Nagios

Nagios???GPLv2?????????????????????
Nagios??NetSaint??Ethan Galstad????????

- [PNP4Nagios](#)

PNP4Nagios

?????https://www.pnp4nagios.org/

> NOTE: ?????????? Nagios

????

```
# □□□□□
yum install gcc perl-Time-HiRes rrdtool-perl make

tar xzf pnp4nagios-0.6.21.tar.gz
cd pnp4nagios-0.6.21
./configure
```

?? Nagios ????????????? nagios???????

```
./configure --with-nagios-user=icinga --with-nagios-group=icinga
```

??????????? configure ???

> " *** Configuration summary for pnp4nagios-0.6.21 03-24-2013 ***
>
> General Options:
> ------------------------- -------------------
> Nagios user/group: nagios nagios
> Install directory: /usr/local/pnp4nagios
> HTML Dir: /usr/local/pnp4nagios/share
> Config Dir: /usr/local/pnp4nagios/etc
> Location of rrdtool binary: /usr/bin/rrdtool Version 1.3.8
> RRDs Perl Modules: FOUND (Version 1.3008)
> RRD Files stored in: /usr/local/pnp4nagios/var/perfdata
> process_perfdata.pl Logfile: /usr/local/pnp4nagios/var/perfdata.log
> Perfdata files (NPCD) stored in: /usr/local/pnp4nagios/var/spool

```
Web Interface Options:
------------------------ ------------------
HTML URL: http://localhost/pnp4nagios
Apache Config File: /etc/httpd/conf.d/pnp4nagios.conf


Review the options above for accuracy. If they look okay,
type 'make all' to compile.
```

????

```
make all
make fullinstall
```

?? PNP4Nagios

?? /etc/httpd/conf.d/pnp4nagios.conf

```
...
AuthUserFile /etc/nagios/htpasswd.users <-- □□□□□ Nagio □□□□

...
```

????? http://xxx.xxx.xxx.xxx/pnp4nagios/

?????????????????????

```
mv /usr/local/pnp4nagios/share/install.php /usr/local/pnp4nagios/share/install.php.xxx
```

?? Nagios

?? /etc/nagios/nagios.cfg

```
process_performance_data=1

service_perfdata_command=process-service-perfdata
host_perfdata_command=process-host-perfdata
```

?? /etc/nagios/objects/commands.cfg

```
define command {
    command_name    process-host-perfdata
    command_line    /usr/bin/perl /usr/local/pnp4nagios/libexec/process_perfdata.pl -d HO
STPERFDATA
}



define command {
    command_name    process-service-perfdata
    command_line    /usr/bin/perl /usr/local/pnp4nagios/libexec/process_perfdata.pl
}
```

?? /etc/nagios/objects/templates.cfg

> " ? generic-host ? generic-service ? process_perf_data ?? 0?????? 1 ?????
> host ? ????????????

```
define host {
  name                generic-host
  ...
  process_perf_data 0
  ...
}

define service {
  name                generic-service
  ...
  process_perf_data 0
  ...
}
```

??? host ? service ??????

?? /etc/nagios/objects/MES-servers.cfg?? host ? service ?????? process_perf_data 1

??MES-server.cfg ????????

```
define host {
    use                 generic-host
    host_name           ap1
    ...
    process_perf_data         1
    action_url                /pnp4nagios/index.php/graph?host=$HOSTNAME$&srv=_HOST_
    ...
}


define service {
    use                 generic-service
    host_name           ap1
    service_description       PING
    ...
    process_perf_data         1
    action_url                /pnp4nagios/index.php/graph?host=$HOSTNAME$&srv=$SERVICEDESC$
    ...
}
```

?????DB2 ???????????

MES-server.cfg?

```
define service{
        use                 generic-service
        host_name           bdb1
        service_description       MMDB_MMTBS01
        contact_groups            adm-alang
        notifications_enabled     0
        check_command             check_db2_tbs_usage!-d MMDB -t MMTBS01 -u istflr -p istflr
        max_check_attempts        1
        normal_check_interval     60
        process_perf_data         1
        action_url                /pnp4nagios/index.php/graph?host=$HOSTNAME$&srv=$SERVICEDESC$' class='tips'
rel='/pnp4nagios/index.php/popup?host=$HOSTNAME$&srv=$SERVICEDESC$
        }
```

commands.cfg?

```
# 'check_db2_tbs_usage' command definition
define command{
    command_name    check_db2_tbs_usage
    command_line    sudo -u db2inst ksh -c "~/bin/db2_check_tbs_usage.sh $ARG1$ "
    }
```

