a Linux Server

Scenarios

You can use EVS disks as system disks or data disks. System disks are purchased together with servers, while data disks can be purchased together with servers or separately. If you buy data disks separately, you must attach and initialize them before they can be used.

This section describes how a non-shared data disk can be purchased on the EVS console, attached to a Linux server, and initialized on the server.

Operation Process

Procedure	Description		
Making Preparations	Sign up for a HUAWEI ID, enable Huawei Cloud services, and top up your account.Buy a cloud server.		
Step 1: Purchase an EVS Disk	Buy a data disk on the EVS console.		
Step 2: Attach the EVS Disk	Attach the data disk to a Linux server.		
Step 3: Initialize the EVS Disk	Initialize the data disk on the server.		

Making Preparations

- 1. Sign up with Huawei Cloud.
 - To sign up a HUAWEI ID and enable Huawei Cloud services, see Signing Up for a HUAWEI ID and Enabling Huawei Cloud Services.
 - To complete real-name authentication, see Individual Real-Name Authentication.

- 2. Top up your account.
 - To learn more about EVS pricing, see **Billing**.
 - To top up an account, see **Topping Up an Account**.
- 3. Ensure that a server has been purchased.
 - For details about how to buy an ECS and use it, see Purchasing and Using an ECS.
 - For details about how to buy a BMS and use it, see Purchasing and Using a BMS.

Step 1: Purchase an EVS Disk

Step 1 Go to the **Buy Disk** page.

_ _...

Step 2 Configure mandatory parameters based on the following table and retain the default settings for other parameters.

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Attach To Server Now Billing Mode Yearly/Monthly Yearly/Monthly Pay par usite Data Source (Optional) Create from ~ Disk Specifications High VO High VO • - 100 + Gite © Selected Specifications High VO High VO • - 100 + Gite © Selected Specifications High VO High VO • - 100 + Gite © Selected Specifications High VO High VO • - 100 - 100 + Gite © Selected Specifications High VO High VO 100 Gite JotPS limit 2,000, IOPS Just Limit 5,000 Automatic Backup Cloud Backup and Recovery (GRR) allows you to back up and restore the disk data to any backup point. To use CBR, buy a disk backup vaulf first. Vaults are containers that store Discups Vault configuration guide - • - • - • - • - • - • - • - • - • - • - • - • - • - • - • - • - • - • - • - •
Billing Mode Yearly/Monthly Pay-part-Les Data Source (Optional) Create from ~ Disk Specifications High I/O · · · O · · 100 + GB · O Selected Specifications High I/O · · · · O · · · 100 + GB · O Automatic Backup Cloud Backup and Recovery (CBR) allows you to back up and restore the disk data to any backup point. To use CBR, buy a disk backup vault first. Vaults are containers that store backups. Vault configuration guide Do not use Use existing Buy new · O Avanced Setting: If KMS encryption is used, what you use bayont the fee quada given by KMS will be balled. View pricing datais (KMS Key NamerID: evs/defa (S6755551-b037-4237-8064-e) Change Key Tag Its recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. View gredefined tags are Constructed.
Data Source (Optional) Create from ✓ Disk Specifications High I/O → ○ · - 100 + GIB ⊙ Selected Specifications High I/O 100 GIB 10PS limit: 2,600,10PS burgt limit: 5,000 Automatic Backup Cloud Backup and Recovery (CBR) allows you to back up and restore the disk data to any backup point. To use CBR, buy a disk backup vault first. Vaults are containers that store backups: Vault configuration guide Do not use Use existing Bare ◇ SCSI ◇ Encryption Tag Share ◇ SCSI ◇ Encryption © Advanced Setting If KMS encryption is used, what you use bayond he fee quota given by KMS will be billed. View pricing details KMS Key Name/ID: evs/defa (56755551-b387-4237-8064-e) Change Key Tag Its recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. View gredefined tags ©
Disk Specifications High VO Image: Control of the
Selected Specifications High VO 100 GiB IOPS limit: 2,600, IOPS burst limit: 5,000 Automatic Backup Cloud Backup and Recovery (CBR) allows you to back up and restore the disk data to any backup point. To use CBR, buy a disk backup vaulf first. Vaults are containers that store backups Vault configuration guide Do not use Use existing Buy new Ohnor Share SCSI Encryption Tag Its recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. View greedefined tags. Q
Automatic Backup Cloud Backup and Recovery (CBR) allows you to back up and restore the disk data to any backup point. To use CBR, buy a disk backup vault first. Vaults are containers that store backups. Vault configuration guide Do not use Use existing Buy new Image: Control to the con
More Share Share Share Tag Share Share Share Share Encryption Advanced Settings If KMS encryption is used, what you use beyond the free quota given by KMS will be billed. View pricing details KMS Key Name/ID: evs/defa (5675531-5387-4237-8064+e) Change Key Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. View predefined tags. Q
Advanced Settings If KMS encryption is used, what you use beyond the free quota given by KMS will be billed. View pricing details Advanced Settings If KMS encryption is used, what you use beyond the free quota given by KMS will be billed. View pricing details KMS Key Name/ID: evs/defa (56755531-b387-4237-8064-e) Change Key Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. View predefined tags. (Address of the same tag to different cloud resources. View predefined tags.)
Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. <u>View predefined tags</u> Q
Tag key Tag value You can add 20 more tags.
Enterprise Project Select an enterprise project-
Disk Name If you buy multiple disks at a time, the value you entered will be used as the prefix of disk names, and one disk name will be composed of this value and a four-digit number. For example, if you enteremy_disk and set the quantity to 2, the disk names will be my_disk-0001 and my_disk-0002.
Quantity You can create 396 more disks. You can create a maximum of 100 disks at a time. Increase Quota.

