

**A Note on
Shell Script command file
“GWBnodesDiskProcessStatusVer2.cmd”**

This script is to check the following things on gwbh1 to gwbh10 m/c's & and the node m/c's gwbcorr1 to gwbcorr16.

1. Features of this script :

- a. Disk mount status on gw b host and node machines.
- b. Alert, if disk usage exceeded the alert level set (now set to 80%).
- c. Status of Disks usage on gw b host and node machines.
- d. Processes run by the user on gw b host & node machines.
- e. Information on “Last few logged-in” to gw b host & node machines (now set to log, last 5 logged-ins).

2. Procedure to run the script :

- a. This script can be run as gpuuser (not as root) from gwbh1 machine.
/home/gpuuser/GWBnodesDiskProcessStatusVer2.cmd

3. Working of the script :

- a. This script logs-in to all the machines & nodes without password from gwbh1 m/c.
- b. This script prints what it is doing, on the terminal for users.
- c. This script writes all the output information to file1 “ProcessDiskStatus_Date_Time.log” in the directory /home/gpuuser/log_files on gwbh1 machine.
- d. This script also writes to file2, only Alert/warning information “ProcessDiskAlerts_Date_Time.log” in the directory /home/gpuuser/log_files on gwbh1 machine.
- e. This script prints the time taken to complete this work at the end. It is around 40 seconds.

4. gwbh machines/nodes and their Disk & Usage table :

Sl.#	Node Name	Disk	Usage
1	gwbh1 to gwbh10	/data	For developers test data.
2	gwbh1 & gwbh6	/gwbifrddata /gwbifrddata1	For interferometry visibility data For interferometry visibility data
3	gwbh6	/gwbifrddata2	For interferometry visibility data
4	gwbh2,3,7,8,9, & 10	/data2 to /data6	For beam former data
5	gwbh2	/data7 to /data9 yg_usb_gwb7 to 11	For beam former data
6	gwbh3	/data7 to /data9 yg_usb_gwb1 to 6	For beam former data
7	gwbh7 to gwbh9	/data7	For beam former data
8	gwbcorr1 to 16	/data	For general use by the developers.

/home/gpuuser is the general disk, which is being monitored on gwbh1 to gwbh10 and nodes gwbcorr1 to gwbcorr16, along with above mentioned disks for mount/unmount and disk space by this script.

All the "system code" has been kept at /home/gpuuser/GWB on gwbh1. The executables of the code is copied to all the m/c's and nodes using script.

5. The sample (trimmed) output files :

These are attached here, for information.

- a. ProcessDiskTerminal.out (copy-pasted) : information messages on the terminal &
- b. ProcessDiskStatus_Date_Time.log : Process-Disk Status log file.
- c. ProcessDiskAlerts_Date_Time.log : Process-Disk Alerts log file.

a. ProcessDiskTerminal.out

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[gpuuser@gwbh1 ~]$ ./GWBnodesDiskProcessStatusVer2.cmd
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Started Checking the Disks Mount, Disks Usage Level, Processes, & Users logged-in on gwbh1 to gwbh10 and gwbcorr1 to gwbcorr16 m/c's of GWB 30 Antenna system

Checking Disks mount status of host machines gwbh1 to gwbh10

Checking Disks Mount Status of gwbh1 : 192.168.4.147

Checking Disks Mount Status of gwbh2

Checking Disks Mount Status of gwbh3

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Checking Disks Mount Status of gwbh9

Checking Disks Mount Status of gwbh10

Checking Disks Mount Status of gwbcorr1 to 16 node machines

Checking Disks Mount Status of gwbcorr1

Checking Disks Mount Status of gwbcorr2

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Checking Disks Mount Status of gwbcorr16

Checking Disks Usage Level exceeding 80% of gwbh1 to gwbh10 host machines

Checking Disks Usage Level exceeding 80% on gwbh1 : 192.168.4.147

Checking Disks Usage Level exceeding 80% on gwbh2

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Checking Disks Usage Level exceeding 80% on gwbh10

Checking Disks Usage level exceeding 80% on gwbcorr1 to 16 node machines

Checking Disks Usage Level exceeding 80% on gwbcorr1

Checking Disks Usage Level exceeding 80% on gwbcorr2

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Checking Disks Usage Level exceeding 80% on gwbcorr16

Checking Disks Usage status of gwbh1 to gwbh10

Checking Disks Usage status of gwbh1 : 192.168.4.147

Checking Disks Usage Status of gwbh2

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Checking Disks Usage Status of gwbh10

Checking Disks Usage status of gwbcorr1 to gwbcorr16

Checking Disks Usage Status of gwbcorr1

Checking Disks Usage Status of gwbcorr2

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Checking Disks Usage Status of gwbcorr16

Checking the Processes running on gwbh1 to gwbh10 by gpuuser

Checking status of Processes running on gwbh1 : 192.168.4.147

Checking Status of Processes Running on gwbh2

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Checking Status of Processes Running on gwbh10

