Scalable File Service Turbo

Troubleshooting

Issue 01

Date 2025-07-22





Copyright © Huawei Cloud Computing Technologies Co., Ltd. 2025. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Cloud Computing Technologies Co., Ltd.

Trademarks and Permissions

HUAWEI and other Huawei trademarks are the property of Huawei Technologies Co., Ltd. All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei Cloud and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, quarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

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/

i

Contents

1 Mounting a File System Timed Out	1
2 Mounting a File System Failed	2
3 Creating an SFS Turbo File System Failed	. 4
4 File System Automatically Unmounted	. 6
5 A Client Server Failed to Access a File System	7
6 Abnormal File System Status	8
7 Data Fails to Be Written into a File System Mounted to ECSs Running Different Types of Operating Systems	
8 Writing to a File System Failed	11
9 Error Message "wrong fs type, bad option" Was Displayed During File System Mounting	
10 Accessing the Shared Folder in Windows Failed	15
11 Change History	21

Mounting a File System Timed Out

Symptom

When a file system was mounted to a cloud server using the **mount** command, message **timed out** was returned.

Possible Causes

- Cause 1: The network is not stable.
- Cause 2: The network connection is abnormal.

Fault Diagnosis

Rectify network faults and mount the file system again.

Solution

 Cause 1 and Cause 2: The network is not stable or the network connection is abnormal.

Remount the file system after the network issue is addressed.

- If the mount is successful, no further action is required.
- If the mount fails, contact technical support.

2 Mounting a File System Failed

Symptom

When a file system was mounted to a cloud server using the **mount** command, message **access denied** was displayed on the server.

Possible Causes

- Cause 1: The file system has been deleted.
- Cause 2: The server and the file system are not in the same VPC.
- Cause 3: The shared path specified in the **mount** command is incorrect.
- Cause 5: The SMB file system is added to an AD domain, and guest mount and anonymous mount are not allowed.

Fault Diagnosis

Take troubleshooting measures based on possible causes.

Solution

- Cause 1: The file system has been deleted.
 - Log in to the console and check whether the file system has been deleted.
 - If yes, create a file system or select an existing file system to mount. Ensure that the server and the file system are in the same VPC.
 - If no, go to Cause 2.
- Cause 2: The server and the file system are not in the same VPC.
 Log in to the console and check whether the server and the file system are in the same VPC.
 - If yes, go to Cause 3.
 - If no, select a file system that is in the same VPC as the server.
- Cause 3: The shared path specified in the mount command is incorrect.
 - a. Log in to the console and check whether the shared path specified in the **mount** command is the same as that shown on the console.
 - b. If the shared path specified in the **mount** command is incorrect, correct it and run the command again.

• Cause 5: The SMB file system is added to an AD domain, and guest mount and anonymous mount are not allowed.

Use the username and password in the AD domain to mount the file system.

3 Creating an SFS Turbo File System Failed

Symptom

An SFS Turbo file system failed to be created.

Fault Diagnosis

Possible causes are described in order of how likely they are to occur.

If the fault persists after you have ruled out one cause, move on to the next one.

Figure 3-1 Fault diagnosis

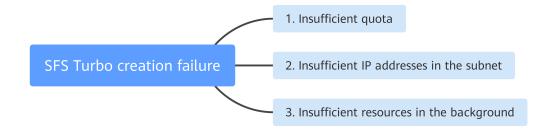


Table 3-1 Fault diagnosis

Possible Cause	Solution
Insufficient quota	The file system quota has been used up. to increase the quota.
Insufficient IP addresses in the subnet	Change the subnet or free up IP addresses in the subnet.
Insufficient resources in the background	Background resources, such as compute and storage resources, have reached the upper limit. for technical consultation.

Submitting a Service Ticket

If the problem persists, submit a service ticket.

4 File System Automatically Unmounted

Symptom

File system was automatically unmounted and needs to be mounted again.

Possible Causes

Auto mount is not configured. The file system is automatically unmounted after the client server is restarted.

Solution

Configure auto mount for the client server so that the file system will be automatically mounted to the server after the server restarts. For details, see **Automatically Mounting a File System**.

Submitting a Service Ticket

If the problem persists, **submit a service ticket**.

5 A Client Server Failed to Access a File System

Symptom

Access from a client server to a file system was denied. All services on the server were abnormal.

Possible Causes

The file system fails to be mounted to the server after being forcibly unmounted.

Fault Diagnosis

Take troubleshooting measures based on possible causes.

Solution

The file system fails to be mounted to the server after being forcibly unmounted.

