Proxmox BACKUP

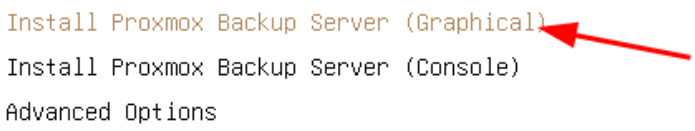
- Installation de Proxmox Backup Server
- Backup and Restore d'un proxmox A à un proxmox B

Installation de Proxmox Backup Server

CREATION DE LA VM

1. Télécharger l'ISO
2. Créer la VM
   1. Mettez 20 Go pour le disque dur
   2. Ajouter un disque dur à la fin succeptible d'acceuillir les backups (100 Go)
3. Mettre le réseau sur le même que le PVE
4. Démarrer la VM
5. Installation de la VM





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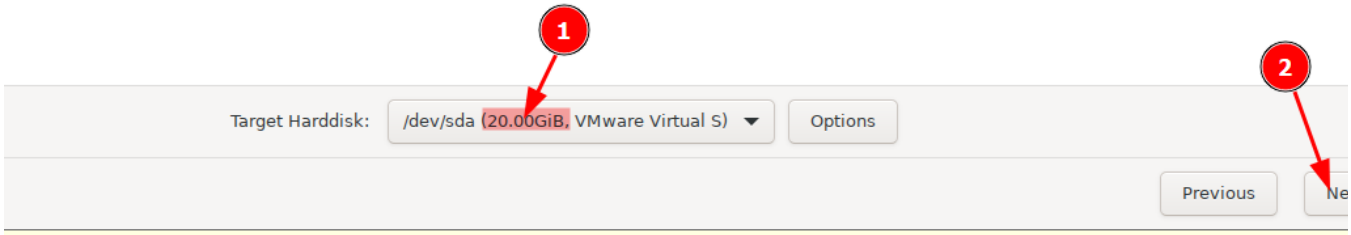
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The Proxmox Installer automatically partitions your hard disk. It installs all required packages and makes the system bootable from the hard disk. All existing partitions and data will be lost.

To continue the installation, press the Next button.

- **Please verify the installation target**
  The displayed hard disk will be used for the installation.
  Warning: All existing partitions and data will be lost.
- **Automatic hardware detection**
  The installer automatically configures your hardware.
- **Graphical user interface**
  Final configuration will be done on the graphical user interface, via a web browser.

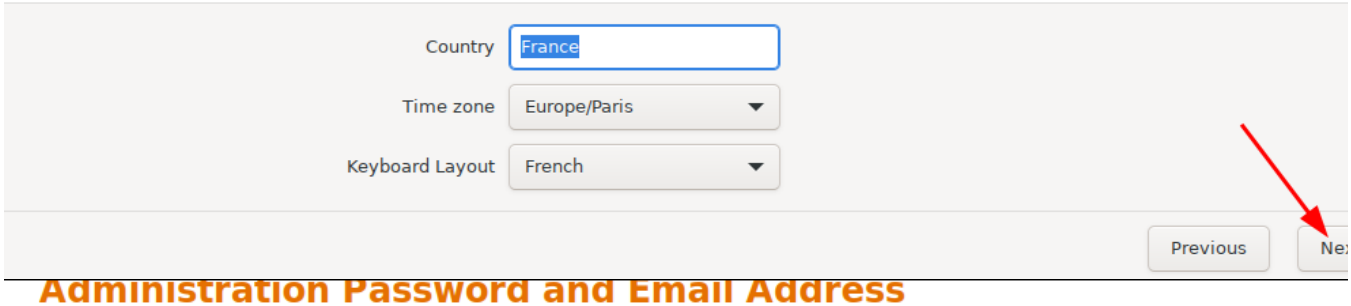


Location and Time Zone selection

The Proxmox Installer automatically makes location-based optimizations, like choosing the nearest mirror to download files from. Also make sure to select the correct time zone and keyboard layout.

