

14/05/2016
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A Note on the use of Shell Script command file “GSBnodesDiskStatusVer5.cmd”

This script is to check the following things on gsbm1, gsbm2, gsbm3, gsbm4, gsbm5 & gsbm6 m/c's and also the nodes 1 to 50.

1. Features of this script are :

- a. Disk mount status on gsbm machines and nodes.
- b. Alert, if disk usage exceeded the alert level set.
- c. Status of Disks usage on gsbm machines and nodes.
- d. Processes run by the user on gsbm machines & nodes.
- e. Information on “Last few logged on” to gsbm machines & nodes.

2. Procedure to run the script :

- a. This script can be run as gsbuser (not as root) from gsbm1 machine.
/home/gsbuser/GSBnodesDiskProcessStatusVer5.cmd

3. Working of the script :

- a. This script logs-in to all the machines & nodes without password from gsbm1 m/c.
- b. This script prints what it is doing, on the terminal for users.
- c. This script writes all the output information to the file1 “ProcessDiskStatus_Date_Time.log” in the directory /home/gsbuser/log_files on gsbm1 machine.
- d. This script also writes to file2, only Alert/warning information “ProcessDiskAlerts_Date_Time.log” in the directory /home/gsbuser/log_files on gsbm1 machine.
- e. This script prints the time taken to complete this work at the end. It is around 13 minutes.

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

SI No.	Node Name	Disk#	Usage
1	gsbm1 & m5*	/mnt/code /mnt/raid0/gsbuser	For storing the gsb system code. This gets mounted on all the gsbm machines & nodes. Log.dat of GSB, which is used for post analysis of GSB failure/buffer loss.
2	gsbm4 & m6*	/gsbifrddata/ /gsbifrddata1/	For recording of 16sec visibility lta data For recording of 2sec visibility lta data
3	gsbm2	/mnt/gsbifrddata2/ /mnt/a & /mnt/b	For recording of Hi Time Visibility (125mSec and 2sec). These are not default disk for HiTimeVis recording, but time to time user do recording in it.
4	gsbm3	/mnt/yg_usb_gsb /mnt/yg_usb_gsb3 /mnt/[ab]	For general use.
5	node33 & 34	/mnt/pulsar /mnt/[abcd]	Used for recording the pulsar data. These disks are getting used for voltage beam recording, two disks at a given time.
6	node33 to 48	/mnt/[abcd]	For storing raw baseband sampled voltage data.
7	Node47 & 48	/mnt/pulsar	Used for recording the pulsar data. Got 500G disk space, old configuration. Now a days these disks are not getting used, since the beam data goes to node33/34 2T disk space.
8	Node49 & 50	/mnt/DISK1 /mnt/DISK2	For storing pulsar data (1TB each).

/home/gsbuser is the general disk, which is being monitored on gsbm machines and nodes 33 to 50, along with above mentioned disks for mount/unmount and disk space by this script.

* gsbm5 is replica of gsbm1 and gsbm6 is replica of gsbm4 machines.

5. The sample (trimmed) output files :

These are attached here, for information.

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

a. ProcessDiskTerminal.out

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[gsbuser@test2 gsbuser]$ ./GSBnodesProcessDiskStatusVer5.cmd
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Kindly wait work in progress...

Checking Disks mount status of 192.168.4.26:gsbm1:test2

Checking Disks mount status of 192.168.4.51:gsbm2:test1

Checking Disks mount status of 192.168.15.103:gsbm4

Checking Disks mount status of 192.168.4.12:gsbm5

Checking Disks mount status of 192.168.4.53:gsbm6

Checking Disk Mount Status of node1

Checking Disk Mount Status of node2

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Checking Disk Mount Status of node50

Checking Disks Usage status of 192.168.4.26:gsbm1:test2

Checking Disks Usage status of 192.168.4.51:gsbm2:test1

Checking Disks Usage status of 192.168.15.103:gsbm4

Checking Disks Usage status of 192.168.4.12:gsbm5

Checking Disks Usage status of 192.168.4.53:gsbm6

Checking Disk Usage Status of node33

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Checking Disk Usage Status of node50

Checking status of Processes running on 192.168.4.26:gsbm1:test2

Checking status of Processes running on 192.168.4.51:gsbm2:test1

Checking status of Processes running on 192.168.15.103:gsbm4

Checking status of Processes running on 192.168.4.12:gsbm5

Checking status of Processes running on 192.168.4.53:gsbm6

Checking status of Processes running on node1

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Checking status of Processes running on node50