Checking status of Processes running on gwbcorr1 to gwbcorr16 by gpuuser

Checking status of Processes running on gwbcorr1

Checking status of Processes running on gwbcorr2

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Checking status of Processes running on gwbcorr16

Checking status of Last 5 USERS Logged-in on gwbh1 to gwbh10

Checking Last 5 Users Logged-in on gwbh1 : 192.168.4.147

Checking Last 5 Users Logged-in on gwbh2

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Checking Last 5 Users Logged-in on gwbh10

Checking Last 5 USERS Logged-in on gwbcorr1 to gwbcorr16

Checking Last 5 Users Logged-in on gwbcorr1

Checking Last 5 Users Logged-in on gwbcorr2

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Checking Last 5 Users Logged-in on gwbcorr16

For output view the file

/home/gpuuser/log_files/ProcessDiskStatus_30082017_121522.log
on 192.168.4.147:gwbh1

For output of only Alerts, view the file

/home/gpuuser/log_files/ProcessDiskAlerts_30082017_121522.log
on 192.168.4.147:gwbh1

Total time taken is : 0 minutes and 41 seconds

[gpuuser@gwbh1 ~]\$

[gpuuser@gwbh1 ~]\$ vim ./log_files/ProcessDiskStatus_30082017_121522.log

[gpuuser@gwbh1 ~]\$ vim ./log_files/ProcessDiskAlerts_30082017_121522.log

b. ProcessDiskStatus_19052016_114102.log

[gpuuser@gwbh1 ~]\$ vim ./log_files/ProcessDiskStatus_30082017_121522.log

30-08-2017 12:15:22 PM IST

USER INPUTs SET :

Alert level of disks : 80%

Processes Run by : gpuuser

Last logins : 5

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STATUS of DISKs MOUNT/UNMOUNT on HOST MACHINES

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Disks Mount/Unmount on gwbh1 : 192.168.4.147

/home mounted

/data mounted

/ mounted

/gwbifrdata mounted

/gwbifrdata1 mounted

Disks Mount/Unmount on gwbh2

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Disks Mount/Unmount on gwbh10

/home mounted on gwbh10
/data mounted on gwbh10
/ mounted on gwbh10
/data2 mounted on gwbh10
/data3 mounted on gwbh10
/data4 mounted on gwbh10
/data5 mounted on gwbh10
/data6 mounted on gwbh10

STATUS of DISKS MOUNT/UNMOUNT on NODE MACHINES

Disks Mount/Unmount on gwbcorr1

/home mounted on gwbcorr1
/data mounted on gwbcorr1
/ mounted on gwbcorr1

Disks Mount/Unmount on gwbcorr2

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Disks Mount/Unmount on gwbcorr16

/home mounted on gwbcorr16
/data mounted on gwbcorr16
/ mounted on gwbcorr16

DISKS USAGE LEVEL ALERT on HOST MACHINES

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Disks Usage Level exceeding 80% on gwbh1 : 192.168.4.147

ALERT : Running out of space on gwbh1 /data 93%
ALERT : Running out of space on gwbh1 /gwbifrddata 87%
ALERT : Running out of space on gwbh1 /gwbifrddata1 91%

Disks Usage Level exceeding 80% on gwbh2

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Disks Usage Level exceeding 80% on gwbh10

ALERT : Running out of space on gwbh10 /data2 94%

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DISKS USAGE LEVEL ALERT on NODE MACHINES
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Disks Usage Level exceeding 80% on gwbcorr1

Disks Usage Level exceeding 80% on gwbcorr16

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STATUS of DISKS USAGE on HOST MACHINES
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Disks Usage on gwbh1 : 192.168.4.147

Filesystem	Size	Used	Avail	Use%	Mounted on
/dev/sda1	529G	359G	144G	72%	/home
/dev/sda5	983G	867G	67G	93%	/data
/dev/sda3	99G	15G	79G	16%	/
/dev/sdb1	1.9T	1.6T	244G	87%	/gwbifrddata
/dev/sdc1	3.7T	3.3T	364G	91%	/gwbifrddata1

Disks Usage on gwbh2

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Disks Usage on gwbh10

/dev/sdb1	493G	136G	332G	30%	/home
/dev/sdb6	1.1T	57G	978G	6%	/data
/dev/sdb3	99G	1.3G	93G	2%	/
/dev/sdc1	1.9T	1.8T	120G	94%	/data2
/dev/sde1	3.7T	2.0T	1.8T	54%	/data3
/dev/sda1	3.7T	1.2T	2.6T	31%	/data4
/dev/sdf1	3.7T	2.1T	1.7T	56%	/data5
/dev/sdd1	3.7T	625G	3.1T	17%	/data6

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STATUS of DISKS USAGE on NODE MACHINES
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Disks Usage on gwbcorr1

/dev/sda1	500G	114G	387G	23%	/home
/dev/sda7	935G	33M	935G	1%	/data
/dev/sda3	100G	565M	100G	1%	/

Disks Usage on gwbcorr2

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Disks Usage on gwbcorr16

/dev/sda2 493G 104G 364G 23% /home
/dev/sda1 920G 77M 873G 1% /data
/dev/sda5 99G 1.3G 93G 2% /

