

# AFS - DFS Space

## AFS

ETICS has an AFS quota under `/afs/cern.ch/project/etics`. There are many volumes, each one with a quota of disk space. The sum of these quotas can't be larger than the quota for the project.

The project AFS area is composed by private and public data. The private data are the DB dumps, certificates and passwords. The public data is composed by the software and configurations used by ETICS. This public data can be accessed through http here: <http://eticsoft.web.cern.ch/eticsoft>.

All operations such as add/remove admins, create/remove volumes or change their quota can be done with `afs_admin`, which is installed in lxplus. If the project needs more space, an email to [AFS.Support@cern.ch](mailto:AFS.Support@cern.ch) has to be sent.

Cleaning afs: in the servers run the script `/etc/cron.daily/etics_clean.sh`

Give more quota: `afs_admin set_quota <path> +#G`

AFS ADMIN info: <http://information-technology.web.cern.ch/book/afs-admin-documentation>

## AFS Permission details

AFS defines the following access rights:

- r - reading of files
- w - writing to files
- k - locking of files (flock() system call)
- l - the right to search for files in the directory, i.e. list which files it contains
- i - creation of new files or directories
- d - deletion of files
- a - the right to change the ACL

Mnemonic rights formed from those above are

- all: r+w+k+l+i+d+a
- none: entry deleted from access list. This does not mean that the user has no rights, since other ACL entries may still apply
- read: r+l
- write: r+w+k+l+i+d, i.e. everything except 'a'

Access rights for a directory can be examined and defined using the `afs_admin list_acl` and `afs_admin set_acl` commands.

Example:

Access list for `/afs/cern.ch/project/etics/` is

Normal rights:

```
vgomesgo:etics-repository rlidwka
etics:webservers rl
etics rlidwka
system:administrators rlidwka
system:anyuser rl
aimar rlidwk
dimeglio rlidwka
eticsbld rlidwka
aabadz rlidwk
```

Set access control list, give and take rights:

```
set_acl -r -f <dir_path> <access_list_entries>+ -c
```

Set administrators for a project:

```
set_acl <project> <account none>+
```

For instance, take rights back of a user:

- `afs_admin set-acl project user none`

## DFS

The DFS space of ETICS is a copy of AFS that has to be mounted in etics-dev-repository and etics-int-repository  
cerndata54.cern.ch/W-ETICSREP\$  
/etc/fstab //cerndata54.cern.ch/W-ETICSREP\$ /mnt/repository\_1 cifs user=eticsbld,passwd=XXXXXXXX,noperm,noacl

Another volumes for the future:

cerndata48.cern.ch/W-ETICSREP1\$  
cerndata48.cern.ch/W-ETICSREP2\$