

Check RPC and check NFSv4 plugins

Install and configuration guide

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1 “Check RPC” plugin

Get the plugin and copy it to */usr/local/nagios/libexec* :

```
cp check_rpc /usr/local/nagios/libexec
chown nagios.nagios /usr/local/nagios/libexec/check_rpc
chmod u+x /usr/local/nagios/libexec/check_rpc
```

Define the command in *check_commands.cfg* :

```
# 'check_rpc' command definition
define command{
    command_name check_rpc
    command_line $USER1$/check_rpc -H $HOSTADDRESS$ -C $ARG1$
}
```

This command will call *check_rpc* on host and check that a RPC service whose name is equal to *\$ARG1* is running. *\$ARG1* is the first argument given to the command.

You must also register a new service to monitor RPC. Add it to your configuration file (for instance *new_conf.cfg*) :

```
define service{
    use generic-service ; Name of service template to use
    host_name localhost,nfs1
```

```

service_description RPC status
is_volatile 0
check_period 24x7
max_check_attempts 4
normal_check_interval 5
retry_check_interval 1
contact_groups admins
notification_options w,u,c,r
notification_interval 960
notification_period 24x7
check_command check_rpc!nfs
}

```

At check_command line, one can see that arguments are separated with a “!”. We will thus check that a RPC service called “nfs” is running on the host being monitored.

Now, restart Nagios (killall -SIGHUP nagios) and check_rpc should be working.

2 Check NFSv4 plugin

“Check NFSv4” module provides a more fine-grained monitoring than “Check RPC”. I assume you have correctly installed Nagios et NRPE plugin (for remote execution). Else, read my other configuration guides.

“Check NFSv4” plugin configuration is really easy. Copy the perl plugin (available from <http://nfsv4.bullopen-source.com/>) to the libexec directory (/usr/local/nagios/libexec).

Then you need to add check_nfsv4 command in NRPE configuration file :

```
(/usr/local/nagios/etc/nrpe.cfg):
```

```
command[check_nfs4]=/usr/local/nagios/libexec/check_nfs4 -v
```

Finally, you need to create the service in your own Nagios configuration file :

```

define service{
    use          generic-service ; Name of service template to use
    host_name localhost,nfs1
    service_description NFSv4 status
    is_volatile 0
}

```

```

check_period 24x7
max_check_attempts 1
normal_check_interval 1
retry_check_interval 1
contact_groups admins
notification_options w,u,c,r
notification_interval 50
notification_period 24x7
check_command check_nrpe!check_nfs4
}

```

This service calls NRPE and asks it to run `check_nfs4` command. Here there are no options, but you can ask for verbose mode (`-v`), to monitor a NFSv4 client instead of a server (`-i`) or to check for security features (`-s`) like `svcgssd` daemon.

To take modifications into account, you need to restart Nagios and NRPE.

NFSv4 plugin can be tuned by modifying the perl code. This is what you possibly want to change :

To set a different time-out to detect if a mount-point hangs :

```
$hang_timeout = 3;
```

To set the path of the log file where NFSv4 is writting :

```
@logfiles = ('/var/log/messages');
```

To set which “problematic” strings need to be searched in the log file :

```
$pblog = "(rpc.mountd:  refused mount|NFSD: Failure|NFSD: error)
```