Press the Next button to continue the installation.

- **Country:** The selected country is used to choose nearby mirror servers. This will speed up downloads and make updates more reliable.
- **Time Zone:** Automatically adjust daylight saving time.
- **Keyboard Layout:** Choose your keyboard layout.



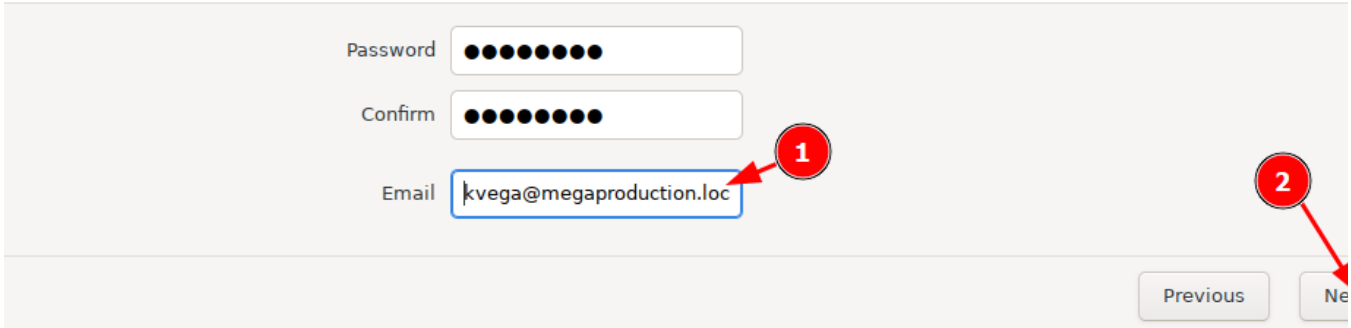
Administration Password and Email Address

Proxmox Backup Server is a full-featured, secure system, based on Debian Linux.

Step, please provide the *root* password.

- **Password:** Please use a strong password. It should be at least 8 characters long, and contain a combination of letters, numbers, and symbols.
- **Email:** Enter a valid email address. Your Proxmox Backup Server will send important alert notifications to this email account (all emails for 'root').

  To continue the installation, press the Next button.

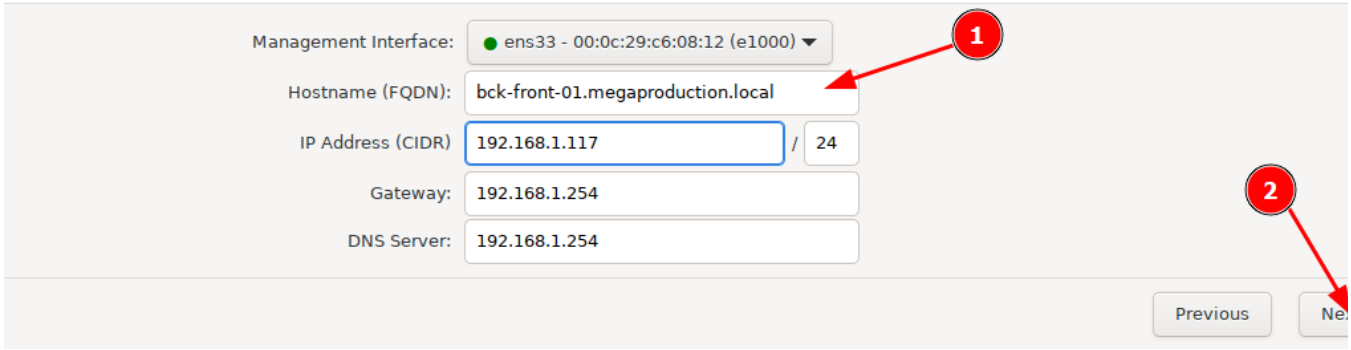


Management Network Configuration

Please verify the displayed network configuration. You will need a valid network configuration to access the management interface after installing.

