

Worker Node Setup in HTCondor

- we put the general worker node setup in config [/etc/condor/config.d/00worker.conf](#)
- cgroup setup differs between [Scientific Linux/CentOS 6 and 7](#)
- settings for running grid jobs are organized in [/etc/condor/config.d/01grid.conf](#)
 - since we have grid and NAF as general users on HTCondor, we keep settings separate if relevant only to one or the other
 - for NAF: todo
- each node checks every 180s its health as disk space, the state of CVMFS mounts,...
 - we use [GridPP's health check](#) script with minor modifications: [healthcheck_wn_condor.sh](#)
 - the check is run via a [condor cron hook](#) in the worker's config
 - a fresh rebooted node will wait for 10m before becoming healthy/accepting jobs
 - a worker node will only offer its resources when [healthy](#)

00worker.conf

```
DAEMON_LIST = MASTER, STARTD
DEFAULT_DOMAIN_NAME = desy.de
UID_DOMAIN = desy.de
FILESYSTEM_DOMAIN = $(UID_DOMAIN)
ALLOW_WRITE = *.$(UID_DOMAIN)
ALLOW_READ = *.$(UID_DOMAIN)
CONDOR_ADMIN = iMAIL@HERE.FOO
CONDOR_HOST = condor01.desy.de
COLLECTOR_NAME = Test Condor Pool - $(CONDOR_HOST)
StartJobs = true
STARTD_ATTRS = StartJobs, $(STARTD_ATTRS)
# When is this node willing to run jobs?
START = (NODE_IS_HEALTHY =?= True) && (StartJobs =?= True)

# Permanent way of stopping jobs from starting
HOSTALLOW_CONFIG = $(CONDOR_HOST)
ALLOW_CONFIG = $(CONDOR_HOST)
ENABLE_RUNTIME_CONFIG = True
RUNTIME_CONFIG_ADMIN = $(CONDOR_HOST)
STARTD.SETTABLE_ATTRS.ADMINISTRATOR = StartJobs
ENABLE_PERSISTENT_CONFIG = True
PERSISTENT_CONFIG_DIR = /etc/condor/persistent

# use one shared port
USE_SHARED_PORT = True
SHARED_PORT_ARGS = -p 9620
COLLECTOR_HOST = $(CONDOR_HOST):9618

# Enable CGROUP control
BASE_CGROUP = # SL6: htcondor # EL7: /system.slice/condor.service #
# hard: job can't access more physical memory than allocated
# soft: job can access more physical memory than allocated when there are free memory
CGROUP_MEMORY_LIMIT_POLICY = soft

# slots
NUM_SLOTS = 1
NUM_SLOTS_TYPE_1 = 1
SLOT_TYPE_1 = 100%
SLOT_TYPE_1_PARTITIONABLE = true
COUNT_HYPERTHREAD_CPUS = true

# startd hook to check if node is healthy
STARTD_CRON_JOBLIST = NODEHEALTH
STARTD_CRON_NODEHEALTH_EXECUTABLE = /etc/condor/tests/healthcheck_wn_condor.sh
STARTD_CRON_NODEHEALTH_PERIOD = 180s
STARTD_CRON_NODEHEALTH_MODE = Periodic
```

01grid.conf

```
GRID_RESOURCE = true

# start worker node allowing single core and multi core jobs
# to push mcore jobs, resources are partly drained and allocated to mcore-only
# https://www.gridpp.ac.uk/wiki/Example\_Build\_of\_an\_ARC/Condor\_Cluster#Fallow
OnlyMulticore = False # legacy

# worker node attributes
STARTD_ATTRS = $(STARTD_ATTRS), GRID_RESOURCE, OnlyMulticore
```

02naf.conf

