Upload/Download - iRODS

Fundamentals

The two basic commands are *iget*, to download files and *iput*, to upload them.

```
$iget myfile.tar.gz

the options
[- r] : recursive - store/download subdirectories
[- f] : force - write data-object even it exists already; overwrite it
[- P] : output the progress of the transfer
are common, while the option
[- b] : bulk upload to reduce overhead
is specific for the iput command.
```

Others

Other relevant commands are *icp* and *irsync*.

The former copies an irods data-object (file) or collection (directory) to another data-object or collection.

```
$icp myfile1.tar.qz myfile2.tar.qz
```

The latter synchronizes the data between a local copy (local file system) and the copy stored in iRODS or between two iRODS copies. Files and directories prepended with 'i:' are iRODS files and collections. Local files and directories are specified without any prependage. For example, the command:

```
$irsync -r foo1 i:foo2
```

synchronizes recursively the data from the local directory foo1 to the iRODS collection foo2. The command compares the checksum values and file sizes of the source and target files to determine whether synchronization is needed.

Further details are available here: https://www.irods.org/index.php/icommands .