

## GIS - Support #7156

### Make server boot again

30/11/2018 11:03 - Philippe May

<b>Status:</b>	Resolved	<b>Start date:</b>	30/11/2018
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Philippe May	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.00 hour
<b>Description</b>			
Yesterday the server could not reboot normally.			

#### History

##### #1 - 30/11/2018 11:06 - Philippe May

To make a long story short:

- Yesterday morning, found the filesystem of gisdb remounted as readonly.
- A kernel update was pending on dom0
- Rebooting the server: could not find a way to reboot it properly

##### #2 - 30/11/2018 11:12 - Philippe May

Decided to install a fresh Stretch on sdc2: could boot without issue.

After fresh boot:

```
root@dream:~# lsblk -f
NAME                                FSTYPE          LABEL  UUID                                  MOUNTPOINT
NT
sda
├─sda1                                vfat            8E56-E147                                /boot/efi
i
├─sda2                                btrfs          35e94cd2-7d9e-4b45-88ba-f6ea79756bb8
├─sda3                                btrfs          39b40adb-70a8-4271-93c1-065bb53d7fed
├─sda4                                swap           a62cdc04-4846-4649-9bdd-72c3d701ec74
├─sda5                                btrfs          594e4dcc-7202-4398-95d2-afb37b4f9df2
└─sda6                                linux_raid_member dream:0 8f064ad3-8046-7ac4-8748-7e98b372ee9b
   └─md0                                LVM2_member    X4Jifu-HeCl-fhzw-fYbM-rdm2-dYLY-kbqB8K
      ├─dream.csr-gisaf.csr.av--swap    swap           d54dae72-6d79-4c74-a9d9-03dfdce55000
      ├─dream.csr-gisaf.csr.av--disk    ext4           92db39ef-d7f0-4227-97f6-2992196a09bb
      ├─dream.csr-infra.csr.av--swap    swap           c9745d54-c279-4a33-85d9-ef512ae76dfd
      ├─dream.csr-infra.csr.av--disk    ext4           097afe53-8590-4bee-a979-595658f34cf4
      ├─dream.csr-samba.csr.av--swap    swap           826e3a7c-7fa1-4c9c-892b-bcdb64abdc47
      ├─dream.csr-samba.csr.av--disk    ext4           8a7004b1-d0ae-4b8e-aa3f-15b26f2d96d2
      ├─dream.csr-gisaf2.csr.av--swap   swap           581499fd-3d3a-4ccf-b097-dce8d6eace24
      ├─dream.csr-gisaf2.csr.av--disk   ext4           fb9221ae-d10b-4c70-bc60-b48ec001729d
      ├─dream.csr-freedombox--swap     swap           1d818299-0433-4d8f-823d-2f12704be732
      ├─dream.csr-freedombox--disk     ext4           0ae31051-aaf7-4589-b00d-e1c103de63cb
      ├─dream.csr-gisdb.csr.av--swap    swap           b8fad7c6-1b86-4509-adbc-3806702e6b97
      ├─dream.csr-gisdb.csr.av--disk    ext4           dea7e1e3-197d-40ac-8892-2358c7a38619
      ├─dream.csr-jupyter.csr.av--swap  swap           71450732-86a4-4496-9073-82287961925c
      └─dream.csr-jupyter.csr.av--disk  ext4           51b56adf-b971-43b1-882f-9addb86244f6
sdb
├─sdb1                                vfat            06D4-5B7C
├─sdb2
├─sdb3
├─sdb4                                swap           a55edd67-196f-4405-bbcc-d6abb7114ac4
└─sdb5
```

```

sdc
├─sdc1                ext4                backup 6b8e0ed6-4b99-4d41-b6a2-4ea37c023726
├─sdc2                ext4                06195c52-a6c4-4cf1-90ae-53827b09bea2 /
└─sdc3                swap                b29a8022-07ea-49cf-bb52-31820d308e2c [SWAP]
sdd
├─sdd1                vfat                D540-3601
├─sdd2                btrfs              35e94cd2-7d9e-4b45-88ba-f6ea79756bb8
├─sdd3                btrfs              39b40adb-70a8-4271-93c1-065bb53d7fed
├─sdd4                swap                d0ac7c97-5e83-47c4-90ac-c03061d93b73
├─sdd5                btrfs              594e4dcc-7202-4398-95d2-afb37b4f9df2
└─sdd6                linux_raid_member dream:0 8f064ad3-8046-7ac4-8748-7e98b372ee9b
    └─md0              LVM2_member        X4Jifu-HeCl-fhzw-fYbM-rdm2-dYLY-kbqB8K
        ├─dream.csr-gisaf.csr.av--swap swap                d54dae72-6d79-4c74-a9d9-03dfdce55000
        ├─dream.csr-gisaf.csr.av--disk ext4                92db39ef-d7f0-4227-97f6-2992196a09bb
        ├─dream.csr-infra.csr.av--swap swap                c9745d54-c279-4a33-85d9-ef512ae76dfd
        ├─dream.csr-infra.csr.av--disk ext4                097afe53-8590-4bee-a979-595658f34cf4
        ├─dream.csr-samba.csr.av--swap swap                826e3a7c-7fal-4c9c-892b-bcdb64abdc47
        ├─dream.csr-samba.csr.av--disk ext4                8a7004b1-d0ae-4b8e-aa3f-15b26f2d96d8
        ├─dream.csr-gisaf2.csr.av--swap swap                581499fd-3d3a-4ccf-b097-dce8d6eace24
        ├─dream.csr-gisaf2.csr.av--disk ext4                fb9221ae-d10b-4c70-bc60-b48ec001729d
        ├─dream.csr-freedombox--swap swap                1d818299-0433-4d8f-823d-2f12704be732
        ├─dream.csr-freedombox--disk ext4                0ae31051-aaf7-4589-b00d-e1c103de63cb
        ├─dream.csr-gisdb.csr.av--swap swap                b8fad7c6-1b86-4509-adbc-3806702e6b97
        ├─dream.csr-gisdb.csr.av--disk ext4                dea7e1e3-197d-40ac-8892-2358c7a38619
        ├─dream.csr-jupyter.csr.av--swap swap                71450732-86a4-4496-9073-82287961925c
        └─dream.csr-jupyter.csr.av--disk ext4                51b56adf-b971-43b1-882f-9addb86244f6

