

Créer 1 machine avec les références ci dessous et la cloner 2 fois:

- 4 CPU
- 4GO RAM
- 1 disque 32GO
- 1 disque 50GO
- 2 cartes réseau (dans mon cas 2 switch 3814)
- 1 ISO Proxmox_ve_7

Modifier les paramètres

LC_PVE_01

×

Matériel virtuel

Options VM

AJOUTER UN PÉRIPHÉRIQUE ▾

> CPU	4 ▾	i
> Mémoire	4 ▾	Go ▾
> Disque dur 1	32 ▾	Go ▾
> Disque dur 2	50 ▾	Go ▾
> Contrôleur SCSI 0	Paravirtuel VMware	
> Adaptateur réseau 1	DsPG-S3814 ▾	<input checked="" type="checkbox"/> Connecter...
> Adaptateur réseau 2	DsPG-S3814 ▾	<input checked="" type="checkbox"/> Connecter...
> Lecteur CD/DVD 1	Fichier ISO banque de données ▾	<input checked="" type="checkbox"/> Connecter...
> Carte vidéo	Spécifier les paramètres personnalisés ▾	
> Périphériques de sécurité	Non configuré	
Périphérique VMCI		
> Autre	Matériel supplémentaire	

 LC_PVE_01

 LC_PVE_02

 LC_PVE_03

Réaliser l'installation et la configuration de base de proxmox:

Je commence par réfléchir au ip et ajouter les regles de NAT dans le firewall:

```
pve01.tssr.lab
{
```

```
    adresse local: 192.168.10.141
    GUI: 10.30.10.126:1001
    SSH: 10.30.10.126:221
    id: root
    passwd: Test1234
  }

  pve02.tssr.lab
  {
    adresse local: 192.168.10.142
    GUI: 10.30.10.126:1002
    SSH: 10.30.10.126:2222
    id: root
    passwd: Test1234
  }

  pve03.tssr.lab
  {
    adresse local: 192.168.10.143
    GUI: 10.30.10.126:1003
    SSH: 10.30.10.126:2223
    id: root
    passwd: Test1234
  }
```

Port Forward

1:1

Outbound

NPt

Rules

<input type="checkbox"/>		Interface	Protocol	Source Address	Source Ports	Dest. Address	Dest. Ports	NAT IP	NAT Ports	Description	Actions	
<input type="checkbox"/>	<input checked="" type="checkbox"/>		WAN	TCP	*	*	WAN address	2223	192.168.10.143	22 (SSH)	SSH-PVE-03	
<input type="checkbox"/>	<input checked="" type="checkbox"/>		WAN	TCP	*	*	WAN address	1003	192.168.10.143	8006	GUI-PVE-03	
<input type="checkbox"/>	<input checked="" type="checkbox"/>		WAN	TCP	*	*	WAN address	2222	192.168.10.142	22 (SSH)	SSH-PVE-02	
<input type="checkbox"/>	<input checked="" type="checkbox"/>		WAN	TCP	*	*	WAN address	1002	192.168.10.142	8006	GUI-PVE-02	
<input type="checkbox"/>	<input checked="" type="checkbox"/>		WAN	TCP	*	*	WAN address	2221	192.168.10.141	22 (SSH)	SSH-PVE-01	
<input type="checkbox"/>	<input checked="" type="checkbox"/>		WAN	TCP	*	*	WAN address	1001	192.168.10.141	8006	GUI-PVE-01	
<input type="checkbox"/>	<input checked="" type="checkbox"/>		WAN	TCP	*	*	WAN address	2202	192.168.10.100	22 (SSH)	SSH Srv-Ubu	

Add

Add

Delete

Save


Separator

Legend

Pass

Linked rule

Installation de proxmox en faisant attention de configurer le reseau correctement:

 Proxmox VE Installer

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.