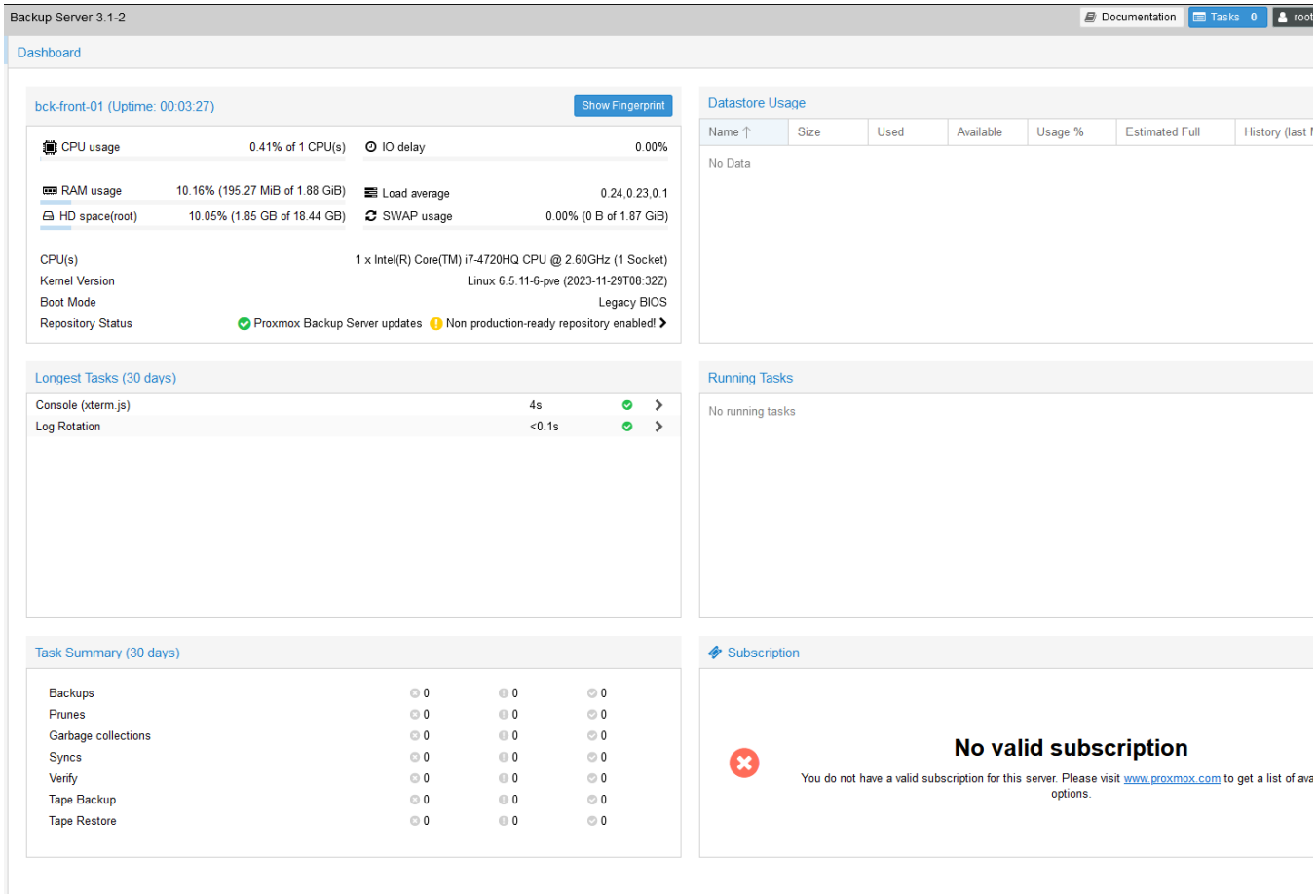
After you have finished, press the Next button. You will be shown a list of the options that you chose during the previous steps.