~dn2inst/bin/db2_check_tbs_usage.sh?

```
#!/bin/ksh
#########################################################
# Author: Felipe Alkain de Souza
#
# Script Name: db2_check_tbs_usage.sh
#
# Functionality: This script checks DB2 tablespace utilization
#
# Usage: ./db2_check_tbs_usage.sh -d <database_name> -t <tbs_name> -u <db_user> -p <db_pass>
#
# Requisite settings:
# - visudo
#   #Defaults    requiretty <== comment out this line
#   nagios  ALL=(ALL)      NOPASSWD: ALL
#
# - Create DB2 catalog for the DBs that are monitored.
#
#
# Update:
# 2013/9/17   by A-Lang
#
#########################################################

. $HOME/sqllib/db2profile

### Nagios RCs Variables
STATE_OK=0
STATE_WARNING=1
STATE_CRITICAL=2
STATE_UNKNOWN=3

Usage() { echo "Usage: $0 [-d <databas_name>] [-t <tbs_name>] [-u <db_user>] [-p <db_pass>]"; }
```

```
ToUpper() {
    echo $1 | tr "[:lower:]" "[:upper:]"
}

GetOut(){
    db2 terminate > /dev/null 2>&1
    sleep 2
    exit $1
}

while getopts ":d:t:u:p:" o; do
    case "$o" in
        d)
            d=$OPTARG
            ;;
        t)
            t=$OPTARG
            ;;
        u)
            u=$OPTARG
            ;;
        p)
            p=$OPTARG
            ;;
        \?)
            echo "Invalid option: -$OPTARG"
            Usage
            ;;
        :)
            echo "Option -$OPTARG requires an argument."
            Usage
            ;;
    esac
done

if [ $OPTIND -ne 9 ]; then
    echo "Invalid options entered."
    Usage
    exit $STATE_UNKNOWN
```

```
fi


DB_NAME=$(ToUpper $d)
DB_TBS=$(ToUpper $t)
DB_USER=$u
DB_PASS=$p


db2 terminate > /dev/null 2>&1
db2 connect to $DB_NAME user $DB_USER using $DB_PASS > /dev/null 2>&1


if [ $? -ne 0 ]
then
    echo "DB2 CRITICAL - The database $DB_NAME did not connect!"
    GetOut $STATE_CRITICAL
fi


TBS_USAGE=`db2 -x "select '     ' CONCAT (SUBSTR(CHAR(DECIMAL(USED_PAGES, 10, 2)/ \
DECIMAL(TOTAL_PAGES,10,2)*100),9,5)) CONCAT '%' as PERCENT_USED \
from table (snapshot_tbs_cfg('${DB_NAME}', 0)) as t \
where TABLESPACE_TYPE=0 and TABLESPACE_NAME='${DB_TBS}'" | sed -e 's/%//g' -e 's/ //g'`
#echo $TBS_USAGE


if [ -z $TBS_USAGE -o $? -ne 0 ]
then
    echo "Unknown Tablespace $DB_TBS !"
    GetOut $STATE_UNKNOWN
fi


PERF_DATA="|'Disk Utilization'=${TBS_USAGE}%;90;95;"


if [ $TBS_USAGE -lt 90 ]; then
    echo "TABLESPACE OK - The database $DB_NAME is healthy now , the used disk space of the tablespace
$DB_TBS is ${TBS_USAGE}% . $PERF_DATA"
    GetOut $STATE_OK


elif [ $TBS_USAGE -gt 90 -a $TBS_USAGE -lt 95 ]; then
    echo "TABLESPACE WARNING - The used disk space of the tablespace $DB_TBS is ${TBS_USAGE}%, crossing
```

the threshold. $PERF_DATA"

   GetOut $STATE_WARNING

else

   echo "TABLESPACE CRITICAL - The used disk space of the tablespace $DB_TBS is ${TBS_USAGE}%, crossing the threshold. $PERF_DATA"

   GetOut $STATE_CRITICAL

fi

#db2 terminate
db2 terminate > /dev/null 2>&1
sleep 1

?? popup ??(optional)

? pnp4nagios ??????? status-header.ssi

```
cp <pnp4nagios □□□□□>/contrib/ssi/status-header.ssi /usr/share/nagios/ssi
```

> " NOTE:
>
> ??????????
>
> /usr/share/nagios/ssi ?????? nagios ??????????

?? /etc/nagios/objects/MES-servers.cfg??? action_url

```
define host {
   use                 generic-host
   host_name           ap1
   ...
   process_perf_data   1
   action_url          /pnp4nagios/index.php/graph?host=$HOSTNAME$&srv=_HOST_' class='tips'
rel='/pnp4nagios/index.php/popup?host=$HOSTNAME$&srv=_HOST_
   ...
}
```

```
define service {
  use                generic-service
  host_name          ap1
  service_description PING
  ...
  process_perf_data  1
  action_url         /pnp4nagios/index.php/graph?host=$HOSTNAME$&srv=$SERVICEDESC$' class='tips'
rel='/pnp4nagios/index.php/popup?host=$HOSTNAME$&srv=$SERVICEDESC$
  ...
}
```

Performance Data ???

Performance Data ??

`label=value[UOM];[warning-range];[critical-range];[min];[max]`

HTTP ??????

`HTTP OK: HTTP/1.1 200 OK - 46869 bytes in 0.294 second response time | time=0.294561s;;;0 size=46869B;;;0`

> " Tip: ????? | ??????? Performance Data

Performance Data ???????????

- space separated list of label/value pairs
- label can contain any characters
- the single quotes for the label are optional. Required if spaces, = or ' are in the label
- label length is arbitrary, but ideally the first 19 characters are unique (due to a limitation in RRD). Be aware of a limitation in the amount of data that NRPE returns to Nagios
- to specify a quote character, use two single quotes
- warn, crit, min/ or max/ may be null (for example, if the threshold is not defined or min and max do not apply). Trailing unfilled semicolons can be dropped
- min and max are not required if UOM=%
- value, min and max in class [-0-9.]. Must all be the same UOM
- warn and crit are in the range format (see Section 2.5). Must be the same UOM UOM (unit of measurement) is one of:
  - no unit specified - assume a number (int or float) of things (eg, users, processes, load averages)
  - s - seconds (also us, ms)

- % - percentage
- B - bytes (also KB, MB, TB, GB?)
- c - a continous counter (such as bytes transmitted on an interface)