Paramete r	Example Value	Description
Region	CN South- Guangzhou	Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.
AZ	AZ1	You can only attach EVS disks to servers in the same AZ. After a disk is purchased, its AZ cannot be changed.
	Later	You can attach the disk after it is purchased.
Billing Mode	Pay-per-use	To learn more about EVS pricing, see Billing .
Data Source	Do not configure it.	If you want to create an empty data disk, do not configure a data source.
Disk Type	Ultra-high I/O	To learn more about disk types, see Disk Types and Performance.
Capacity	100 GiB	Enter a disk capacity.
Automatic Backup	Do not use	Automatic backup allows you to back up the disk data to ensure your data security and integrity.
More > Share	Do not selection this option.	A non-shared disk can only be attached to one server. The sharing attribute of a disk cannot be changed after the disk has been purchased.
More > SCSI	Select this option.	A SCSI disk allows the server OS to directly access the underlying storage media and send SCSI commands to the disk. The device type of a disk cannot be changed after the disk has been purchased.
More > Encryption	Select this option and use the default key.	EVS uses the industry-standard XTS-AES-256 cryptographic algorithm and keys to encrypt EVS disks. The encryption attribute of a disk cannot be changed after the disk has been purchased.
Disk Name	volume-0001	Enter a disk name.
Quantity	1	The preset disk quantity is 1 , which means only one disk is created.

Step 3 Click Next.

Step 4 Go back to the disk list page. When the status of the **volume-0001** disk changes to **In-use**, the disk is successfully created.

----End

Step 2: Attach the EVS Disk

EVS disks cannot be used alone. You need to attach them to cloud servers first.

- **Step 1** In the disk list, find the **volume-0001** disk and click **Attach** in the **Operation** column.
- **Step 2** Attach the **volume-0001** disk to your desired server. Ensure that the server and disk are in the same AZ.

Attach Disk	~
A disk can only be attached to a server in the same region and AZ. Learn more After the disk is attached to a server, log in to the server, format the new partition of the disk, and mount the partition. A bootable disk can only be attached to a server and used as a system disk if the server and the disk's original server were created from the same image. Before attaching a shared SCSI disk, ensure that all the ECSs you want to attach the disk are in the same ECS group.	
Disk: volume-0001 AZ3 VBD Non-shareable ECSs BMSs Name Q	Q
Name Function ⑦ Billing Mode ⑦ Status ⑦ Image Private IP EIP AZ	
Pay-per-use 🧿 . AZ3	

Step 3 Click **OK** to go back to the disk list page. When the status of the **volume-0001** disk changes to **In-use**, the disk is successfully attached.

