Alibaba Cloud
Apsara File Storage NAS

Operations Guide

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Generic conventions

Table -1: Style conventions

Style	Description	Example
⛔	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	⛔ Danger: Resetting will result in the loss of user configuration data.
⚠️	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	⚠️ Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
📋	This indicates warning information, supplementary instructions, and other content that the user must understand.	ⓘ Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	📋 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK.
Courier font	It is used for commands.	Run the `cd / d  C :/ windows` command to enter the Windows system folder.
Italics	It is used for parameters and variables.	`bae  log  list -- instanceid` *Instance_ID*
[] or [a|b]	It indicates that it is a optional value, and only one item can be selected.	`ipconfig` *[-all|-t]*

Style	Description	Example
{} or {a|b}	It indicates that it is a required value, and only one item can be selected.	`swich` *{stand | slave}*

Contents

1 Use CPFS

Cloud Paralleled File System (CPFS) is a parallel file storage service that is recently released by Alibaba Cloud. It is dedicated to providing high-performance and easy-to-access file storage.

Manage file systems

For more information, see *Quick Start Guide* for instructions on how to create a file system. Currently, CPFS provides the subscription billing method. During a service period, you can upgrade the service to increase storage capacity, corresponding bandwidth, and IOPS performance. Before the service expires, you can renew the service to extend the service time.

Mount a file system

CPFS is compatible with POSIX-based APIs. You can use one or more of these APIs to mount a CPFS file system. Alibaba Cloud provides a custom client application. You can use the following steps to install and configure the client application.

Take a CentOS operating system as an example. Proceed as follows:

1. Install dependency packages in the following order: make, gcc, libyaml-devel, libtool, zlib-devel, glibc-headers, kernel-devel.

   You can run the following command to install packages:

   ```
   yum install -y make gcc libyaml-devel libtool zlib
   -devel glibc-headers kernel-devel
   ```

   > 📋 **Note:**
   > Ensure that the version of kernel-devel to be installed is the same as that of the kernel.

2. Download the *Installation package of a CPFS client* and install the package on the server.

Execute this command to install the package.

```
rpm - ivh  cpfs - client - 1 . 0 . dev - rc_2 . x86_64 . rpm
```

- Open the / etc / cpfs / cpfs - client - autobuild . conf configuration file, and modify the rebuild property as follows:

```
buildArgs =- j16
configArgs =-- with - o2ib = no
```

Save the file and run the service cpfs - client rebuild command.

```
[root@bms-f222 ~]# service cpfs-client rebuild
- Building CPFS modules
>> Building with config_args: --with-o2ib=/usr/src/ofa_kernel/default, build_args: -j16
- Installing CPFS modules
```

- Open the / etc / cpfs / cpfs - mounts . conf configuration file, and add

```
buildArgs =- j16
configArgs =-- with - o2ib = no
```

View mount information

```
cat  / etc / cpfs / cpfs - mounts . conf
192 . 168 . 5 . 179 @ tcp :/ hpctest    / mnt / test
```

Execute the service cpfs - client start command or the service cpfs-client stop command to start or stop the mount service.

```
[root@hpctest-ag-1 ~]# service cpfs-client start
Starting CPFS Client:
- Loading CPFS modules
- Mounting directories from /etc/cpfs/cpfs-mounts.conf
mount -t lustre  192.168.5.179@tcp:/hpctest /mnt/test

[root@hpctest-ag-1 mnt]# service cpfs-client stop
Shutting down CPFS Client:
- Unmounting directories from /etc/cpfs/cpfs-mounts.conf
umount /mnt/test
- Unloading modules
```

2 Manage LDAP users

Cloud Paralleled File System (CPFS) allows you to configure user-created Lightweight Directory Access Protocol (LDAP) services to control user access to CPFS file systems.

LDAP is used to provide directory services.

You can view the basic information of a file system on the File System Details page. Additionally, in the Access Control section of the page, you can click Add LDAP to configure the LDAP service.