- 1. Restart the server.
- 2. Check whether the file system can be properly mounted and accessed.
 - If yes, no further action is required.
 - If no, contact technical support.

6 Abnormal File System Status

The following table describes the abnormal status of a file system and how to restore the file system to normal.

Table 6-1 Measures for handling abnormal file system status

Abnormal Status	Suggestion
Expansion error	When the file system is in the Expansion error status, it can automatically recover to the available status. If the status cannot be restored to available, contact the administrator.

Data Fails to Be Written into a File System Mounted to ECSs Running Different Types of Operating Systems

A file system can be mounted to a Linux ECS and a Windows ECS. However, data may fail to be written to the file system.

Symptom

If a file system is mounted to a Linux and a Windows, on the Windows, you cannot write data to the files created by the Linux.

Possible Causes

A shared NFS file system belongs to the root user and cannot be modified. The write permission is granted to a user only when both the values of UID and GID of the user are **0**. You can check your UID using Windows commands. If the value of UID is, for example, **-2**, you do not have the write permission.

Fault Diagnosis

To address this problem, modify the registry to change both UID and GID to **0** for NFS access requests from Windows.

Solution

- **Step 1** Choose **Start** > **Run** and enter **regedit** to open the registry.
- Step 2 Enter the HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\ClientForNFS \CurrentVersion\Default directory. Figure 7-1 shows an example of the directory.

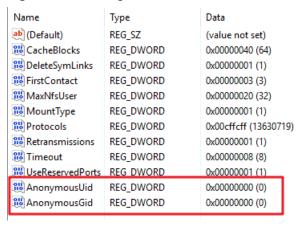
Registry Editor File Edit View Favorites Help ⊿ ₁톨 Computer Name Туре Data HKEY_CLASSES_ROOT ab (Default) REG_SZ (value not set) ▶ ■ HKEY_CURRENT_USER REG_DWORD 88 CacheBlocks 0x00000040 (64) REG DWORD 0x00000001 (1) DeleteSymLinks R FirstContact REG DWORD 0x00000003 (3) HARDWARE **MaxNfsUser** REG_DWORD 0x00000020 (32) ⊳ · 🌇 SAM **MountType** REG_DWORD 0x00000001 (1) SECURITY Protocols 0x00455455 (4543573) REG DWORD REG_DWORD 0x00000001 (1) Retransmissions 18 Timeout REG DWORD 0x00000008 (8) Clients UseReservedPorts REG_DWORD 0x00000001 (1) Cloudbase Solutions .NETFrame Active Setup ASP.NET ▶ BestPractices ▶ BidInterface - 🎳 CurrentVersio ⊿ 🃗 Default RegNotify . Users D ■ COM3 Command Processor Cryptography ▶-M CTF DataAccess DevDiv

Figure 7-1 Entering the directory

 $Computer \verb|\HKEY_LOCAL_MACHINE| SOFTWARE \verb|\Microsoft| ClientFor NFS \verb|\CurrentVersion| Default to the computer of the compu$

Step 3 Right-click the blank area and choose **New > DWORD Value** from the shortcut menu. Set **AnonymousUid** and **AnonymousGid** to **0**. **Figure 7-2** shows a successful operation.

Figure 7-2 Adding values



Step 4 After the registry is modified, restart the server for the modification to take effect.

----End

8 Writing to a File System Failed

Symptom

Data failed to be written to the file system mounted to ECSs running the same type of OS.

Possible Causes

The ECS security group configuration is incorrect. Specifically, the port used to communicate with the file system is not enabled.

Fault Diagnosis

Check whether the port of the ECS is enabled and correctly configure the port on the security group console.

Solution

- **Step 1** Log in to the ECS console.
 - 1. Log in to the console.
 - 2. Click \bigcirc in the upper left corner and select a region.
 - 3. Choose Service List > Compute > Elastic Cloud Server.
- **Step 2** On the displayed page, select the target ECS to go to the ECS details page.
- **Step 3** Click the **Security Groups** tab and select the target security group. Click **Manage Rule** to go to the security group console.
- **Step 4** On the displayed page, click the **Inbound Rules** tab and click **Add Rule** to open the **Add Inbound Rule** page. Add rules as follows:

After an SFS Turbo file system is created, the system automatically enables the security group ports required by NFS. This ensures that the SFS Turbo file system can be successfully mounted to the ECSs. The inbound ports required by NFS are ports 111, 2049, 2051, 2052, and 20048. The inbound port required by SMB is port 445. If you need to change the enabled ports, go to the VPC console, choose **Access Control** > **Security Groups**, locate the target security group, and change the ports.