----End

Step 3: Initialize the EVS Disk

After attaching the **volume-0001** disk, you need to initialize it before it can be used. The following example uses fdisk to format the disk into two primary MBR partitions, with one 40 GiB and the other 60 GiB.

Step 1 Log in to the server.

For how to log in to an ECS, see Logging In to an ECS.

For how to log in to a BMS, see Logging In to a BMS.

- Step 2 Create two primary partitions, /dev/vdb1 and /dev/vdb2 for data disk /dev/vdb.
 - 1. Check that the capacity of the /dev/vdb data disk is 100 GiB.

lsblk	
[root@ecs-cei	ntos76 ~]# lsblk
NAME MAJ:I	MIN RM SIZE RO TYPE MOUNTPOINT
vda 253:0	0 40G 0 disk
-vda1 253:1	0 1G 0 part /boot
^L vda2 253:2	0 39G 0 part /
vdb 253:16	0 100G 0 disk

2. Create the first primary partition /dev/vdb1.

```
fdisk /dev/vdb
```

n

р

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NOTE

- Entering **p** for **Partition type** creates a primary partition, and entering **e** creates an extended partition.
- Value **1** is the primary partition number.

[root@ecs-test-0001 ~]# fdisk /dev/vdb Welcome to fdisk (util-linux 2.23.2).

Changes will remain in memory only, until you decide to write them. Be careful before using the write command.

Device does not contain a recognized partition table Building a new DOS disklabel with disk identifier 0x38717fc1.

Command (m for help): n Partition type: p primary (0 primary, 0 extended, 4 free) e extended Select (default p): p Partition number (1-4, default 1): 1

Set **First sector** to **2048** and **Last sector** to **83886079** for partition /dev/vdb1 (40 GiB).

First sector (2048-209715199, default 2048): 2048 Last sector, +sectors or +size{K,M,G} (2048-209715199, default 209715199):83886079 Partition 1 of type Linux and of size 40 GB is set

- 3. Create the second primary partition /dev/vdb2.
 - n
 - р

۳ 2

Command (m for help): n Partition type: p primary (0 primary, 0 extended, 4 free) e extended Select (default p): p Partition number (1-4, default 2): 2

Set the **First sector** to **83886080** and **Last sector** to **209715199** for partition /dev/vdb2.

First sector (83886080-209715199, default 83886080): 83886080 Last sector, +sectors or +size{K,M,G} (83886080-209715199, default 209715199):209715199 Partition 2 of type Linux and of size 60 GB is set

NOTE

First and last sectors of the partitions in this example are calculated as follows:

Sector value = Capacity/512 bytes, 1 GiB = 1073741824 bytes

First sector (2048-209715199, default 2048) shows the sector value range of the /dev/vdb data disk (100 GiB).
 First sector = 2048

Last sector = Sector value - 1 = (100 x 1073741824/512) - 1 = 209715200 - 1=209715199

- For the first partition /dev/vdb1 (40 GiB) of the /dev/vdb data disk:
 First sector = 2048 (The start sector of the /dev/vdb data disk is used.)
 Last sector = Sector value 1 = (40 x 1073741824/512) 1 = 83886079
- For the second partition /dev/vdb2 (60 GiB) of the /dev/vdb data disk:
 First sector = Last sector of /dev/vdb1 + 1 = 83886079 + 1 = 83886080
 Last sector = First sector + Sector value 1 = 83886080 + (60 x 1073741824/512) 1 = 209715199

Step 3 Check the sizes and partition styles of the new partitions.

1. Check whether the partitioning is successful.

p Command (m for help): p

```
Disk /dev/vdb: 107.4 GB, 107374182400 bytes, 209715200 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk label type: dos
Disk identifier: 0x994727e5
```

Device Boot	Start	End	Blocks	ld	Syst	em	
/dev/vdb1	2048	83886079	41942	016	83	Liı	nux
/dev/vdb2	83886080	20971519	99 629	9145	560	83	Linux

Command (m for help):

NOTE

In case that you want to discard the changes made before, you can exit fdisk by entering \bf{q} and press **Enter**. Then, re-create the partitions by referring to step 1.