STATUS of PROCESSES RUNNING on HOST MACHINES by gpuuser
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Processes running on 192.168.4.147 gwbh1

COMMAND PID TT C STIME ELAPSED
ps -u gpuuser --sort=-%cpu 13866 pts/1 1 12:15 00:01
/bin/bash ./GWBnodesDiskPro 9030 pts/1 0 12:15 00:36
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/home/gpuuser/GWB/ver3/bin/ 26083 ? 0 Jul28 33-03:44:05

Processes running on gwbh2

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Processes running on gwbh10

COMMAND PID TT C STIME ELAPSED
/home/gpuuser/GWB/ver5/bin/ 14757 ? 99 12:02 13:56
sshd: gpuuser@pts/1 9412 ? 0 Aug25 4-18:42:41

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dasd gpuuser 44571 ? 0 Jun20 71-01:24:48

STATUS of PROCESSES RUNNING on NODE MACHINES by gpuuser
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Processes running on gwbcorr1

COMMAND PID TT C STIME ELAPSED
/home/gpuuser/GWB/ver5/bin/ 52530 ? 99 12:02 13:56
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ps -u gpuuser --sort=-%cpu 58987 ? 0 12:15 00:00

Processes running on gwbcorr2

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Processes running on gwbcorr16

COMMAND	PID	TT	C	STIME	ELAPSED
/home/gpuuser/GWB/ver5/bin/	19489	?	99	12:02	13:57
/home/gpuuser/mpi/bin/orted	19488	?	0	12:02	13:58
sshd: gpuuser@notty	25930	?	0	12:16	00:00
ps -u gpuuser --sort=-%cpu	25931	?	0	12:16	00:00

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STATUS of LAST 5 LOGGed in USERS on HOST MACHINES
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Last 5 Users Logged-in on gwbh1 : 192.168.4.147

gpuuser	pts/2	gwbcorr14	Wed Aug 30 11:11 - 11:11	(00:00)
gpuuser	pts/2	gwbcorr11	Wed Aug 30 11:10 - 11:10	(00:00)
gpuuser	pts/2	gwbcorr10	Wed Aug 30 11:10 - 11:10	(00:00)
gpuuser	pts/2	gwbcorr8	Wed Aug 30 11:10 - 11:10	(00:00)
gpuuser	pts/2	gwbcorr7	Wed Aug 30 11:10 - 11:10	(00:00)

wtmp begins Wed Mar 8 09:00:40 2017

Last 5 Users Logged-in on gwbh2

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Last 5 Users Logged-in on gwbh10

gpuuser	pts/5	gwbh1.gmrt.ncra.	Wed Aug 30 10:57 - 10:57	(00:00)
gpuuser	pts/5	gwbh1.gmrt.ncra.	Wed Aug 30 10:57 - 10:57	(00:00)
gpuuser	pts/5	gwbh1.gmrt.ncra.	Wed Aug 30 10:56 - 10:57	(00:00)
gpuuser	pts/0	rficorr1.gmrt.nc	Tue Aug 29 12:06	still logged in
gpuuser	pts/4	astro8.gmrt.ncra	Tue Aug 29 10:37 - 16:01	(05:23)

wtmp begins Wed Feb 22 21:41:48 2017

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STATUS of LAST 5 LOGGed in USERS on NODE MACHINES
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Last 5 Users Logged-in on gwbcorr1

gpuuser	pts/1	gwbh6	Wed Aug 30 12:13	still logged in
gpuuser	pts/0	gwbh6	Tue Aug 29 16:05 - 10:57	(18:52)

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Last 5 Users Logged-in on gwbcorr16

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gpuuser pts/0    gwbh1    Wed Aug 23 10:45 - 10:45 (00:00)
gpuuser pts/1    gwbh1    Fri Aug 11 12:05 - 12:05 (00:00)
gpuuser pts/0    gwbh6    Wed Aug 9 12:09 - 12:09 (00:00)
gpuuser pts/0    gwbh6    Thu Jul 27 15:42 - 15:42 (00:00)
gpuuser pts/0    gwbh6    Wed Jul 5 15:07 - 15:08 (00:00)
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wtmp begins Sat Feb 6 00:41:20 2016

Total time taken is : 0 minutes and 41 seconds

c. ProcessDiskAlerts_19052016_114102.log

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USER INPUTs SET :

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Processes Run by : gpuuser

Last logins : 5

STATUS of DISKs MOUNT/UNMOUNT on HOST MACHINES

STATUS of DISKs MOUNT/UNMOUNT on NODE MACHINES

DISKs USAGE LEVEL ALERT on HOST MACHINES

ALERT : Running out of space on gwbh1 /data 93%

ALERT : Running out of space on gwbh1 /gwbifrddata 87%

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ALERT : Running out of space on gwbh8 /data5 99%

ALERT : Running out of space on gwbh10 /data2 94%

DISKs USAGE LEVEL ALERT on NODE MACHINES

Total time taken is : 0 minutes and 41 seconds

\$ The End of Report \$