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简介

基于librfs文件系统库，对磁盘、分区、镜像文件等对象，提供各种文件操作相关的命令集。

运行环境

windows 98 以上系统。

支持文件系统类型

详见 ranfs.pdf文档

支持命令

help

```

1  help          Display this help
2  version       Display version
3  set           Configuration of the shell
4  echo          Print string
5  log           Configure log Settings
6  time          time a command
7  source        Exec commands from file
8  system        Run local system command
9  mkfs.fat      Format the fat file system
10 lspart        Display device partition
11 mount         mount the file system
12 umount        umount file system
13 df            report file system disk space usage
14 ls            Display directory listing
15 cat           concatenate files and print on the standard output
16 touch         change file timestamps
17 dd            convert and copy a file
18 truncate      shrink or extend the size of a file to the specified
    size
19 ltruncate     shrink or extend the size of a local file to the
    specified size
20 cd            Change current directory
21 lcd           Change local current directory
22 pwd           Display working directory
23 lpwd          Display local working directory
24 cp            copy files and directories
25 mv            move files
26 get           Download files
27 put           Upload files
28 mkdir         make directories
29 lmkdir        make local directories
30 rmdir         remove directories
31 lrmkdir       remove local directories
32 rm            remove files or directories
33 lrm           remove local files or directories
34 open          Test to open the file
35 test          the test file system
36 md5sum        compute and check MD5 message digest
37 apisrv        api server
38 exit          exit with a errno

```

version

显示librfs和rfs版本

```

1  version [opt]
2  Display version
3  -h Display this help

```

set

配置rfsd相关设置

```
1 set [opt]
2     -e When the error Stop script execution
3     -x Displays the command to run
4     -h Display this help
```

log

配置日志输出

```
1 log [opt]
2 Set the log output
3     -o [file] Set the log file output
4     -n [ip:port] Set the log file output
5     -t [tag] Set the log tag
6     -l [level] Set the log level
7     -f [func] Set the log func
8     -w enable OutputDebugString
```

time

计算命令执行时间

```
1 time [opt] [cmd]
2 cmd calculation command execution time
3     -h Display this help
```

source

执行指定文件里的命令

```
1 source [opt] [file] [arguments]
2 exec commands from file
3     -h Display this help
```

system

执行系统的命令

```
1 system [cmd] [arguments]...
2 Run local system command
3     -h Display this help
```

mkfs.fat

格式化文件为fat文件系统

```
1 mkfs.fat [opt] [file]...
2 create fat file system
3     -t [fs_type] [fat12 fat16 fat32]
4     -d [file_type] [file disk]
5     -f [fat_size] [1 2]
6     -s [sector_size] [512 1024 2048 4096]
7     -a [cluster size]
8     -o [volume_offset]
9     -l [volume_size]
10    -h Display this help
```

lspart

显示文件或者设备分区列表

```
1 lspart [opt] [file]
2 Display device partition
3     -f [file_type] file type [file disk]
4     -s [sector_size] specify the sector size bytes [512 1024 2048
5     4096]
6     -h Display this help
```

mount

挂载文件到盘符

```
1 mount [opt] [file] [drive]
2 mount the file to the drive
3     -f [file_type] file type [file disk]
4     -o [vol_offset] Offset sector of the partition
5     -s [sector_size] specify the sector size bytes [512 1024 2048
6     4096]
7     -t [fs_type] file system type [fat ntfs ext]
8     -r Read-only file system
9     -c [codepage] File system code page[ 936 ... ]
10    -n do not use the system file cache
11    -h Display this help
```

使用例子

```
1 mount -t ntfs -s 512 d:\ntfs.img a:
```

将d:\ntfs.img镜像文件挂载 `a:`，注意这里 `a:` 不是系统里a:盘，而是RFS文件系统虚拟出来的。-s 512 指定镜像文件扇区大小，一般都是512字节。

```
1 mount -t ext f: b:
```

将系统 `f:` 分区，挂载到 `b:`，借助rfsh可以实现ext2、ext3、ext4文件系统分区读取文件操作。

umount

卸载盘符

```
1 umount [opt] [drive]...
2 unmount drive
3     -a Unload all drive
4     -h Display this help
```

使用例子

```
1 umount a:
```

卸载盘符 a:

```
1 umount -a
```

卸载挂载的所有盘符

df

获取设备文件系统类型，空间使用等报表

```
1 df [opt] [path]...
2 report file system disk space usage
3     -h Display this help
```

ls

枚举目录文件

```
1 ls [opt] [path]...
2     -i open path as id file
3     -b simple file list
4     -s output short filename list
5     -r recursive directory enumeration
6     -o [file] output to the specified file
7     -h Display this help
```

cat

查看文件内容

```
1 cat [opt] [file]...
2 concatenate files and print on the standard output
3     -h Display this help
```

touch

创建文件，及更改文件时间

```
1 touch [opt] [file]...
2 change file timestamps
3     -h Display this help
```

dd

转换或复制文件

```
1 dd [opt] file...
2 convert and copy a file
3     bs=BYTES    read and write BYTES bytes at a time
4     count=N     copy only N input blocksn
5     seek=BLOCKS skip BLOCKS obs-sized blocks at start of output
6     skip=BLOCKS skip BLOCKS ibs-sized blocks at start of input
7     if=FILE     read from FILE instead of stdin
8     of=FILE     write to FILE instead of stdout
9     conv=CONVS  [notrunc, sync, noerror]
```