2. Write the changes to the partition table and synchronize the new partition table to the OS.

w

partprobe

NOTE

If error message **-bash: partprobe: command not found** is returned, the system cannot identify the command. In this case, run **yum install -y parted** to install the command. Then run the command again.

3. Confirm that the partition style is MBR.

parted /dev/vdb

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If Partition Table: msdos is returned, the partition style is MBR.

[root@ecs-test-0001 ~]# parted /dev/vdb GNU Parted 3.1 Using /dev/vdb Welcome to GNU Parted! Type 'help' to view a list of commands. (parted) p Model: Virtio Block Device (virtblk) Disk /dev/vdb: 107GB Sector size (logical/physical): 512B/512B Partition Table: msdos Disk Flags: Number Start End Size Type File system Flags 1049kB 42.9GB 42.9GB primary 1 42.9GB 107GB 64.4GB primary 2 (parted) q [root@ecs-test-0001 ~]#

Enter **q** and press **Enter** to exit parted.

- **Step 4** Create ext4 file systems for partitions **/dev/vdb1** (40 GiB) and **/dev/vdb2** (60 GiB).
 - mkfs -t ext4 /dev/vdb1

mkfs -t ext4 /dev/vdb2

NOTE

It takes some time to create file systems. Do not exit before the system returns the following information:

[root@ecs-test-0001 ~]# mkfs -t ext4 /dev/vdb1 mke2fs 1.42.9 (28-Dec-2013) Filesystem label= OS type: Linux Block size=4096 (log=2) Fragment size=4096 (log=2) Stride=0 blocks, Stripe width=0 blocks 2621440 inodes, 10485504 blocks 524275 blocks (5.00%) reserved for the super user First data block=0 Maximum filesystem blocks=2157969408 320 block groups 32768 blocks per group, 32768 fragments per group 8192 inodes per group Superblock backups stored on blocks: 32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208, 4096000, 7962624

Allocating group tables: done Writing inode tables: done Creating journal (32768 blocks): done Writing superblocks and filesystem accounting information: done

Check whether the file system format is ext4.

parted /dev/vdb

р

[root@ecs-test-0001 ~]# parted /dev/vdb GNU Parted 3.1 Using /dev/vdb Welcome to GNU Parted! Type 'help' to view a list of commands. (parted) p Model: Virtio Block Device (virtblk) Disk /dev/vdb: 107GB Sector size (logical/physical): 512B/512B Partition Table: msdos Disk Flags: Number Start End Size Type File system Flags 1 1049kB 42.9GB 42.9GB primary ext4 2 42.9GB 107GB 64.4GB primary ext4 (parted) q [root@ecs-test-0001 ~]#

Enter **q** and press **Enter** to exit parted.

Step 5 Create directories (mount points) and mount the new partitions on the created mount points.

mkdir -p /mnt/sdc

mkdir -p /mnt/sdd

mount /dev/vdb1 /mnt/sdc

mount /dev/vdb2 /mnt/sdd

lsblk

View the mount results.

[root@ecs-test-0001 ~]# lsblk NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT vda 253:0 0 40G 0 disk +vda1 253:1 0 40G 0 part / vdb 253:16 0 100G 0 disk +vdb1 253:17 0 40G 0 part /mnt/sdc +vdb2 253:18 0 60G 0 part /mnt/sdd

You should now see that partitions **/dev/vdb1** and **/dev/vdb2** are mounted on **/mnt/sdc** and **/mnt/sdd**.

Step 6 Use the partition UUIDs to configure auto mount at startup.

