

Wikiprint Book

Title: Available commands

Subject: TracMeteo - DRM4G/AvailableCommands

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Available commands

Type the `--help` option to obtain information about all commands:

```
$ drm4g --help
DRM4G is an open platform, which is based on GridWay Metascheduler, to define,
submit, and manage computational jobs. For additional information,
see http://meteo.unican.es/trac/wiki/DRM4G .

Usage: drm4g [ --version ] [ --help ]
        <command> [ options ] [ <args>... ]

Options:
  -h --help      Show help.
  -v --version   Show version.
  -d --debug     Debug mode.

drm4g commands are:
  start          Start DRM4G daemon and ssh-agent
  stop           Stop DRM4G daemon and ssh-agent
  status         Check DRM4G daemon and ssh-agent
  restart        Restart DRM4G daemon
  clear          Start DRM4G daemon deleting all the jobs available on DRM4G
  conf           Configure DRM4G daemon, scheduler and logger parameters
  resource       Manage computing resources
  id             Manage reosource identities
  host           Print information about the hosts
  job            Submit, get status and history and cancel jobs

See 'drm4g <command> --help' for more information on a specific command.
```

start:

```
Start DRM4G's daemon and ssh-agent.

Usage:
  drm4g start [ options ]

Options:
  -d --debug     Debug mode..
```

stop:

```
Stop DRM4G's daemon and ssh-agent.

Usage:
  drm4g stop [ options ]

Options:
  -d --debug     Debug mode.
```

status:

```
Check DRM4G's daemon and ssh-agent.

Usage:
  drm4g status [ options ]

Options:
  -d --debug     Debug mode
```

clear:

Restart DRM4G's daemon deleting all the jobs available on DRM4G.

Usage:

```
drm4g clear [ options ]
```

Options:

```
-d --debug    Debug mode.
```

restart:

Restart DRM4G's daemon.

Usage:

```
drm4g [ options ] restart
```

Options:

```
-d --debug    Debug mode.
```

conf:

Configure DRM4G's daemon, scheduler and logger parameters.

Usage:

```
drm4g conf ( daemon | sched | logger ) [ options ]
```

Options:

```
-d --debug    Debug mode
```

resource:

Manage computing resources on DRM4G.

Usage:

```
drm4g resource [ list [ --all ] | edit | check | create | destroy ] [ options ]
```

Options:

```
-d --debug    Debug mode.
--all         Lists all of the created resources.
```

Commands:

```
list         Show resources available.
edit         Configure resources.
check        Check if configured resources are accessible.
create       Create new virtual machines
destroy      Delete all virtual machines
```

host:

Print information about the hosts available on DRM4G.

Usage:

```
drm4g [ options ] host [ list ] [ <hid> ]
```

Arguments:

```
<hid>        Host identifier.
```

Options:

```
-d --debug    Debug mode.
```

Host field information:

```

HID           Host identifier.
ARCH          Architecture.
JOBS(R/T)    Number of jobs: R = running, T = total.
LRMS         Local Resource Management System.
HOSTNAME     Host name.
QUEUENAME    Queue name.
WALLT        Queue wall time.
CPUT         Queue cpu time.
MAXR         Max. running jobs.
MAXQ         Max. queued jobs.

```

id:

Manage identities for resources. That involves managing private/public keys and grid credentials, depending on the resource configuration.

Usage:

```

drm4g id <resource_name> init  [ options ] [ --lifetime=<hours> ]
drm4g id <resource_name> info  [ options ]
drm4g id <resource_name> delete [ options ]

```

Options:

```

-l --lifetime=<hours>  Duration of the identity's lifetime [default: 168].
-d --debug             Debug mode.

```

Commands:

```

init                Create an identity for a certain period of time, by
                    default 168 hours (1 week). Use the option --lifetime
                    to modify this value. It adds the configured private
                    key to a ssh-agent and creates a grid proxy using
                    myproxy server.
                    It appends the public key to the remote user's
                    ~/.ssh/authorized_keys file (creating the file, and
                    directory, if necessary). It tries to load the public
                    key obtained by appending *.pub to the name of the
                    configured private key file. Alternative the public
                    key can be given by public_key variable.
                    It also configures the user's grid certificate
                    under ~/.globus directory (creating directory,
                    if necessary) if grid_cert variable is defined.

info                Get some information about the identity's status.

delete             Remove the identity from the ssh-agent and the
                    myproxy server.

```

job:

Submit, get status and history and cancel jobs.

Usage:

```

drm4g job submit  [ options ] [ --ntasks <total_tasks> ] [ --dep <job_id> ... ] <template>
drm4g job list    [ options ] [ <job_id> ]
drm4g job cancel  [ options ] <job_id> ...
drm4g job log     [ options ] <job_id>
drm4g job history [ options ] <job_id>

```

Arguments:

<job_id> Job identifier.
 <template> Job template.
 <total_tasks> Total number of tasks in the job array.

Options:

--ntasks <total_tasks> Number of tasks to submit.
 --dep=<job_id> ... Define the job dependency list of the job.
 -d --debug Debug mode.

Commands:

submit Command for submitting jobs.
 list Monitor jobs previously submitted.
 cancel Cancel jobs.
 log Keep track of a job.
 history Get information about the execution history of a job.

Job field information:

JID Job identification.
 DM Dispatch Manager state, one of the following: pend, hold, prol, prew, wrap, epil, canl, s
 EM Execution Manager state: pend, susp, actv, fail or done.
 START The time the job entered the system.
 END The time the job reached a final state (fail or done).
 EXEC Total execution time, includes suspension time in the remote queue system.
 XFER Total file transfer time, includes stage-in and stage-out phases.
 EXIT Job exit code.
 TEMPLATE Filename of the job template used for this job.
 HOST Hostname where the job is being executed.
 HID Host identification.
 PROLOG Total prolog (file stage-in phase) time.
 WRAPPER Total wrapper (execution phase) time.
 EPILOG Total epilog (file stage-out phase) time.
 MIGR Total migration time.
 REASON The reason why the job left this host.
 QUEUE Queue name.