- **IP address (CIDR):** Set the main IP address and netmask for your server in CIDR notation.
- **Gateway:** IP address of your gateway or firewall.
- **DNS Server:** IP address of your DNS server.



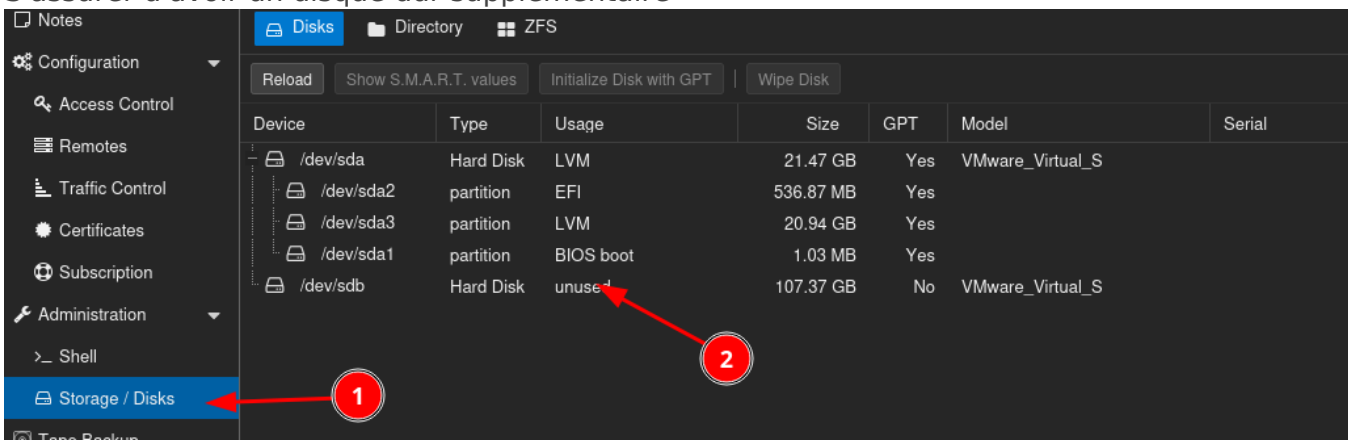


6. Le serveur est accèssible via l'IP configuré plus haut pour moi https://192.168.1.117:8007



Ajout d'un DATASTORE

1. S'assurer d'avoir un disque dur supplémentaire



2. Se connecter au serveur de backup en ssh
3. Lister les disque disponible

```
root@bck-front-01:~# lsblk
NAME         MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
sda            8:0    0   20G  0 disk
├─sda1         8:1    0 1007K  0 part
├─sda2         8:2    0  512M  0 part
└─sda3         8:3    0 19.5G  0 part
```

```
  ├─pbs-swap 252:0    0  1.9G  0 lvm  [SWAP]
  └─pbs-root 252:1    0 17.6G  0 lvm  /
sdb            8:16   0  100G  0 disk
```

Ici on vois bien mon disque de 100 Go je peux continuer

4. Créer un dossier qui nous servira de dossier de backup

```
root@bck-front-01:~# mkdir /BACKUP
root@bck-front-01:~# ls / |grep BACKUP
BACKUP
```

5. Créer la partition sur le disque, pour moi ce disque est sdb

```
root@bck-front-01:~# fdisk /dev/sdb

Welcome to fdisk (util-linux 2.38.1).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Device does not contain a recognized partition table.
Created a new DOS (MBR) disklabel with disk identifier 0xc6692165.

Command (m for help): n
Partition type
   p   primary (0 primary, 0 extended, 4 free)
   e   extended (container for logical partitions)
Select (default p): p
Partition number (1-4, default 1): 1
First sector (2048-209715199, default 2048):
Last sector, +/-sectors or +/-size{K,M,G,T,P} (2048-209715199, default 209715199):

Created a new partition 1 of type 'Linux' and of size 100 GiB.

Command (m for help): t
Selected partition 1
Hex code or alias (type L to list all): 83
Changed type of partition 'Linux' to 'Linux'.

Command (m for help): w
```