NOTE

- Mounts become invalid after a system reboot. You can configure auto mount at startup by adding information of the new partition into the **/etc/fstab** file.
- You are advised not to use device names to identify disks in the /etc/fstab file because device names are assigned dynamically and may change (for example, from /dev/vdb1 to /dev/vdb2) after a stop or start. This can even prevent your server from booting up.
- UUIDs are the unique character strings for identifying partitions in Linux.
- This operation will not affect the existing data on the ECS.
- 1. Query the partition UUIDs.

blkid /dev/vdb1

blkid /dev/vdb2

[root@ecs-test-0001 ~]# blkid /dev/vdb1 /dev/vdb1: UUID="0b3040e2-1367-4abb-841d-ddb0b92693df" TYPE="ext4" /dev/vdb2: UUID="0d6769k2-1745-9dsf-453d-hgd0b34267dj" TYPE="ext4"

The UUIDs of partitions /dev/vdb1 and /dev/vdb2 are 0b3040e2-1367-4abb-841d-ddb0b92693df and 0d6769k2-1745-9dsf-453d-hgd0b34267dj.

2. Configure auto mount at startup.

vi /etc/fstab

Press **i** to enter the editing mode, move the cursor to the end of the file, press **Enter**, and add the following content:

UUID=0b3040e2-1367-4abb-841d-ddb0b92693df /mnt/sdc ext4 defaults 0 2 UUID=0d6769k2-1745-9dsf-453d-hgd0b34267dj /mnt/sdd ext4 defaults 0 2

Press **Esc**, enter **:wq**, and press **Enter** to save the settings and exit the vi editor.

 Table 1-1
 Parameter description

Example Value	Description
UUID=0b3040e2-1367-4abb-841d- ddb0b92693df	The UUID of the partition.
/mnt/sdc	The mount point of the partition.
ext4	The file system format of the partition.
defaults	The partition mount option. Normally, this parameter is set to defaults .
0	 The Linux dump backup option. 0: Linux dump backup is not used. Usually, dump backup is not used, and you can set this parameter to 0. 1: Linux dump backup is used.
2	 The fsck option, which means whether to use fsck to check the disk during startup. 2: The check starts from the partitions whose mount points are non-root directories. / is the root directory. 1: The check starts from the partitions whose mount points are root directories. 0: The fsck option is not used.

Step 7 Verify that auto mount takes effect.

umount /dev/vdb1

umount /dev/vdb2

mount -a

The system reloads all the content in the **/etc/fstab** file.

Query file system mounting information.

mount | grep /mnt/sdc

mount | grep /mnt/sdd

If information similar to the following is displayed, auto mount has taken effect:

root@ecs-test-0001 ~]# mount | grep /mnt/sdc /dev/vdb1 on /mnt/sdc type ext4 (rw,relatime,data=ordered) root@ecs-test-0001 ~]# mount | grep /mnt/sdd /dev/vdb2 on /mnt/sdd type ext4 (rw,relatime,data=ordered)

----End

You can use the disk after it is initialized.

2 Quickly Buying an EVS Disk and Using It on a Windows Server

Scenarios

You can use EVS disks as system disks or data disks. System disks are purchased together with servers, while data disks can be purchased together with servers or separately. If you buy data disks separately, you must attach and initialize them before they can be used.

This section describes how a non-shared data disk can be purchased on the EVS console, attached to a Windows server, and initialized on the server.

Operation Process

Procedure	Description	
Making Preparations	Sign up for a HUAWEI ID, enable Huawei Cloud services, and top up your account.	
Step 1: Purchase an EVS Disk	Buy a data disk on the EVS console.	
Step 2: Attach the EVS Disk	Attach the data disk to a Windows server.	
Step 3: Initialize the EVS Disk	Initialize the data disk on the server.	

Making Preparations

- 1. Sign up with Huawei Cloud.
 - To sign up a HUAWEI ID and enable Huawei Cloud services, see Signing Up for a HUAWEI ID and Enabling Huawei Cloud Services.
 - To complete real-name authentication, see **Individual Real-Name Authentication**.
- 2. Top up your account.

- a. To learn more about EVS pricing, see **Billing**.
- b. To top up an account, see **Topping Up an Account**.
- 3. Ensure that a server has been purchased.
 - For details about how to buy an ECS and use it, see Purchasing and Using an ECS.
 - For details about how to buy a BMS and use it, see Purchasing and Using a BMS.

Step 1: Purchase an EVS Disk

- **Step 1** Go to the **Buy Disk** page.
- **Step 2** Configure mandatory parameters based on the following table and retain the default settings for other parameters.