You are advised to use an independent security group for an SFS Turbo file system to isolate it from service nodes.

Step 5 Click **OK**. Access the file system again for verification.

----End

9 Error Message "wrong fs type, bad option" Was Displayed During File System Mounting

Symptom

The message "wrong fs type, bad option" was displayed when you run the **mount** command to mount a file system to a Linux ECS.

Possible Causes

An NFS client is not installed on the Linux ECS. That is, the **nfs-utils** software package is not installed before you execute the **mount** command.

Fault Diagnosis

Install the required **nfs-utils** software package.

Solution

Step 1 Log in to the ECS and run the following command to check whether the **nfs-utils** package is installed. If no command output is returned, the package is not installed.

rpm -qa|grep nfs

Figure 9-1 Checking whether the software package has been installed

```
tail or so.
[root@bcd ~]# rpm -qa | grep nfs
[root@bcd ~]# yum list | grep nfs
libnfsidmap.i686
                                               0.25-15.el7
libnfsidmap.x86_64
libnfsidmap-devel.i686
libnfsidmap-devel.x86_64
                                               0.25-15.el7
                                                                                   base
                                                                                   base
nfs-utils.x86 64
                                               1:1.3.0-0.33.el7 3
                                                                                   updates
 fs4-acl-tools.x86_64
                                               0.3.3-15.el7
                                                                                   base
nfsometer.noarch
                                               1.7-1.el7
```

Step 2 Install the nfs-utils software package.

yum -y install nfs-utils

Figure 9-2 Executing the installation command

```
[root@bcd ~]# yum -y install nfs-utils.x86_64
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
Resolving Dependencies
--> Running transaction check
--> Package nfs-utils.x86_64 1:1.3.0.0.33.el7_3 will be installed
--> Processing Dependency: libtirpc >= 0.2.4.0.7 for package: 1:nfs-utils-1.3.0.0.33.el7_3.x86_64
--> Processing Dependency: gssproxy >= 0.3.0.0 for package: 1:nfs-utils-1.3.0.0.33.el7_3.x86_64
```

Figure 9-3 Successful installation

```
Installed:
    nfs-utils.x86_64 1:1.3.0+0.33.el7_3

Dependency Installed:
    qssproxy.x86_64 0:0.4.1-13.el7
    libcollection.x86_64 0:0.6.2-27.el7
    libroclection.x86_64 0:0.25-15.el7
    libpath_utils.x86_64 0:0.2.1-27.el7
    librerto-tevent.x86_64 0:0.2.5-4.el7
    libverto-tevent.x86_64 0:0.2.5-4.el7
    rpcbind.x86_64 0:0.2.0-38.el7

Complete!

| keyutils.x86_64 0:1.5.8-3.el7 | libbasicobjects.x86_64 0:0.1.1-27.el7 | librerio.x86_64 0:0.1.3-27.el7 |
```

- Step 3 Run the mount command again to mount the file system to the .

 mount -t nfs -o vers=3,timeo=600,noresvport,nolock,tcp <shared-path> <local-path>
- **Step 4** View the mounted file system.

mount -l

If the command output contains the following information, the file system has been mounted:

example.com:/share-xxx on /local_path type nfs (rw,vers=3,timeo=600,nolock,addr=)

----End

10 Accessing the Shared Folder in Windows Failed

Symptom

When you mount a file system to a Windows ECS, the system displayed a message "You cannot access this shared folder because your organization's security policies block unauthenticated guest access. These policies help to protect you PC from unsafe or malicious devices on the network."

Possible Causes

Guest access to the SMB file system is blocked or disabled.

Fault Diagnosis

Solution 1: Manually allow guest access.

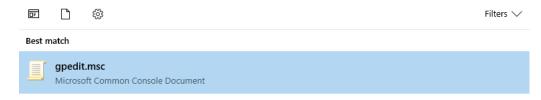
Solution 2: Modify the registry to allow guest access (suitable for versions later than Windows Server 2016).

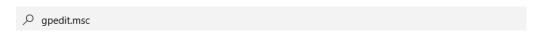
Solution

Solution 1: Manually allow guest access.

Step 1 Open **Run** command box, enter **gpedit.msc**, and press **Enter** to start **Local Group Policy Editor**.

