

cgroup setup

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- cgroup setup differs between Scientific Linux 6 (kernel 2.6*) and CentOS 7 (kernel 3.10*)
 - under SL6/SysV you need to install libcgconfig tools etc. and configure them
 - under EL7 systemd will handle cgroup resources itself
 - note: all CPU shares of slots/cgroups are relative within the share of the condor parent cgroup relative to the other cgroups
 - we set slots to be partitionable to allow single and multi core jobs to mix

EL7

(thanks to [Brian](#) for the help)

- Condor job cgroups can be put under the system resource (maybe dedicated resource unit may be possible??)

```
BASE_CGROUP = /system.slice/condor.service
```

- with it a job's cgroup resource slice should be in

```
/sys/fs/cgroup/{cpu,cpuacct/memory/...}/system.slice/condor.service/condor_var_lib_condor_execute_slot1_@WN.FQDN.HERE/
```

SL6

- libcgroup needs to be installed and services **cgconfig** and **cgred** enabled/started
- to enable cgroups configure a parent cgroup 'htcondor'
 - in the Condor worker node config **BASE_CGROUP** containing all jobs later on as sub-cgroups
 - and the basic cgroup config (the htcondor group definition might be placed in /etc/cgconfig.d/... instead)

```
> cat /etc/cgconfig.conf
mount {
    cpuset = /cgroup/cpuset;
    cpu = /cgroup/cpu;
    cpuacct = /cgroup/cpuacct;
    memory = /cgroup/memory;
    devices = /cgroup/devices;
    freezer = /cgroup/freezer;
    net_cls = /cgroup/net_cls;
    blkio = /cgroup/blkio;
}
group htcondor {
    cpu {}
    cpuacct {}
    memory {}
    freezer {}
    blkio {}
}
```

- with it, job cgroup resource infos/limits should be available around

```
/cgroup/{cpu/cpuacct/memory}/htcondor/condor_var_lib_condor_execute_slot1_@WN.FQDN.HERE/
```