Duy Disk				
Region	Regions are geographic areas isolated from each other. Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.			
AZ ③	AZ3 (1) AZ7 (1) AZ2 AZ1 There are 1 servers in the current AZ. Select the AZ where your server resides. The AZ cannot be changed after the disk is created. AZ4			
Attach To Server Now Later				
Billing Mode Yearly/Monthly Pay-per-use ③				
Data Source (Optional)	Create from ~			
Disk Specifications	High I/O ✓ ⊘ − 100 + GIB ⊙			
Selected Specifications High I/O 100 GB IOPS limit: 2,600, IOPS burst limit: 5,000				
Automatic Backup	Cloud Backup and Recovery (CBR) allows you to back up and restore the disk data to any backup point. To use CBR, buy a disk backup vault first. Vaults are containers that store backups. Vault configuration guide Do not use Use existing Buy new Image: Control of the control of			
More ^	Share SCSI Encryption Tag			
Advanced Settings	Share 🕥 💟 SCSI 😳 💆 Encryption 🕥 If KMS encryption is used, what you use beyond the free quota given by KMS will be billed. View pricing details KMS Key Name/ID: evs/defa (5675553f-b387-4237-8064-e) Change Key			
Tag	It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. <u>View oredefined tags</u> Q Tag key Tag value You can add 20 more tags.			
Enterprise Project	-Select an enterprise project- V Q Create Enterprise Project			
Disk Name	volume-001 If you buy multiple disks at a time, the value you entered will be used as the prefix of disk names, and one disk name will be composed of this value and a four-digit number. For example, if you enter my_disk and set the quantity to 2, the disk names will be my_disk-0001 and my_disk-0002.			
Quantity	- 1 + You can create 396 more disks. You can create a maximum of 100 disks at a time. Increase Quota.			

Paramete r	Example Value	Description
Region	CN South- Guangzhou	Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.

Paramete r	Example Value	Description	
AZ AZ1		You can only attach EVS disks to servers in the same AZ. After a disk is purchased, its AZ cannot be changed.	
	Later	You can attach the disk after it is purchased.	
Billing Mode	Pay-per-use	To learn more about EVS pricing, see Billing .	
Data Source	Do not configure it.	If you want to create an empty data disk, do not configure a data source.	
Disk Type	Ultra-high I/O	To learn more about disk types, see Disk Types and Performance.	
Capacity	100 GiB	Enter a disk capacity.	
Automatic Backup	Do not use	Automatic backup allows you to back up the disk data to ensure your data security and integrity.	
More > Share	Do not selection this option.	A non-shared disk can only be attached to one server. The sharing attribute of a disk cannot be changed after the disk has been purchased.	
More > SCSI	Select this option.	A SCSI disk allows the server OS to directly access the underlying storage media and send SCSI commands to the disk. The device type of a disk cannot be changed after the disk has been purchased.	
More > Encryption	Select this option and use the default key.	EVS uses the industry-standard XTS-AES-256 cryptographic algorithm and keys to encrypt EVS disks. The encryption attribute of a disk cannot be changed after the disk has been purchased.	
Disk Name	volume-0001	Enter a disk name.	
Quantity	1	The preset disk quantity is 1 , which means only one disk is created.	

Step 3 Click Next.

Step 4 Go back to the disk list page. When the status of the **volume-0001** disk changes to **In-use**, the disk is successfully created.

----End

Step 2: Attach the EVS Disk

EVS disks cannot be used alone. You need to attach them to cloud servers first. In the following example, the **volume-0001** disk is attached.

- **Step 1** In the disk list, find the **volume-0001** disk and click **Attach** in the **Operation** column.
- **Step 2** Attach the **volume-0001** disk to your desired server. Ensure that the server and disk are in the same AZ.

× Attach Disk A disk can only be attached to a server in the same region and AZ. Learn mor After the disk is attached to a server, log in to the server, format the new partition of the disk, and mount the partition. A bootable disk can only be attached to a server and used as a system disk if the server and the disk's original server were created from the same image Before attaching a shared SCSI disk, ensure that all the ECSs you want to attach the disk are in the same ECS group. Disk: volume-0001 | | AZ3 | VBD | Non-shareable BMSs a [a] Name \sim Function (?) Billing Mode 🝸 | Status 🍸 Name Image Private IP ... EIP AZ AZ3 Pay-per-use θ

Step 3 Click **OK** to go back to the disk list page. When the status of the **volume-0001** disk changes to **In-use**, the disk is successfully attached.

