NMIS 9 - Configuration Options for Server Performance Tuning

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Configuration items

NMIS runs a daemon to periodically obtain the nodes information, and other maintenance jobs that need to be done (to calculate metrics, cleanup jobs, run the plugins, etc.).

The main process - **the nmis scheduler** - runs a loop and checks which jobs need to be done. It will add these jobs into a queue, and it will fork worker processes that will run these jobs.

The number of workers is set in the parameter nmisd_max_workers:

```
nmisd_max_workers
```

This means the maximum number of worker processes that the nmis main process will be able to start.

This parameter takes by default a value of 10. But this value is too big for a small network. Can be adjusted based on the number of nodes:

Number of nodes	Number of threads
120	3-4

The nmis scheduler will run in a loop. When an iteration is finalised, the process will sleep for nmisd_scheduler_cycle seconds. This value is 10 by default, but it can be modified.

```
'nmisd_scheduler_cycle' => 10,
```

There are a couple of configuration items to modify the lifecycle of the forks.

```
'nmisd_worker_cycle' => 30,
'nmisd_worker_max_cycles' => 100,
```

nmisd_worker_cycle is the number of seconds the process will sleep if it doesn't have any job to perform.

Every time a worker performs a job, a cycle counter is increased. It is possible to change the default behaviour so the worker is killed every N cycles. Another process will be started by the parent once the child process reaches the max cycles, if the number of children processes doesn't reach the max_workers. It will prevent a worker memory get too big. This number can be adjusted, as, if it is too low, there is a cost associated in killing and starting a new process. Can be changed in **nmisd_worker_max_cycles**. Check

> **Error rendering macro 'jira'**
>
> java.io.IOException: Error on line 75: The element type "img" must be terminated by the matching end-tag "</img>".

for more details in tests with this value.

Go to usr/local/nmis9/conf/ Config.nmis

```
'nmis_group' => 'nmis',
'nmis_host' => 'localhost',
'nmis_host_protocol' => 'http',
'nmis_user' => 'nmis',
'nmisd_fping_worker' => 'true',
'nmisd_max_workers' => 10,
'nmisd_scheduler_cycle' => 10,
'nmisd_worker_cycle' => 30,
'nmisd_worker_max_cycles' => '100',
'node_button_in_logs' => 'true',
```