On vois que la nouvelle partition a été créée

```
root@bck-front-01:~# lsblk
NAME         MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
sda            8:0    0   20G  0 disk
├─sda1         8:1    0 1007K  0 part
├─sda2         8:2    0  512M  0 part
└─sda3         8:3    0 19.5G  0 part
  ├─pbs-swap 252:0    0  1.9G  0 lvm  [SWAP]
  └─pbs-root 252:1    0 17.6G  0 lvm  /
sdb            8:16   0  100G  0 disk
└─sdb1         8:17   0  100G  0 part
```

6. Formater la partition en ext4

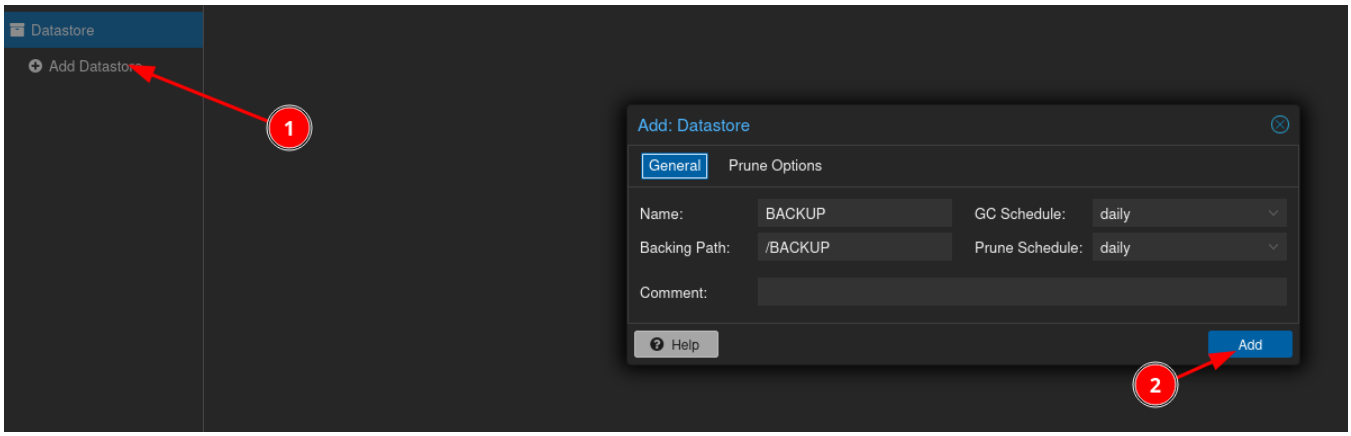
```
root@bck-front-01:~# mkfs.ext4 -b 4096 /dev/sdb1
mke2fs 1.47.0 (5-Feb-2023)
Creating filesystem with 26214144 4k blocks and 6553600 inodes
Filesystem UUID: 5b339dd1-548b-4781-ae76-db130436f824
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
        4096000, 7962624, 11239424, 20480000, 23887872

Allocating group tables: done
Writing inode tables: done
Creating journal (131072 blocks): done
Writing superblocks and filesystem accounting information: done
```

7. Monter la partition sur le serveur:
   1. Editer le fichier `/etc/fstab`
   2. Ajouter la ligne suivante en fin de fichier:
      `/dev/sdb1       /BACKUP ext4    defaults`
   3. Monter le volume:
      `mount -a`
   4. Vérifier si disques est bien monté:

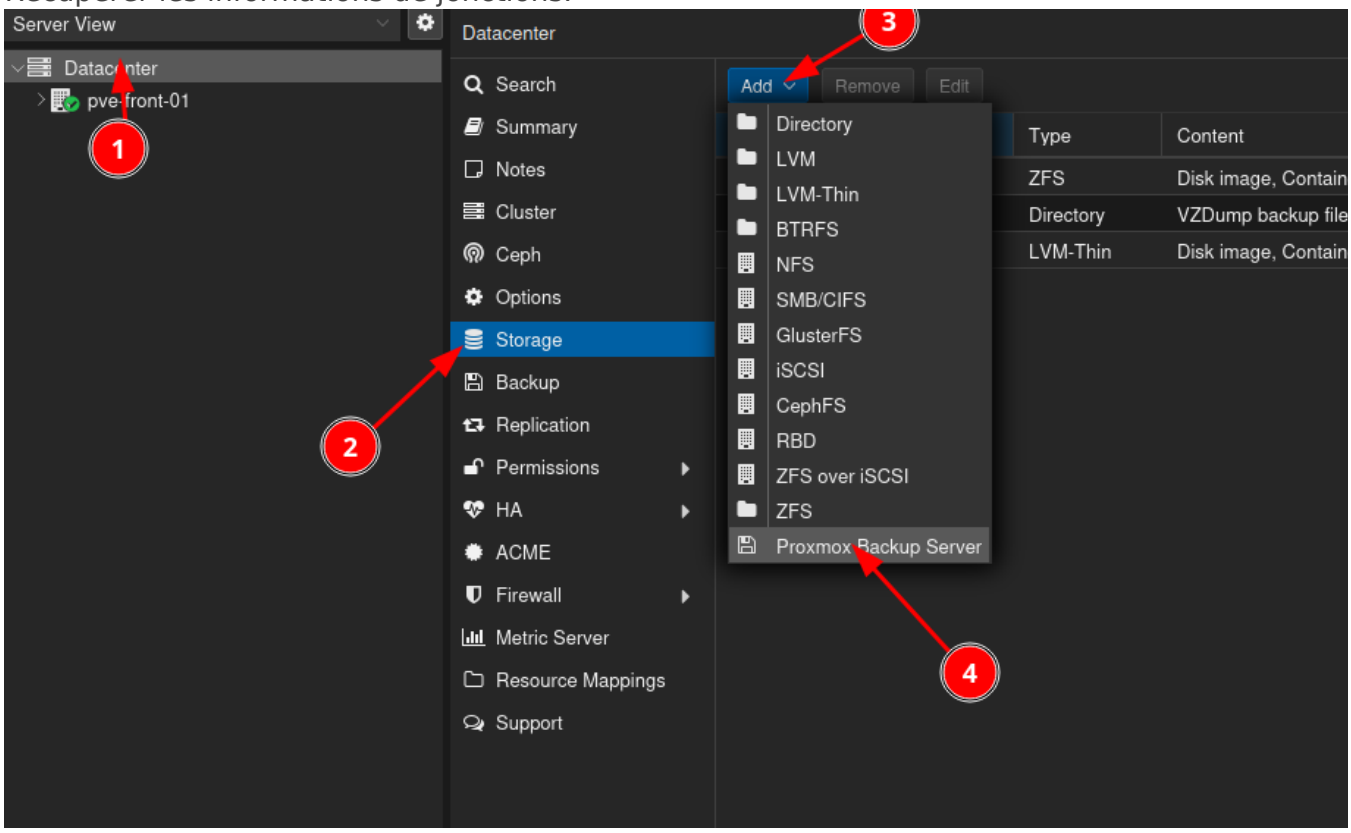
```
root@bck-front-01:~# cat /etc/fstab
# <file system> <mount point> <type> <options> <dump> <pass>
/dev/pbs/root / ext4 errors=remount-ro 0 1
/dev/pbs/swap none swap sw 0 0
proc /proc proc defaults 0 0
/dev/sdb1       /BACKUP ext4    defaults
```