----End

Step 3: Initialize the EVS Disk

After attaching the **volume-0001** disk, you need to initialize it before it can be used. In the following example, the disk is formatted into a 100 GiB GPT partition with the NTFS file system.

Step 1 Log in to the server.

For how to log in to an ECS, see Logging In to an ECS.

For how to log in to a BMS, see Logging In to a BMS.

Step 2 On the desktop of the server, click the start icon in the lower left corner.

The Windows Server window is displayed.

Step 3 Click Server Manager.

The Server Manager window is displayed.

Server Ma	anager 🕨 Dasł	nboard	- (🕄 🚩 Manage <u>Tools</u> View Help
E Dashboard	WELCOME TO SER	/ER MANAGER		Component Services Computer Management Defragment and Optimize Drives
Local Server All Servers File and Storage Services	QUICK START	1 Con	figure this local server	Disk Cleanup Event Viewer iSCSI Initiator Local Security Policy
	WHAT'S NEW	2 A 3 A 4 C	dd roles and features dd other servers to manage reate a server group	Microsoft Azure Services ODBC Data Sources (32-bit) ODBC Data Sources (64-bit) Performance Monitor Print Management Resource Monitor
	LEARN MORE	R GROUPS	Unnect this server to cloud se	V Services System Configuration System Information Task Scheduler Windows Firewall with Advanced Security Windows Firewall with Advanced Security
	File and St Services Manageabil Events Performance BPA results	ips: 1 Servers tot orage 1 ity	 Local Server Manageability Events Services Performance BPA results 	Windows PowerShell Windows PowerShell (x86) Windows PowerShell ISE Windows PowerShell ISE (x86) Windows Server Backup
			C/1C/2010 4 27	DM .

Figure 2-1 Server Manager

Step 4 In the upper right corner, choose **Tools** > **Computer Management**.

Figure 2-2 Computer Management

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Actions
Computer Management (L More Actions

Step 5 Choose **Storage** > **Disk Management**.

Disks are displayed in the right pane. If there is a disk that is not initialized, the system will prompt you with the **Initialize Disk** dialog box.

In the **Initialize Disk** dialog box, the to-be-initialized disk is selected. Select a partition style and click **OK**. In this example, **GPT (GUID Partition Table)** is selected.

NOTICE

The maximum disk size supported by MBR is 2 TiB, and that supported by GPT is 18 EiB. Because an EVS data disk currently supports up to 32 TiB, use GPT if your disk size is greater than 2 TiB.

If the partition style of an in-use disk is changed, all data on the disk will be lost, so take care to select an appropriate partition style when initializing the disk. If you must change the partition style to GPT, it is recommended that you back up the disk data before the change.

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🜆 Computer Management (Local	Volume	Layout	Type	File System	Status	C	Actions
 W System Tools Task Scheduler 	- (C:) System Reserved	Simple Simple	Basic Basic	NTFS NTFS	Healthy (Boot, Page File, Crash Dump, Primary Partition) Healthy (System, Active, Primary Partition)	39 50	Disk Management
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> Ň Performance 🛃 Device Manager		nitialize Di	sk		×		
 Storage Windows Server Backur 		You must in	itialize a	disk before Lo	igical Disk Manager can access it.		
📅 Disk Management		Select disk:	s:				
	<	Use the foll	owing pa Anator P	artition style for	the selected disks:	>	
-	Disk 0 Basic 40.00 GB Online	GPT (G Note: The (Windows.	iUID Par GPT par	tition Table) tition style is no	t recognized by all previous versions of many Part		
	*O Disk 1 Unknown 100.00 GB Not Initialized	100.00 GB Unallocat	ed				
< >>	Unallocated	^o rimary pa	rtition				

Figure 2-3 Disk list

Step 6 In the Unallocated area of Disk 1, right-click the blank area and choose New Simple Volume.