truncate

缩小或扩大文件大小

```
1 truncate [opt] [file]...
2 shrink or extend the size of a file to the specified size
3     -c do not create any files
4     -s file size
5     -h Display this help
```

ltruncate

缩小或扩大本地文件大小

```
1 | ltruncate [opt] [file]...
2 | shrink or extend the size of a local file to the specified size
3 |         -s [size] file size
4 |         -h Display this help
```

cd

改变当前目录

注意：这个当前目录是rfs文件系统当前目录，lcd改变才是系统当前目录。

```
1 | cd [path]
2 | Change current directory
3 |         -h Display this help
```

lcd

改变本地当前目录

```
1 | lcd [opt]
2 | Change local current directory
3 |         -h Display this help
```

pwd

显示当前目录

```
1 | pwd [opt]
2 | Display working directory
3 |         -h Display this help
```

注意：显示当前目录是rfs文件系统当前目录。

lpwd

显示本地当前目录

```
1 | lpwd [opt]
2 | Display local working directory
3 |         -h Display this help
```

cp

复制文件或目录


```
1 cp [opt] [source] ... [target]
2 copy files and directories
3     -h Display this help
```

mv

移动文件或目录

```
1 mv [opt] source ... target
2 move files
3     -h Display this help
```

get

下载文件到本地

```
1 get [opt] [file|path]...
2 Download files
3     -s [size] Read the file bytes at a time
4     -o [path] Get the file to the directory
5     -l [file_index:file_offset] Read the file offset the breakpoint
6     -r downloads directory recursively
7     -v Show the download progress
8     -t Test speed of read-only
9     -n only get to the file name
10    -i open the remote_path as id file
11    -a Bytes read random number
12    -b sector buffer read files
13    -c Print the download is complete information
14    -h Display this help
```

注意：这里的下载文，是从rfs文件系统里，下载文件或文件夹到本地磁盘上。

put

上传文件

```
1 put [opt] [file|path]...
2 Upload files
3     -s [size] Read the file bytes at a time
4     -C [lpath] set the current local directory
5     -r Upload directory recursively
6     -v Show the download progress
7     -t Test speed of read-only
8     -i open the remote_path as id file
9     -b sector buffer read files
10    -h Display this help
```

注意：这里上传是将本地文件或文件夹上传到rfs文件系统里。

mkdir

创建文件夹

```
1 mkdir [opt] [path]...
2 make directories
3     -p mkdir directory recursively
4     -h Display this help
```

lmkdir

在本地创建文件夹

```
1 lmkdir [opt] [path]...
2 make local directories
3     -h Display this help
```

rmdir

删除目录

```
1 rmdir [opt] [path]..
2 remove directories
3     -p remove directory recursively
4     -h Display this help
```

lrmdir

删除本地目录

```
1 lrmdir [opt] [path]...
2 remove local directories
3     -h Display this help
```

rm

删除文件或目录

```
1 rm [opt] [file|path]...
2 remove files or directories
3     -r remove directory recursively
4     -v Show the rm progress
5     -i open path as id file
6     -h Display this help
```

lrm

删除本地文件或目录

```
1 lrm [opt] [file]...
2 remove local files or directories
3     -h Display this help
```

open

测试open函数接口

```
1 open [file] [flags]
2 Test to open the file
3     flags [O_RDONLY|O_WRONLY|O_RDWR|O_APPEND|O_CREAT|O_TRUNC]
4     -h Display this help
```

test

测试文件系统基础功能

```
1 test [cmd] [file]
2 testing the file system basic function
3     append_random_write [file]
4     append [file]
5     lseek [file]
6     lseek2 [file]
7     twofile
```

md5sum

计算目录或文件的MD5

```
1 md5sum [opt] [file]..
2     -o [file] output to the specified file
3     -b read files in binary mode (default on DOS/Windows)
4     -t read files in text mode (default)
5     -c check MD5 sums against given list
6     -w warn about improperly formatted checksum lines
7     -h Display this help
```

exit

退出rfsh

```
1 | exit [opt] [errno]
2 | exit with a errno
3 |         -h Display this help
```

退出rfsh，返回错误代码，便于实现批处理操作。

命令行参数

rfsh 支持命令行参数，便于通过脚本调用

```
1 | rfsh v1.1 - ranfs shell tools
2 | Copyright (c) 2014-2017 www.ranfs.com All Rights Reserved.
3 |
4 | Usage: rfsh [opt] [arguments]...
5 |         -f [file] [arguments] Specify the execution of the script file
6 |         -c "cmd" Execute the command string
7 |         -h display this help
```

-f

指定脚本文件和参数，让rfsh进行执行。

-c

执行命令字符串，多个命令使用 `;` 分割。

-h

显示本帮助

使用例子

操作fat镜像文件

```
1 | mount -o 128 -t fat fat32.img a:
2 | put ranfs.txt
3 | cat ranfs.txt
4 | umount a:
```

说明：挂载当前目录fat32.img到 `a:`，挂载分区所处扇区偏移，为镜像文件第128个扇区。上传 ranfs.txt到镜像文件根目录，并显示ranfs.txt文件内容，然后卸载挂载。

操作ntfs镜像文件

```
1 mount -r -t ntfs ntfs.img a:
2 cat ranfs.txt
3 umount a:
```

说明：挂载系统当前目录下ntfs.img到 `a:`，读取镜像文件根目录下ranfs.txt，然后卸载挂载。