

# xrdls

## xrdls something similar to ls

Xrootd does not provide the directory listing (ls) semantics as a file system does. The *xrdls* is a command line tool that looks a little bit like an ls. By defaults it loops over all xrootd data servers and obtains a directory listing for each of them.

### usage

xrdls [-l] [dataserver] directory

- -l prints a long listing
- specify dataserver if the listing from only this server is requested. Default is to loop over all servers

It is implemented by using the standard unix ls command together with the xrootd preload library. Using the long listing the user and group name are not meaningful. The time shown is the mtime.

Below are some examples

### simple ls

```
> xrdls /glast/mc

==listing from server sulky02
ServiceChallenge TonyTest junk
==listing from server sulky47
DC2 ServiceChallenge junk
==listing from server sulky48
DC2 ServiceChallenge TonyTest junk
```

### ls using long format

```
>xrdls -l /glast/mc

==listing from server sulky02
total 4
drwx----- 1 wilko  ec          1536 Aug  2 15:38 ServiceChallenge
drwx----- 1 wilko  ec           512 Jun 17 13:39 TonyTest
drwx----- 1 wilko  ec           512 May 15 16:36 junk
==listing from server sulky47
total 3
drwx----- 1 wilko  ec           512 Jan  8  2007 DC2
drwx----- 1 wilko  ec           512 May  3  09:54 ServiceChallenge
drwx----- 1 wilko  ec           512 Feb 28  09:13 junk
==listing from server sulky48
total 5
drwx----- 1 wilko  ec           512 Jan  8  2007 DC2
drwx----- 1 wilko  ec          1536 Jul 27 17:28 ServiceChallenge
drwx----- 1 wilko  ec           512 Jun 17 13:39 TonyTest
drwx----- 1 wilko  ec           512 May 16 18:15 junk
```

## ls for single server

```
> xrdls -l sulky02 /glast/wilko

==listing from server sulky02
ls: root://sulky02//glast/wilko/n2.root: No such file or directory
total 1027
-rw----- 1 wilko  ec          0 Aug  9 23:36 DIR_LOCK
-rw----- 1 wilko  ec       10240 Aug  9 23:35 n1.root
-rw----- 1 wilko  ec          0 Aug  9 23:34 n1.root.lock
-rw----- 1 wilko  ec          0 Aug  9 23:35 n2.root.lock
-rw----- 1 wilko  ec    1037312 Aug  9 23:36 new.root
-rw----- 1 wilko  ec          0 Aug  9 23:35 new.root.lock
drwx----- 1 wilko  ec        512 Aug  2 10:23 test
```

This example shows a few things.

1. The line  
ls: root://sulky02//glast/wilko/n2.root: No such file or directory  
means that there is a link in the directory and the link target (which is the file in the cache) is missing and therefore the stat of the file fails (like ls -l would do).
2. There is one special file **DIR\_LOCK** and files with the extensions **.lock**. These files used by the xrootd to manage a the cache file system and keep track if files have been migrated to HPSS. These files must not be used or removed.