

CEPHFS ADMINISTRATIVE COMMANDS

FILESYSTEMS

These commands operate on the CephFS filesystems in your Ceph cluster. Note that by default only one filesystem is permitted: to enable creation of multiple filesystems use `ceph fs flag set enable_multiple true`.

```
fs new <filesystem name> <metadata pool name> <data pool name>
```

```
fs ls
```

```
fs rm <filesystem name> [--yes-i-really-mean-it]
```

```
fs reset <filesystem name>
```

```
fs get <filesystem name>
```

```
fs set <filesystem name> <var> <val>
```

```
fs add_data_pool <filesystem name> <pool name/id>
```

```
fs rm_data_pool <filesystem name> <pool name/id>
```

SETTINGS

```
fs set <fs name> max_file_size <size in bytes>
```

CephFS has a configurable maximum file size, and it's 1TB by default. You may wish to set this limit higher if you expect to store large files in CephFS. It is a 64-bit field.

Setting `max_file_size` to 0 does not disable the limit. It would simply limit clients to only creating empty files.

MAXIMUM FILE SIZES AND PERFORMANCE

CephFS enforces the maximum file size limit at the point of appending to files or setting their size. It does not affect how anything is stored.

When users create a file of an enormous size (without necessarily writing any data to it), some operations (such as deletes) cause the MDS to have to do a large number of operations to check if any of the RADOS objects within the range that could exist (according to the file size) really existed.

The `max_file_size` setting prevents users from creating files that appear to be eg. exabytes in size, causing load on the MDS as it tries to enumerate the objects during operations like stats or deletes.

DAEMONS

These commands act on specific mds daemons or ranks.

```
mds fail <gid/name/role>
```

Mark an MDS daemon as failed. This is equivalent to what the cluster would do if an MDS daemon had failed to send a message to the mon for `mds_beacon_grace` second. If the daemon was active and a suitable standby is available, using `mds fail` will force a failover to the standby.

If the MDS daemon was in reality still running, then using `mds fail` will cause the daemon to restart. If it was active and a standby was available, then the “failed” daemon will return as a standby.

```
mds deactivate <role>
```

Deactivate an MDS, causing it to flush its entire journal to backing RADOS objects and close all open client sessions. Deactivating an MDS is primarily intended for bringing down a rank after reducing the number of active MDS (`max_mds`). Once the rank is deactivated, the MDS daemon will rejoin the cluster as a standby. `<role>` can take one of three forms:

```
<fs_name>:<rank>  
<fs_id>:<rank>  
<rank>
```

Use `mds deactivate` in conjunction with adjustments to `max_mds` to shrink an MDS cluster. See [Configuring multiple active MDS daemons](#)

```
tell mds.<daemon name>
```

```
mds metadata <gid/name/role>
```

```
mds repaired <role>
```

```
mds stat
```

GLOBAL SETTINGS

```
fs dump
```

```
fs flag set <flag name> <flag val> [<confirmation string>]
```

“flag name” must be one of [`enable_multiple`]

Some flags require you to confirm your intentions with “-yes-i-really-mean-it” or a similar string they will prompt you with. Consider these actions carefully before proceeding; they are placed on especially dangerous activities.

ADVANCED

These commands are not required in normal operation, and exist for use in exceptional circumstances. Incorrect use of these commands may cause serious problems, such as an inaccessible filesystem.

```
mds compat rm_compat
```

```
mds compat rm_incompat
```

```
mds compat show
```

```
mds set_state
```

```
mds rmfailed
```

LEGACY

These legacy commands are obsolete and no longer usable post-Luminous.

```
mds add_data_pool # replaced by "fs add_data_pool"  
mds cluster_down # replaced by "fs set cluster_down"  
mds cluster_up # replaced by "fs set cluster_up"  
mds dump # replaced by "fs get"  
mds getmap # replaced by "fs dump"  
mds newfs # replaced by "fs new"  
mds remove_data_pool # replaced by "fs rm_data_pool"  
mds set # replaced by "fs set"  
mds set_max_mds # replaced by "fs set max_mds"  
mds stop # replaced by "mds deactivate"
```