

GIS - Support #6954

Create a VM for DB

23/10/2018 16:36 - Philippe May

Status:	Resolved	Start date:	23/10/2018
Priority:	Normal	Due date:	
Assignee:	Philippe May	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Description			
We have identified that the gis.csr.av domU has issues with the file system. It switches to read only at times (heavy load).			
In order to mitigate the risks for the database (which is now used for, eg, polling weather station data), the database should be hosted in its own virtual machine (domU).			

History

#1 - 23/10/2018 17:13 - Philippe May

Follow the instruction on https://redmine.auroville.org.in/projects/gis/wiki/CSR_server , with:

```
export vm_name=gisdb.csr.av
root@dream:~# export vm_ip_addr=172.16.0.7
root@dream:~# export vm_password=foobar
root@dream:~# xen-create-image --broadcast=172.16.0.255 --dist=stretch --fs=ext4 --gateway=172.16.0.1 --hostname ${vm_name} --ip=${vm_ip_addr} --lvm=dream.csr --maxmem=512M --memory=256M --mirror=http://ftp.de.debian.org/debian/ --netmask=255.255.255.0 --password=${vm_password} --size=10G --swap=1G --vcpus=1 --bridge=br0
```

IP address (in /etc/systemd/network/50-wired.network): 192.168.0.18

Next: Ansible.

#2 - 24/10/2018 11:06 - Philippe May

Ansible done (role postgis).

Set up the postgres server: follow [Db-support](#)

#3 - 24/10/2018 11:30 - Philippe May

Migrate the database

Copy the backup files:

```
rsync -a gis.csr.av:/var/backups/postgres /var/backup
chgrp -R postgres /var/backups/postgres
chmod -R g+r /var/backups/postgres
```

```
## Backups from autopostgresqlbackup
rsync -a gis.csr.av:/var/lib/autopostgresqlbackup/ /var/lib/autopostgresqlbackup
chgrp -R postgres /var/lib/autopostgresqlbackup
chmod -R g+r /var/lib/autopostgresqlbackup
```

Restore the database from secondary backups:

```
zcat /var/lib/autopostgresqlbackup/daily/postgres_globals/postgres_globals_2018-10-24_06h25m.Wednesday.sql.gz
| psql
zcat /var/lib/autopostgresqlbackup/daily/avgis/avgis_2018-10-24_06h25m.Wednesday.sql.gz | psql
```

#4 - 24/10/2018 12:28 - Philippe May

Change the config for gisaf (db connection) on gis.csr.av. Restart:

- gisaf (systemctl restart uwsgi.service)
- notebooks (systemctl restart systemctl restart jupyter-gisaf.service, systemctl restart systemctl restart jupyter-gisaf-admin.service)

All OK.

#5 - 24/10/2018 12:32 - Philippe May

Backups (dom0)

Setup backupninja on dom0 to backup the new VM (see /etc/backup.d/61.gisdb.tar)

Create mount point

```
mkdir /mnt/lvs/dream.csr-gisdb.csr.av
```

Test:

```
mount /dev/mapper/dream.csr-gisdb.csr.av--disk /mnt/lvs/dream.csr-gisdb.csr.av
```

Run ninjahelper: select 61.gisdb.tar => "Run now".

Finally (tomorrow): check that the daily rdiff backup is OK.

#6 - 10/11/2018 16:02 - Philippe May

- Status changed from New to Resolved

- % Done changed from 0 to 100

Backup to dom0 OK:

```
root@dream:~# ll /var/backups/rdiff/mnt/lvs/dream.csr-gisdb.csr.av/var/lib/autopostgresqlbackup/daily/avgis/
total 126964
drwxr-xr-x 2 root libvirt    4096 Nov  9 11:55 ./
drwxr-xr-x 6 root libvirt    4096 Oct 31 20:10 ../
-rw----- 1 root root      21619342 Nov  4 11:55 avgis_2018-11-04_11h55m.Sunday.sql.gz
-rw----- 1 root root      21629016 Nov  5 11:55 avgis_2018-11-05_11h55m.Monday.sql.gz
-rw----- 1 root root      21642026 Nov  6 11:55 avgis_2018-11-06_11h55m.Tuesday.sql.gz
-rw----- 1 root root      21644811 Nov  7 11:55 avgis_2018-11-07_11h55m.Wednesday.sql.gz
-rw----- 1 root root      21791729 Nov  8 11:55 avgis_2018-11-08_11h55m.Thursday.sql.gz
-rw----- 1 root root      21663268 Nov  9 11:55 avgis_2018-11-09_11h55m.Friday.sql.gz
```