

M-8. rax_status_df

1.0 General Information

1.1 Description

This Korn script monitors how full the various partitions on **the RAX box** are and notifies the user when any partition exceeds 90% (default). The script uses the sed command and the linux df command. The rax_status_df script is intended to be a cron job run by user oper. Prior to build OB6 the percentage default was 85%.

1.2 Enhancements/Bug Fixes/Changes

Build OB7.2

No changes were made to the script.

Build OB6

A major rewrite of this script was done by OHD/HL to make it much more robust than the original script developed by the RAXUM team.

2.0 Configuration Information

2.1 apps_defaults tokens

One apps_defaults token is used by the rax_status_df script, it is:

| | |
|---------|---|
| adb_dir | name of the directory where RFC Archive apps and other files are stored on the archive system |
|---------|---|

2.2 oper's cron

This script should be executed by oper as part of its cron on the archive system. In this way this script can be executed on a routine basis.

Example cron entries are shown below.

```
16 12 * * * /rfc_arc/scripts/sysadmin/rax_status_df
```

2.3 "housecleaning" requirements

The log file for this script will occasionally need to be downsized. It is recommended that an entry to "houseclean" this log file be added to the purge_files that oper's cron is

already running. An example of what this entry might look like is shown below.

```
#shrink rax_status_df log file
CHKRAX=$ARCDIR/logs/sysadmin
cd $CHKRAX
tail -40 chkdisk_rpt.log > bozoB
rm chkdisk_rpt.log
mv bozoB chkdisk_rpt.log
```

Another way to “houseclean” this log file might also be to take advantage of the linux logrotate utility. Information on how to use this utility can be found in section M-11.

3.0 The Script

This script runs the linux df command and checks the output for partitions that are greater than 90% full. If any partitions exceed 90% full, a message is created and sent to the printer. The user may wish to do something other **than** send this message to the printer, such as send the message to the textdb and use the alert/alarm feature or include this in a browser monitoring webpage the office may be using. The script is located in the directory /rfc_arc/scripts/sysadmin. It is recommended this script be run once per day. The user can change the percent value if need be by editing the script.

Command line options

rax_status_df [-per <num>] [-all] [-nolog]

- per <num> (optional) if present, list only the disk dirs that exceed the given <num> percentage; the default is 90 percent. NOTE: this does NOT apply to size values in the hardwired list for variable “PthLis”.
- all (optional) if present, list all disk dirs that are above the percentage of use limit; else the default is to only list disk dirs that are on the hardwired list in variable “PthLis” at the top of the script.
- nolog (optional) if present, do NOT output the report or the log message to files in the system admin directory, only output to standard out; else the default is to output to the report and log files.

Log File

The script adds a single entry each day to the log file chkdisk_rpt.log. This file is located in the directory /rfc_arc/logs/sysadmin. An example of this log file is shown below.

```
Wed Sep 24 12:15:01 UTC 2003 - all rax directories <= 85% full
```

```
Thu Sep 25 12:15:00 UTC 2003 - all rax directories <= 85% full
Fri Sep 26 12:15:00 UTC 2003 - all rax directories <= 85% full
Sat Sep 27 12:15:00 UTC 2003 - all rax directories <= 85% full
Sun Sep 28 12:15:00 UTC 2003 - all rax directories <= 85% full
```

Message File

The message file is only created if a partition exceeds the percent fullness that has been defined. The most recent message created is always available for viewing. The disksp-rpt.txt file is also located in the directory /rfc_arc/logs/sysadmin. Examples of file contents for <= 90% and > 90% are shown.

All partitions <= 90%

| Filesystem | 1k-blocks | Used | Available | Use% | Mounted on |
|-----------------------------------|-----------|----------|-----------|------|----------------------------|
| /dev/sda7 | 2015984 | 462436 | 1451140 | 25% | / |
| /dev/sda1 | 46453 | 13405 | 30650 | 31% | /boot |
| /dev/sda11 | 331066756 | 13078516 | 301170940 | 5% | /data |
| /dev/sda6 | 2015984 | 34096 | 1879480 | 2% | /local |
| none | 514208 | 0 | 514208 | 0% | /dev/shm |
| /dev/sda2 | 10080364 | 104744 | 9463556 | 2% | /rfc_arc_data |
| /dev/sda9 | 255660 | 8246 | 234214 | 4% | /tmp |
| /dev/sda3 | 4032064 | 3085288 | 741952 | 81% | /usr |
| /dev/sda10 | 255660 | 199122 | 43338 | 83% | /var |
| ds-krf:/home | 5734400 | 2936728 | 2630056 | 53% | /home |
| ds-krf:/awips/hydroapps/lx/public | 18432000 | 14118928 | 4061528 | 78% | /awips/hydroapps/lx/public |
| ds-krf:/data/fxa/ispan/hydro_adbs | 5427200 | 2420424 | 2836920 | 47% | /rfc_arc_data/q/raw |
| /dev/sda5 | 2015984 | 177464 | 1736112 | 10% | /rfc_arc |
| px2f:/px2data | 0 | 1 | 0 | 0% | /px2data |

one or more partitions > 90%

```
>>>>> CHECKING DISK SPACE ON RAX <<<<<
```

```
Sun Sep 28 16:20:06 UTC 2003
```

```
The following directories are more than 90% full:
```

```
  /usr      91
  /var      95
```

```
>>>>>>>>> End of Report <<<<<<<<<<<<<
```

4.0 Troubleshooting Information

For this script, check out the log and output files. When the cron runs this script any “surprise” errors will be in user oper’s mailbox on the RAX. Normally user oper should not have any mail from this script. For additional help, contact the RFC Support Group.