

Nagios Checks in Depth

Systems Administration

School of Information Technology
Otago Polytechnic
Dunedin, New Zealand

Three kinds of Nagios Checks

1. Local services
2. Network exposed services
3. Remote services

Local Services

- ▶ Services running on the same system that runs Nagios
- ▶ A good way to explore the mechanics of plugins and checks

in /etc/nagios3/conf.d/localhost_nagios2.cfg

```
define service{  
    use                generic-service  
    host_name          localhost  
    service_description Disk Space  
    check_command       check_all_disks!20%!10%  
}
```

in /etc/nagios-plugins/config/disk.cfg

```
define command{  
    command_name    check_all_disks  
    command_line     /usr/lib/nagios/plugins/check_disk ...  
                    -w '$ARG1$' -c '$ARG2$' -e  
}
```

check_disk

This is just a simple program written in C. We can call it manually.

```
root@app:~# /usr/lib/nagios/plugins/check_disk -w 20% -c 10%
DISK OK - free space: / 5887 MB (80% inode=90%);
/lib/init/rw 122 MB (100% inode=99%);
/dev 117 MB (99% inode=98%);
/dev/shm 122 MB (100% inode=99%);|
/=1405MB;6146;6914;0;7683
/lib/init/rw=0MB;97;109;0;122
/dev=0MB;93;105;0;117 /dev/shm=0MB;97;109;0;122
```

Writing your own plugins

- ▶ It turns out that it's easy to write your own nagios plugins to implement checks.
- ▶ Write a simple program (in whatever language your choose) that conforms to a simple text-based API.
- ▶ Write a `.cfg` file that defines your check command and invokes your program.

Network Exposed Services

- ▶ Very similar to local services
- ▶ Nothing extra needs to be installed on the monitored systems
- ▶ Just connect to the service over the network and see if it works

For example, we check MySQL, but we need to dig into the check to see why it's not working yet.

in /etc/nagios3/conf.d/ppt_mysql_service.cfg

Currently the MySQL service is defined like this...

```
#check that mysql services are running
define service {
    # stuff omitted ...
    check_command      check_mysql
}
```

in /etc/nagios-plugins/config/mysql.cfg

```
# 'check_mysql' command definition
define command{
    command_name    check_mysql
    command_line    /usr/lib/nagios/plugins/check_mysql
                   -H '$HOSTADDRESS$'
}
```

Remote Services

- ▶ Sometimes we want to monitor remote services that are not exposed on a network
- ▶ There are a few ways to handle this, each with its pros and cons
- ▶ We'll consider one way, using Nagios Remote Plugin Executor (*NRPE*)
- ▶ We will pick up this topic next time.