Management Interface:

ens192 - 00:50:56:9e:ab:8d (vmxnet3) ▼

Hostname (FQDN):

pve01.tssr.lab

IP Address (CIDR)

192.168.10.141 / 24

Gateway:

192.168.10.1

DNS Server:

192.168.10.1

Abort

Previous

Next

Une fois l'installé faite, modifier le fichier host comme suis et vérifier en faisant ping les machines:

```

GNU nano 5.4 /etc/hosts *
127.0.0.1 localhost.localdomain localhost

192.168.10.141 pve01.tssr.lab pve01
192.168.10.142 pve02.tssr.lab pve02
192.168.10.143 pve03.tssr.lab pve03

# The following lines are desirable for IPv6 capable hosts

::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute  ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify  ^_ Go To Line

GNU nano 5.4 /etc/hosts *
127.0.0.1 localhost.localdomain localhost

192.168.10.143 pve03.tssr.lab pve03
192.168.10.141 pve01.tssr.lab pve01
192.168.10.142 pve02.tssr.lab pve02

# The following lines are desirable for IPv6 capable hosts

::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute  ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify  ^_ Go To Line

lucho@perso-001:~$
"perso-001" 10:26 16-mai-22

lucho@perso-001:~$ ssh*
root@pve01:~# nano /etc/hosts
root@pve01:~# ping pve02
PING pve02.tssr.lab (192.168.10.142): 56(84) bytes of data:
64 bytes from pve02.tssr.lab (192.168.10.142): icmp_seq=1 ttl=64 time=1.07 ms
64 bytes from pve02.tssr.lab (192.168.10.142): icmp_seq=2 ttl=64 time=0.771 ms
64 bytes from pve02.tssr.lab (192.168.10.142): icmp_seq=3 ttl=64 time=0.692 ms
64 bytes from pve02.tssr.lab (192.168.10.142): icmp_seq=4 ttl=64 time=0.697 ms
^C
--- pve02.tssr.lab ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3017ms
rtt min/avg/max/mdev = 0.692/0.808/1.073/0.156 ms
root@pve01:~#

root@pve03:~# nano /etc/hosts
root@pve03:~# ping pve01
PING pve01.tssr.lab (192.168.10.141): 56(84) bytes of data:
64 bytes from pve01.tssr.lab (192.168.10.141): icmp_seq=1 ttl=64 time=0.656 ms
64 bytes from pve01.tssr.lab (192.168.10.141): icmp_seq=2 ttl=64 time=0.580 ms
64 bytes from pve01.tssr.lab (192.168.10.141): icmp_seq=3 ttl=64 time=0.459 ms
^C
--- pve01.tssr.lab ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2039ms
rtt min/avg/max/mdev = 0.459/0.565/0.656/0.081 ms
root@pve03:~#

the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
root@pve02:~# clear
root@pve02:~# nano /etc/hosts
root@pve02:~# ping pve03
PING pve03.tssr.lab (192.168.10.143): 56(84) bytes of data:
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=1 ttl=64 time=0.856 ms
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=2 ttl=64 time=0.721 ms
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=3 ttl=64 time=0.701 ms
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=4 ttl=64 time=0.833 ms
^C
--- pve03.tssr.lab ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 0.701/0.777/0.856/0.067 ms
root@pve02:~#

lucho@perso-001:~$
"perso-001" 10:31 16-mai-22

```

Remplacer les sources apt entreprise par les sources no-subscriptions:

```
nano /etc/apt/sources.list.d/pve-entreprise.list
```

Remplacer :

```
deb https://enterprise.proxmox.com/debian/pve bullseye pve-enterprise
```

Par:

```
deb http://download.proxmox.com/debian bullseye pve-no-subscription
```

```

lucho@perso-001: ~
GNU nano 5.4 /etc/apt/sources.list.d/pve-enterprise.list *
deb http://download.proxmox.com/debian bullseye pve-no-subscription

GNU nano 5.4 /etc/apt/sources.list.d/pve-enterprise.list *
deb http://download.proxmox.com/debian bullseye pve-no-subscription

lucho@perso-001:~$

