SimpleCMD_QubeWorkerSelection

Qube Worker Selection	ו	
Hosts		Browse
Groups		Browse
Omit Hosts		Browse
Omit Groups		Browse
Priority Cluster		Browse
Host Order	+host.processors.avail	Browse
Requirements		Browse
Reservations		Browse
Restrictions		Browse

Click here for details...

Hosts

Explicit list of Worker hostnames that will be allowed to run the job (comma-separated).

Groups

Explicit list of Worker groups that will be allowed to run the job (comma-separated). Groups identify machines through some attribute they have, eg, a GPU, an amount of memory, a license to run a particular application, etc. Jobs cannot migrate from one group to another. See worker_groups.

Omit Hosts

Explicit list of Worker hostnames that are *not* allowed run the job (comma-separated).

Omit Groups

Explicit list of Worker groups that are *not* allowed to run the job (comma-separated).

Priority Cluster

Clusters are non-overlapping sets of machines. Your job will run at the given priority in the given cluster. If that cluster is full, the job can run in a different cluster, but at lower priority. Clustering



Example:

- A job submitted to /showB/lighting will run with its given priority in /showB/lighting cluster.
- If /showB/lighting is full, that job can run in /showB/FX, but at a lower priority.
- If both /showB/lighting and /showB/FX are full, the job can run in /showA/* at an even lower priority.

Host Order

Order to select Workers for running the job (comma-separated) [+ means ascending, - means descending].

Host Order is a way of telling the job how to select/order workers

- "+host.processors.avail" means prefer workers which have more slots available
- "+host.memory.avail" means prefer workers which have more memory available
- "+host.memory.total" means prefer workers which have more total memory
- "+host.processor_speed" means prefer workers with higher cpu speeds
- "+host.cpus" means prefer workers with higher total cpu slots

Requirements

Worker properties needed to be met for job to run on that Worker (comma-separated, expression-based). Click 'Browse' to choose from a list of Host Order Options.

Requirements is a way to tell the workers that this job needs specific properties to be present in order to run. The drop-down menu allows a choice of OS:

- "winnt" will fill the field with "host.os=winnt" which means only run on Windows based workers
- "linux" will fill the field with "host.os=linux" which means only run on Linux based workers
- "osx" will fill the field with "host.os=osx" which means only run on OSX based workers

You can also add any other Worker properties via plain text. Some examples:

- "host.processors.avail.=4" means only run this job on workers that have 4 or more slots available
- "host.processors.used=0" means only run this job on workers with 0 slots in use
- "host.memory.avail=400" means only run this job on workers that have 400 memory available

With integer values, you can use any numerical relationships, e.g. =, <, >, <=, >=. This won't work for string values or floating point values. Multiple requirements can also be combined with AND and OR (the symbols && and || will also work).

The 'Only 1 of a "kind" of job' checkbox will restrict a Worker to running only one instance with a matching "kind" field (see below). The prime example is After Effects, which will only allow a single instance of AE on a machine. Using this checkbox and the "Kind" field, you can restrict a Worker to only one running copy of After Effects, while still leaving the Worker's other slots available for other "kinds" of jobs.

Reservations

Worker resources to reserve when running job (comma-separated, expression-based).

⊖ ○ ○ Browse	Requiremer	nts
host.os		\$
Only 1 of a "kind" of job		
Cancel	ОК	

host.memory	0 🗘 Mb	
host.processors	1 🗘 🗐 All	
global.vray	0	
global_host.nuke	0	
license.prman	0	
OK Clear Cancel		

Reservations is a way to tell the workers that this job will reserve the specific resources for this job.

Menu items:

- "host.processors" this will fill the field with "host.processors=X" which means reserve X slots on the worker while running this job
- "host.memory" this will fill the field with "host.memory=X" which means only reserve X memory on the worker while running this job

Other options:

- "host.license.nuke=1" when a Global Resources entry has been made you can reserve any arbitrary named item. New in 6.6: Once you global resource, it will show up in this menu (eg global.vray above).See also Job Reservations

Restrictions

Restrict job to run only on specified clusters ("||"-separated) [+

means all below, * means at that level]. Click 'Browse' to choose from a list of Restrictions Options.

Restrictions is a way to tell the workers that this job can only run on specific clusters. You can choose more than one cluster in the list.

Examples:

- Choosing /showA would restrict the job to machines that are only in the /showA cluster, and no other cluster, not even those below /showA.
 Choosing /showA/* would restrict the job to the cluster(s) *below* /showA, but
- not including /showA
- Choosing /showA/+ would restrict the job to /showA and all the clusters ٠ below it.

See Also

- Controlling Host Selection
- How to use qbwrk.conf
- worker_groups
- worker_cluster
- · How to use clustering for workers