8. Retourner sur la GUI et ajouter le datastore

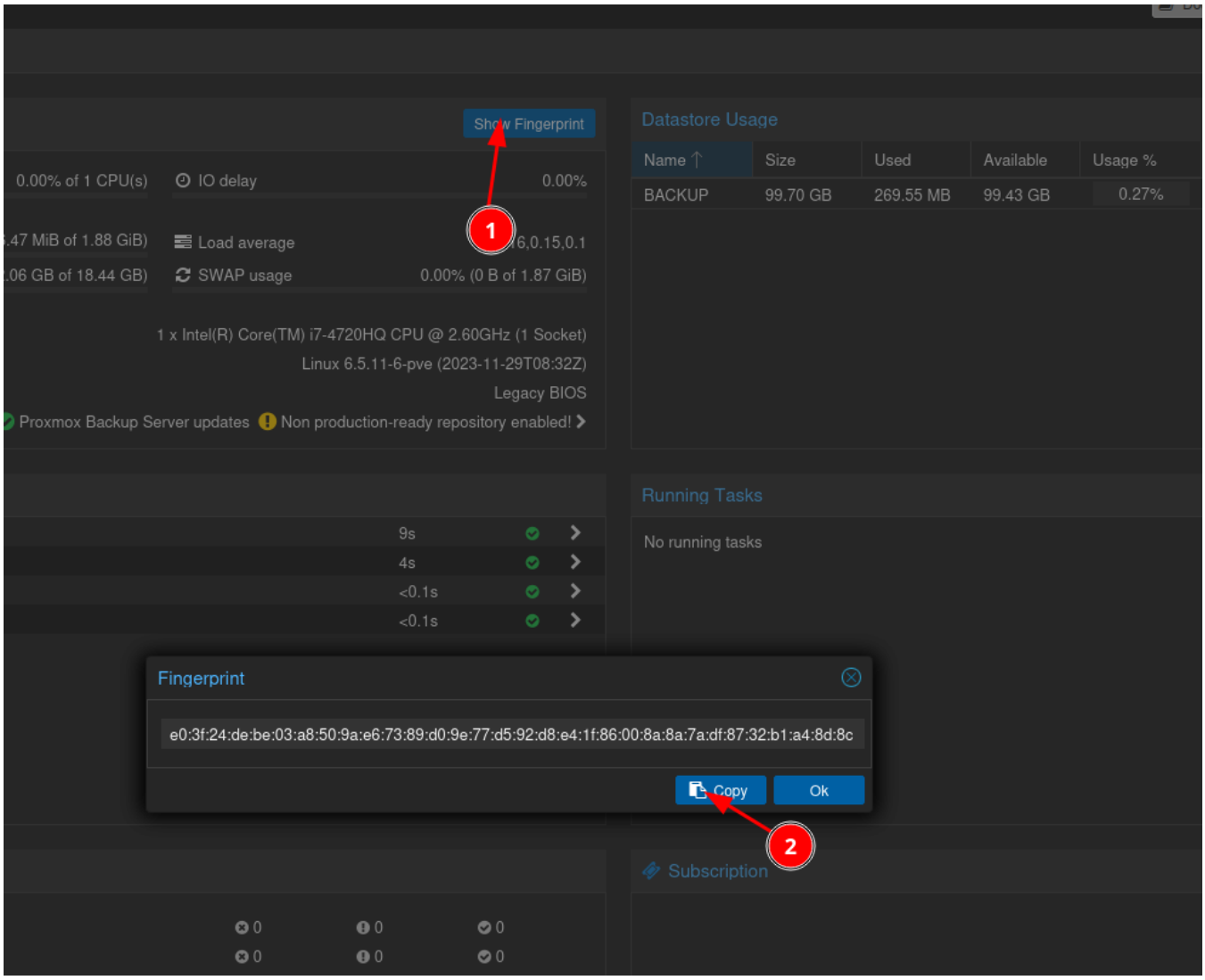


Lier le serveur de BACKUP au serveur PROXMOX

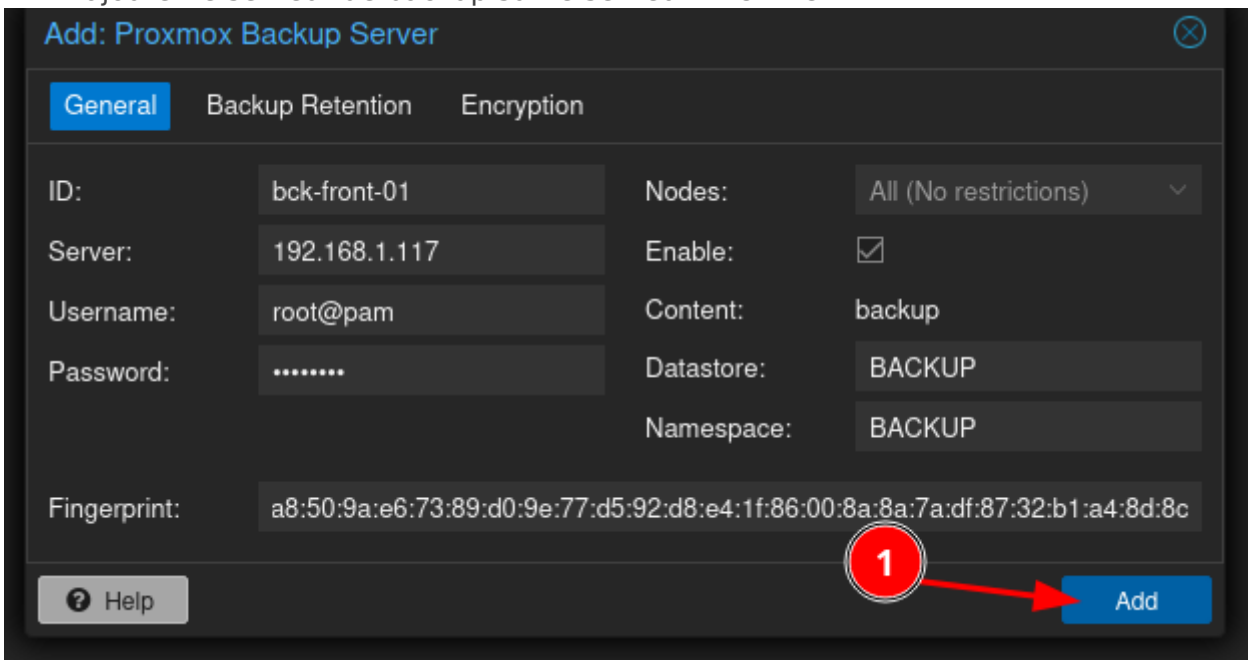
1. Se connecter au serveur Proxmox via la GUI
2. Récupérer les informations de jonctions:



3. Se connecter au serveur de Backup et récupérer le fingerprint



4. Enfin ajouter le serveur de backup sur le serveur PROXMOX



Backup and Restore d'un proxmox A à un proxmox B

□□ Migration d'une VM Proxmox vers un autre serveur - Méthode Backup & Restore

1. Sauvegarder la VM sur l'ancien serveur

```
vzdump <VMID> --storage local --mode stop
```

- `<VMID>` : ID de la VM à migrer
- `--mode stop` : la VM sera arrêtée durant la sauvegarde (plus sûr)
- Le fichier de sauvegarde sera créé dans `/var/lib/vz/dump/`

---

2. Copier le fichier de sauvegarde vers le nouveau serveur

```
scp /var/lib/vz/dump/vzdump-qemu-<VMID>-*.vma.zst root@<NOUVEAU_IP>:/var/lib/vz/dump/
```

---

3. Restaurer la VM sur le nouveau serveur

```
qmrestore /var/lib/vz/dump/vzdump-qemu-<VMID>-*.vma.zst <NOUVEL_VMID>
```

Option : Spécifier le stockage cible

```
qmrestore /var/lib/vz/dump/vzdump-qemu-<VMID>-*.vma.zst <NOUVEL_VMID> --storage local-lvm
```