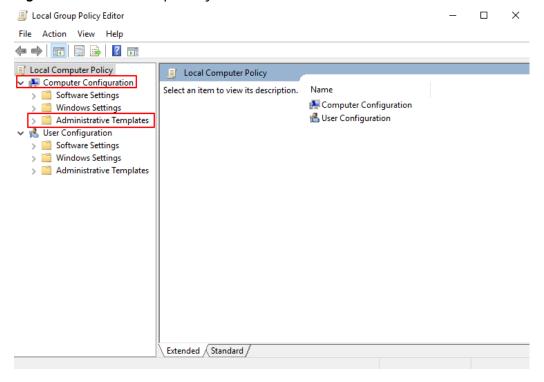
Figure 10-1 Entering gpedit.msc





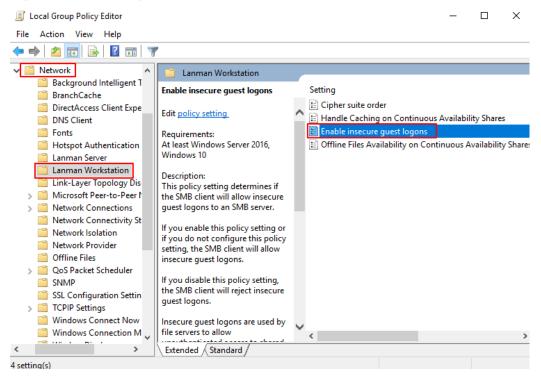
Step 2 On the **Local Group Policy Editor** page, choose **Computer Configuration** > **Administrative Templates**.

Figure 10-2 Local Group Policy Editor



Step 3 Under **Administrative Templates**, choose **Network > Lanman Workstation** and find the option of **Enable insecure guest logons**.

Figure 10-3 Locating the option



Step 4 Double-click Enable insecure guest logons. Select Enabled and click OK.

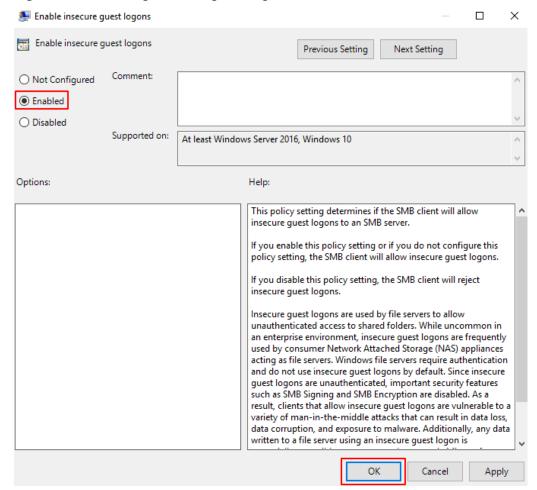


Figure 10-4 Enabling insecure guest logons

- **Step 5** Mount the file system again. If the fault persists, contact technical support.
 - ----End
 - Solution 2: Modify the registry to allow guest access (suitable for versions later than Windows Server 2016).
- **Step 1** Choose **Start** > **Run** and enter **regedit** to open the registry.
- **Step 2** Go to the HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services \LanmanWorkstation\Parameters directory.

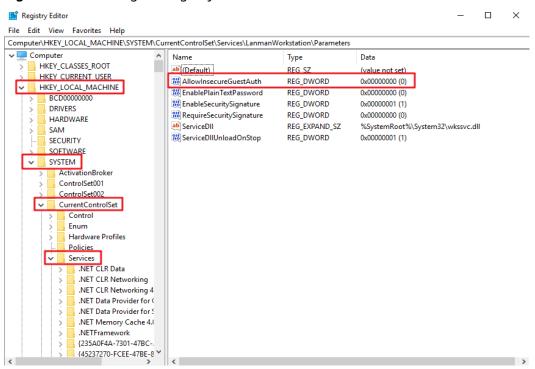
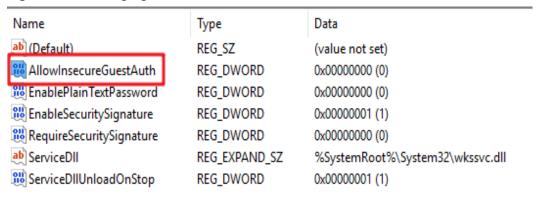
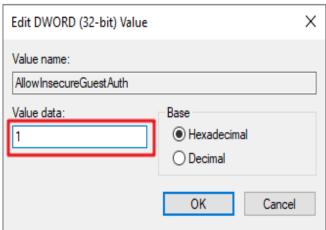


Figure 10-5 Entering the registry

Step 3 Right-click **AllowInsecureGuestAuth** and choose **Modify** from the shortcut menu. In the pop-up window, change the value to **1**.

Figure 10-6 Changing the value





----End

11 Change History

Released On	Description
2022-09-30	This issue is the first official release.