```

### #3 - 30/11/2018 11:34 - Philippe May

```

root@dream:~# uname -a
Linux dream 4.9.0-8-amd64 #1 SMP Debian 4.9.130-2 (2018-10-27) x86_64 GNU/Linux

```

```

apt install xen-system-amd64 libvirt-daemon libvirt-daemon-system

```

Reboot: OK. Systemctl: all OK.

#### #4 - 30/11/2018 13:08 - Philippe May

Allow root login by ssh (/etc/ssh/sshd\_config).

Connect with virt-manager (using xen+ssh://root@192.168.1.107/): OK.

Copy the libvirt config:

```
mkdir /mnt/sda2
mount /dev/sda2 /mnt/sda2
cp -a /mnt/sda2/etc/libvirt/libxl /etc/libvirt/
cp /mnt/sda2/etc/libvirt/libxl.conf /etc/libvirt/libxl.conf
systemctl restart libvirtd.service
```

The virtual machines show up in virt-manager.

Update the boot kernel options (importantly: dom0\_mem=512M:max=512M dom0\_max\_vcpus=1 dom0\_vcpus\_pin):

```
cp /mnt/sda2/etc/default/grub.d/xen.cfg /etc/default/grub.d/xen.cfg
update-grub
```

Reboot, OK.

Try to start a domU, got an error. More after lunch.