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🜆 Computer Management (Local	Volume	Layout	Type I	File System	Status		C	Actions		
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	= Disk 0					New Simple Volume				
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					1	New RAID-5 Volume				
	Disk 1 Basic	Disk 1 Basic Properties								
	99.88 GB	99.88 GB				Help	-1			
	Unline	Unallocate	edí			///////////////////////////////////////				
							4			
< >	Unallocated F	rimary par	tition							

Figure 2-4 Computer Management

The New Simple Volume Wizard window is displayed.



Figure 2-5 New Simple Volume Wizard

Step 7 Click Next to go to the Specify Volume Size page.

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Ecomputer Management (Local	Volume Layout Type File System Status	С	Actions
 System Tools Task Scheduler 	New Simple Volume Wizard X Partitio	n) 39 50	Disk Management 🔹
> 🚺 Event Viewer	Specify Volume Size	1	More Actions
> 👸 Shared Folders	Choose a volume size that is between the maximum and minimum sizes.		
> We Local Users and Groups > (N) Performance			
🛃 Device Manager			
Storage Windows Server Backur	Maximum disk space in MB: 102270		
T Disk Management	Minimum diek enang in MB: 8		
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Figure 2-6 Specify Volume Size

Step 8 Specify the volume size and click **Next**. The system selects the maximum volume size by default. You can specify the volume size as required. In this example, the default setting is used.

Figure 2-7 Assign Drive Letter or Path

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🌆 Computer Management (Local	Volume	Layout Type File System Status	_	C	Actions
V 🙀 System Tools	New Simple	Volume Wizard X	Partition)	39	Disk Management
> 🛃 Event Viewer	Assign D	rive Letter or Path		, si	More Actions
> 👸 Shared Folders	For ea	sier access, you can assign a drive letter or drive path to your partition.			
> A Local Users and Groups			-		
L Device Manager					
V 🚰 Storage		ing the following drive letter:			
T Disk Management	O Ma	upt in the following ampty NTES folder:			
> 📓 Services and Applications		Browse			
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	Basic	\$ <i></i>	///////////////////////////////////////		
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	Online	Unallocated			
< >	Unallocated	Primary partition			

Step 9 Assign a drive letter or path to your partition and click **Next**. The system assigns drive letter D by default. In this example, the default setting is used.

Figure 2-8 Format Partition



Step 10 Specify format settings and click **Next**. The system selects the NTFS file system by default. You can specify a file system type as required. In this example, the default setting is used.

Figure 2-9 Completing the New Simple Volume Wizard



NOTICE

The partition sizes supported by file systems vary. Choose an appropriate file system format based on your service requirements.

Step 11 Click Finish.

Wait for the initialization to complete. When the volume status changes to **Healthy**, the initialization has succeeded.

Figure 2-10 Disk initialized

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Tysk Scheduler	(C:) New Volume (Dr)	Simple Basic NTFS	Healthy (Boot, Page File, Crash Dump, Primary Partition)	35	Disk Management
 I ask Scheduler I ask Scheduler S Shared Folders S Shared Folders Local Users and Groups Performance Device Manager Storage Windows Server Backuper Disk Management Services and Applications 	 New Volume (D: System Reserved) 	Simple Basic NTFS	Healthy (Primary Partition) Healthy (System, Active, Primary Partition)	50	More Actions
	<	>			
	Disk 0 Basic 40.00 GB Online	System Reserved 500 MB NTFS Healthy (System, Active, Pr	(C.) 39.51 GB NTFS ir Healthy (Boot, Page File, Crash Dump, Primary Part		
	Disk 1 Basic 99.88 GB Online	New Volume (D:) 99.87 GB NTFS Healthy (Primary Partition)			
< >>	Unallocated I	Primary partition			

Step 12 After the volume is created, click **I** on the task bar and check whether a new volume appears in the File Explorer. In this example, New Volume (D:) is the new volume.

If New Volume (D:) appears, the disk is successfully initialized and no further action is required.

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Desktop Documents Downloads Music Pictures Videos	Local Disk (C:)	New Volume (Dr.) 99.7 GB free of 99.8 GB		
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----End

You can use the disk after it is initialized.