

**Note**

If a directory has no layout attributes, then it inherits the layout of its parent. You must set the layout attributes of a directory before you can view them. By default, layout attributes are set on only the top-level directory of the mounted CephFS file system (on the mount point).

- 2.2. Use the `setfattr` command to change the layout of the `/mnt/mycephfs/dir1` directory.

```
[admin@clienta ~]$ setfattr -n ceph.dir.layout.stripe_count \
-v 2 /mnt/mycephfs/dir1
```

- 2.3. Verify the layout of the `/mnt/mycephfs/dir1` directory again. Layout attributes should now be available for this directory. Settings other than the one that you specified are inherited from the closest parent directory where attributes were set.

```
[admin@clienta ~]$ getfattr -n ceph.dir.layout /mnt/mycephfs/dir1
getfattr: Removing leading '/' from absolute path names
# file: mnt/mycephfs/dir1
ceph.dir.layout="stripe_unit=4194304 stripe_count=2 object_size=4194304
pool=mycephfs_data"
```

- 2.4. Verify the layout for the `/mnt/mycephfs/dir1/ddtest` file and notice that the layout does not change for this file, which existed before the layout change.

```
[admin@clienta ~]$ getfattr -n ceph.file.layout /mnt/mycephfs/dir1/ddtest
getfattr: Removing leading '/' from absolute path names
# file: mnt/mycephfs/dir1/ddtest
ceph.file.layout="stripe_unit=4194304 stripe_count=1 object_size=4194304
pool=mycephfs_data"
```

- 2.5. Create a file called `anewfile` under the `/mnt/cephfs/dir1/` directory. Notice how the `stripe_count` for the layout of this file matches the new layout of the `/mnt/cephfs/dir1/` directory. The new file inherits the layout attributes from its parent directory at creation time.

```
[admin@clienta ~]$ touch /mnt/mycephfs/dir1/anewfile
[admin@clienta ~]$ getfattr -n ceph.file.layout /mnt/mycephfs/dir1/anewfile
getfattr: Removing leading '/' from absolute path names
# file: mnt/mycephfs/dir1/anewfile
ceph.file.layout="stripe_unit=4194304 stripe_count=2 object_size=4194304
pool=mycephfs_data"
```

- 2.6. Modify the layout of the `/mnt/mycephfs/dir1/anewfile` file so that the `stripe_count` value is 3. You can modify a specific file layout if the file is empty. Ensure that the new value for `stripe_count` is correct.