

Monitor disk health with HDSentinel and collectd

A little shell script to connect HDSentinel to collectd.

HDSentinel^[^1] is a brilliant little freeware capable of showing S.M.A.R.T. data from the disks in various ways. Since these values are important in monitoring and I'm using collectd as monitoring system, I needed a way to integrate the two. I ended up using the Exec plugin of collectd.

The steps:

```
wget http://www.hdsentinel.com/hdslin/  
hdsentinel_008_x64.zip  
unzip hdsentinel_008_x64.zip  
chmod 0755 HDSentinel  
mv HDSentinel /usr/bin/hdsentinel
```

bash:

Add the monitor scripts:

```
vim /etc/collect/scripts/hdsentinel.sh
```

bash:

```
#!/usr/bin/env bash  
  
HOSTNAME=`uname -n`  
INTERVAL="${COLLECTD_INTERVAL:-1}"  
  
disks=`ls /dev/sd[a-z]`  
  
while sleep "${INTERVAL}"; do  
    hdsentinel=`/usr/bin/sudo /usr/bin/hdsentinel`  
    for disk in ${disks}; do  
        data=`echo "${hdsentinel}" | grep -A11 ${disk}`  
        name=`echo "${data}" | grep "HDD Device" | awk
```

bash:

```

'{print $4}'`
    disk=${disk##/dev/}

    temp=`echo "${data}" | grep "Temperature" | awk
'{print $3}'`
    echo "PUTVAL "${HOSTNAME}/hdsentinel-${disk}/
temperature" interval=$INTERVAL N:${temp}"

    tempmax=`echo "${data}" | grep "Highest Temp" | awk
'{print $3}'`
    echo "PUTVAL "${HOSTNAME}/hdsentinel-${disk}/
temperature-max" interval=$INTERVAL N:${tempmax}"

    health=`echo "${data}" | grep "Health" | awk '{print
$3}'`
    echo "PUTVAL "${HOSTNAME}/hdsentinel-${disk}/percent-
health" interval=$INTERVAL N:${health}"

    performance=`echo "${data}" | grep "Performance" |
awk '{print $3}'`
    echo "PUTVAL "${HOSTNAME}/hdsentinel-${disk}/percent-
performance" interval=$INTERVAL N:${performance}"

done
done

```

Note: "percent" and "temperature" are types of collectd. Thx deadite66[^2]!

Add the collectd plugin:

```
vim /etc/collectd/collectd.conf
```

bash

```
LoadPlugin exec
<plugin exec>
    Exec "nobody" "/etc/collectd/scripts/hdsentinel.sh"
</plugin>
```

bash

Add "nobody" to sudoers, but only for hdsentinel (install sudo if you need to, hdsentinel needs root access to run, but collectd will not exec with root user):

```
vim /etc/sudoers
```

```
bash
```

```
# add to the end
```

```
nobody    ALL=(ALL) NOPASSWD: /usr/bin/hdsentinel
```

```
bash
```

Links

1. http://www.hdsentinel.com/hard_disk_sentinel_linux.php
2. <http://ubuntuforums.org/showthread.php?t=1479963>

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