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UNIX Get An Alert When Disk Is Full

Posted by [Vivek Gite](#) <vivek@nixcraft.com>

I want to get an alert when my disk is full under UNIX and Mac OS X? How do I set a specified threshold and run the script via cron?

The `df` command report file system disk space usage including the amount of disk space available on the file system containing each file name argument. Disk space is shown in 1K blocks by default, unless the environment variable `POSIXLY_CORRECT` is set, in which case 512-byte blocks are used.

Use `df` command and pass the `-P` option which make `df` output POSIX compliant (i.e. 512-byte blocks rather than the default. Note that this overrides the `BLOCKSIZE` specification from the environment).



[1]

UNIX

[2]

```
# df -P /
```

OR

```
# df -P /usr
```

Sample Outputs:

Filesystem	512-blocks	Used	Avail	Capacity	Mounted on
/dev/aacd0s1e	162491344	21988048	127503992	15%	/usr

You can now simply `grep /usr` file system and print out used capacity:

```
# df -P /usr | grep /usr | awk '{ print $5}' | sed 's/%//g'
```

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Or assign value to a variable:

```
# output=$(df -P /usr | grep /usr | awk '{ print $5}' | sed 's/%//g')
# echo $output
```

Under BASH or KornShell you [can use arrays indexed](#) ^[3] by a numerical expression to make code small:

```
# output=$(df -P /)
# echo "${output[11]}"
```

A Sample Shell Script

```
#!/bin/bash
# Tested Under FreeBSD and OS X
FS="/usr"
THRESHOLD=90
OUTPUT=$(LC_ALL=C df -P $FS)
CURRENT=$(echo ${OUTPUT[11]} | sed 's/%//')
[ $CURRENT -gt $THRESHOLD ] && echo "$FS file system usage $CURRENT" | mail -s "$FS file sy
```

You need to modify syntax, if you are using KSH or TCSH / CSH instead of BASH. Save this script and run as [a cron job](#):

```
@daily /path/to/your.df.script.sh
```

GUI Notification

Display warning dialog using /usr/bin/zenity

```
#!/bin/bash
# Tested Under FreeBSD and OS X
FS="/usr"
THRESHOLD=90
OUTPUT=$(LC_ALL=C df -P ${FS})
CURRENT=$(echo ${OUTPUT[11]} | sed 's/%//')
[ $CURRENT -gt $THRESHOLD ] && /usr/bin/zenity --warning --text="The disk $FS ($CURRENT%
```



[4]

DF GUI Warning Notification

Finally update your cronjob as follows (you need to use DISPLAY variable to display output window):

```
36 19 * * * DISPLAY=:0.0 /path/to/script.sh
```

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[2] Image: <http://www.cyberciti.biz/faq/category/unix/>

[3] can use arrays indexed: <http://www.cyberciti.biz/faq/tag/bash-array/>

[4] Image: <http://www.cyberciti.biz/faq/mac-osx-unix-get-an-alert-when-my-disk-is-full/df-warning/>