Subject: Strange behaviour in disk space. How to diagnose sudden rise in file space used?
Posted by mcarreira on Mon, 26 Jul 2010 15:24:29 GMT
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My server is a centos-4 openvz hardware node and root file system is a 50GB partition.
Until last week, df -h command showed 46GB Size, 17GB used, 28GB Available (38% used).
Suddenly the disk became full, and messages in /var/log/message stopped because no space available. So I was unable to see what was wrong with it.
I tried to see which directories were "guilty" about this problem. But, using "du" command was not very informative, because it showed me only 13 GB used (?). There was a different result between "du" and "df" commands I cannot understand.
I deleted some unuseful files to get some disk space available, and now I have 4.8GB available with "df" command, and /var/log/messages started to be written again.

This is the result of "df -h"

```
[root@hn ~]# df -h
Filesystem            Size  Used Avail Use% Mounted on
/dev/md1               46G   39G  4.8G  89% /
/dev/md0               84M   47M   33M  60% /boot
/dev/md5               92G   46G   42G  53% /vz
/dev/md2              917G  340G  532G  39% /shares
/dev/sde1             917G  508G  363G  59% /disco2
/dev/sdf1             113G  188M  107G   1% /tempdisk
none                 2.0G     0  2.0G   0% /dev/shm
```

This is the result of du -hs /*

```
[root@hn ~]# du -sh /*
284K    /baksystem
6.7M    /bin
44M     /boot
1.5M    /copia
616K    /dev
508G    /disco2
55M     /etc
458M    /home
8.0K    /initrd
179M    /lib
21M     /lib64
16K     /lost+found
12K     /media
8.0K    /misc
20K     /mnt
8.0K    /opt
4.6G    /proc
2.6G    /root
```

21M /sbin
8.0K /selinux
339G /shares
8.0K /srv
0 /sys
20K /tempdisk
864K /teste
72K /tftpboot
188K /tmp
4.6G /usr
913M /var
470M /vmachines
421G /vz

If I sum all space used in every directory (except /disco2 /shares and /vz directories, which are mounted points of other disks) I only get aproximately 13GB.
So, why "df" tells me that my disk is almost full, when some days before it was showing me 17GB used?
Also those impossible 421GB in /vz are not corresponding to 46GB used in a 92GB partition when using "df" command.

Someone has a clue?

Subject: Re: Strange behaviour in disk space. How to diagnose sudden rise in file space used?
Posted by olojoh1977 on Tue, 27 Jul 2010 06:50:55 GMT
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Just a newbie trying to help...

Perhaps there are "zombie"-processes with open files?
Try lsof.

Kind regards Olof

Subject: Re: Strange behaviour in disk space. How to diagnose sudden rise in file space used?
Posted by mcarreira on Tue, 27 Jul 2010 17:19:53 GMT
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Thanks, but I did it already.
I also tried to reboot in single mode (init 1), but the result is the same. There are no zombie processes. Something happened suddenly(??) I looked to all logs, I didn't made any update or download anything...

I will move everything to a new larger disk briefly, but I'm not happy without knowing what happened (this server is running since 2007 without any problem until now).
The attachment has an image from my MRTG graph showing the size used in the partition, where it can be seen the sudden rise in the space used.

File Attachments

1) CapturaEcra.png, downloaded 380 times