Checking status of last logged in users 192.168.4.26:gsbm1:test2

Checking status of last logged in users 192.168.4.51:gsbm2:test1

Checking status of last logged in users 192.168.15.103:gsbm4

Checking status of last logged in users 192.168.4.12:gsbm5

Checking status of last logged in users 192.168.4.53:gsbm6

Checking status of LAST LOGGED in USERS on node1

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Checking status of LAST LOGGED in USERS on node50

For output view the file /home/gsbuser/log_files/ProcessDiskStatus_03052016_100810.log @
192.168.4.26:gsbm1:test2

For output of only Alerts, view the file
/home/gsbuser/log_files/ProcessDiskAlerts_03052016_100810.log
@ 192.168.4.26:gsbm1:test2

Total time taken is : 13 minutes and 30 seconds

[gsbuser@test2 gsbuser]\$

b. ProcessDiskStatus_03052016_100810.log

03-05-2016 10:08:10 AM

USER INPUTs SET :
Alert level of disks : 90%
Processes Run by : gsbuser
Last logins : 5

STATUS of DISKs MOUNT/UNMOUNT :

@ 192.168.4.26 gsbm1:test2

/dev/hda1 mounted
/mnt/raid0 mounted
/mnt/code mounted

ALERT : Running out of space on gsbm1:test2 /mnt/code 90%

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/mnt/code mounted on node50
/mnt/DISK1 mounted on node50
/mnt/DISK2 mounted on node50

STATUS of DISKs USAGE :

@ 192.168.4.26 gsbm1:test2

Filesystem	Size	Used	Avail	Use%	Mounted on
/dev/hda1	9.9G	7.6G	1.8G	82%	/
/dev/md0	1.8T	1.2T	565G	68%	/mnt/raid0
/dev/md1	276G	234G	28G	90%	/mnt/code

@ node50

/dev/sda6	4.8G	1.8G	2.8G	40%	/home
/dev/sdc1	932G	190G	742G	21%	/mnt/DISK1
/dev/sdd1	932G	88G	844G	10%	/mnt/DISK2

STATUS of PROCESSES RUNNING :

@ 192.168.4.26 gsbm1:test2

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
gsbuser	4596	0.0	0.2	14316	4796	?	S	Jan28	24:50	/home/gsbuser/bin

@ node50

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
gsbuser	3366	0.0	0.1	17004	3192	?	Ss	Feb15	0:00	/home/gsbuser/bin/dasd

STATUS of LAST LOGGed in USERS :

@ 192.168.4.26 gsbm1:test2

gsbuser	pts/1	astro8.gmrt.ncra	Tue	May	3	10:06	still logged in
gsbuser	pts/2	astro8.gmrt.ncra	Mon	May	2	14:59 - 17:18	(02:18)
gsbuser	pts/1	astro8.gmrt.ncra	Mon	May	2	14:50 - 17:18	(02:28)
gsbuser	pts/2	oper2.gmrt.ncra	Sun	May	1	19:17 - 20:07	(00:49)
gsbuser	pts/16		Sun	May	1	19:12 - 19:12	(00:00)

wtmp begins Sun Sep 1 07:46:33 2013

@ node50

root	pts/1	gsbm1	Sun	May	1	19:03 - 19:03	(00:00)
gsbuser	pts/1	gsbm1	Fri	Apr	29	11:33 - 11:33	(00:00)
gsbuser	pts/1	gsbm1	Thu	Apr	28	15:52 - 15:52	(00:00)
gsbuser	pts/1	gsbm1	Thu	Apr	28	14:41 - 14:42	(00:01)
gsbuser	pts/1	gsbm1	Sun	Apr	24	19:01 - 19:01	(00:00)

wtmp begins Fri Apr 8 16:45:50 2016

c. ProcessDiskAlerts_03052016_100810.log

03-05-2016 10:08:10 AM

USER INPUTs SET :

Alert level of disks : 90%

Processes Run by : gsbuser

Last logins : 5

ALERT : Running out of space on gsbm1:test2 /mnt/code 90%
ALERT : Running out of space on gsbm2:test1 /mnt/b 100%
ALERT : Running out of space on gsbm3 /home 98%
ALERT : Running out of space on gsbm3 /mnt/usb_gsb 99%
ALERT : Running out of space on gsbm3 /mnt/b 99%
ALERT : Running out of space on gsbm4 /home 100%