#### #5 - 30/11/2018 15:32 - Philippe May

From /var/log/libvirt/libxl/libxl-driver.log:

```
2018-11-30 09:39:09.449+0000: xc: panic: xc_dom_core.c:208: failed to open file '/boot/vmlinuz-4.18.0-0.bpo.1-amd64': No such file or directory: Internal error
```

So:

```
root@dream:/etc/apt/sources.list.d# cat > ftp_de_debian_org_debian.list << EOF
> deb http://ftp.de.debian.org/debian/ stretch-backports main contrib non-free
EOF
root@dream:/var/log/libvirt# cat > /etc/apt/apt.conf.d/01nocommend << EOF
```

```
APT::Install-Recommends "0";
APT::Install-Suggests "0";
EOF
```

```
apt install linux-image-4.18.0-0.bpo.1-amd64
```

## #6 - 30/11/2018 16:03 - Philippe May

Reboot, still OK.

```
root@dream:/var/log/libvirt/libxl# uname -a
Linux dream 4.18.0-0.bpo.1-amd64 #1 SMP Debian 4.18.6-1~bpo9+1 (2018-09-13) x86_64 GNU/Linux
```

By the way, boots directly into grub, skipping the rebind bootloader step: one less animal in the zoo.

Still doesn't boot domU:

```
root@dream:/var/log/libvirt/libxl# tail /var/log/libvirt/libxl/libxl-driver.log
2018-11-30 10:11:11.627+0000: libxl: libxl_exec.c:118:libxl_report_child_exitstatus: /etc/xen/scripts/vif-bridge online [1660] exited with error status 1
2018-11-30 10:11:11.627+0000: libxl: libxl_device.c:1237:device_hotplug_child_death_cb: script: Could not find bridge device br0
2018-11-30 10:11:11.627+0000: libxl: libxl_create.c:1461:domcreate_attach_devices: unable to add nic devices
2018-11-30 10:11:11.879+0000: libxl: libxl_exec.c:118:libxl_report_child_exitstatus: /etc/xen/scripts/vif-bridge offline [1707] exited with error status 1
2018-11-30 10:11:11.879+0000: libxl: libxl_device.c:1237:device_hotplug_child_death_cb: script: Could not find bridge device br0
2018-11-30 10:11:16.542+0000: libxl: libxl_exec.c:118:libxl_report_child_exitstatus: /etc/xen/scripts/vif-bridge online [1923] exited with error status 1
2018-11-30 10:11:16.542+0000: libxl: libxl_device.c:1237:device_hotplug_child_death_cb: script: Could not find bridge device br0
2018-11-30 10:11:16.542+0000: libxl: libxl_create.c:1461:domcreate_attach_devices: unable to add nic devices
2018-11-30 10:11:16.807+0000: libxl: libxl_exec.c:118:libxl_report_child_exitstatus: /etc/xen/scripts/vif-bridge offline [1975] exited with error status 1
2018-11-30 10:11:16.807+0000: libxl: libxl_device.c:1237:device_hotplug_child_death_cb: script: Could not find bridge device br0
```

```
cp /mnt/sda2/etc/systemd/network/* /etc/systemd/network/
systemctl enable --now systemd-networkd.service
```

OK, the infra.csr.av domU starts.

#### #7 - 30/11/2018 16:06 - Philippe May

Make sure grub takes the Xen image by default:

Change /etc/default/grub.d/xen.cfg and set:

```
XEN_OVERRIDE_GRUB_DEFAULT = 1
```

#### #8 - 30/11/2018 16:19 - Philippe May

Installed the server on its 192.168.0.0 network and all is well.

TODO: backups.

#### #9 - 30/11/2018 16:21 - Philippe May

For information: in this process, the BIOS of the PowerEdge T30 server was updated from 1.0.12 to 1.0.15.

#### #10 - 30/11/2018 16:24 - Philippe May

- Status changed from New to In Progress

#### #11 - 01/12/2018 11:19 - Philippe May

Ansiblize (roles: avcan):

```
ansible-playbook site.yml -i inventory.ini -l dream.csr.av
```

Backupninja:

```
apt install backupninja  
cp /mnt/sda2/etc/backup.d/* /etc/backup.d/
```

Add in /etc/fstab:

```
LABEL=backup /var/backups ext4 auto 0 0
```

Mount it:

```
mount /var/backups
```

**#12 - 05/02/2019 11:13 - Philippe May**

*- Status changed from In Progress to Resolved*