```

Nous allons supprimer le message d'erreur dans le fichier proxmox-widget-toolkit:

```
sed -Ezi.bak "s/(Ext.Msg.show\\(\\{s+title: gettext\\('No validsub)/void\\(\\{\\|\\|\\|/g" /usr/share/javascript/proxmox-widget-toolkit/proxmoxlib.js &&
systemctl restart pveproxy.service
```

```

lucho@perso-001: ~
root@pve01:~# sed -Ezi.bak "s/(Ext.Msg.show\\(\\{s+title: gettext\\('No validsub)/void\\(\\{\\|\\|\\|/g" /usr/share/javascript/proxmox-widget-toolkit/proxmoxlib.js && systemctl restart pveproxy.service

the exact distribution terms for each program are described in the individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law.
root@pve02:~# clear
root@pve02:~# nano /etc/hosts
root@pve02:~# ping pve03
PING pve03.tssr.lab (192.168.10.143) 56(84) bytes of data:
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=1 ttl=64 time=0.856 ms
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=2 ttl=64 time=0.721 ms
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=3 ttl=64 time=0.701 ms
64 bytes from pve03.tssr.lab (192.168.10.143): icmp_seq=4 ttl=64 time=0.833 ms
^C
--- pve03.tssr.lab ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 0.701/0.777/0.856/0.067 ms
root@pve02:~# nano /etc/hosts
root@pve02:~# sed -Ezi.bak "s/(Ext.Msg.show\\(\\{s+title: gettext\\('No validsub)/void\\(\\{\\|\\|\\|/g" /usr/share/javascript/proxmox-widget-toolkit/proxmoxlib.js && systemctl restart pveproxy.service
root@pve02:~#

lucho@perso-001:~$

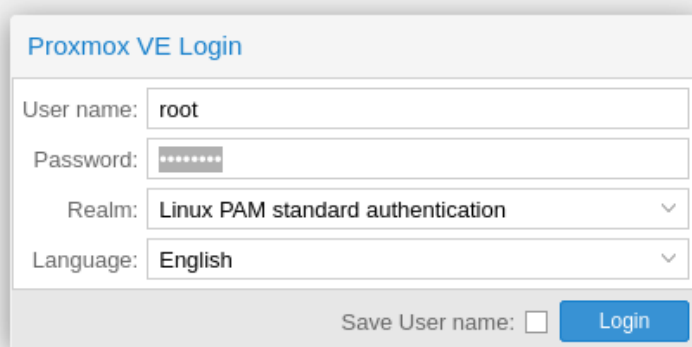
```

Après ça vous pouvez lancer la commande :

```
apt update && apt upgrade -y && reboot
```

On se connecte à l'interface web de notre pve01

```
https://10.30.10.126:1001
```



The image shows a Proxmox VE Login dialog box. It has a title bar 'Proxmox VE Login'. Below the title bar, there are four input fields: 'User name:' with the value 'root', 'Password:' with masked characters, 'Realm:' with a dropdown menu showing 'Linux PAM standard authentication', and 'Language:' with a dropdown menu showing 'English'. At the bottom of the dialog, there is a checkbox labeled 'Save User name:' which is unchecked, and a blue 'Login' button.

Création du bond0 à la place du vmbr0 (cette étape est à réaliser sur les 3 serveurs)

On commence par supprimer le vmbr0 et on crée le vmbr0

Create: Linux Bond

Name:

bond0

IPv4/CIDR:

192.168.10.141/24

Gateway (IPv4):

192.168.10.1

IPv6/CIDR:

Gateway (IPv6):

Autostart:

☒

Slaves:

ens192 ens224

Mode:

balance-rr

Hash policy:

bond-primary:

Comment:

MTU:

1500

Help

Advanced ☒

Create

Create

Revert

Edit

Remove

Apply Configuration

Name ↑	Type	Active	Autostart	VLAN a...	Ports/Slaves	Bond Mode	CIDR	Gateway	Comment
bond0	Linux Bond	No	Yes	No	ens192 en...	balance-rr	192.168.10.141/24	192.168.10.1	
ens192	Network Device	Yes	Yes	No					
ens224	Network Device	No	Yes	No					

On fais cette configuration sur les 3 serveurs et on reboot

Ensuite on vas creer une nouvelle regle associée dans le pfsense (car on a changé l'interface donc nos regles nat ne fonctionnent plus)

Message d'erreur exemple:

```
kex_exchange_identification: read: Connection reset by peer
Connection reset by x.x.x.x port 22
lost connection
```

Donc on crée de nouvelles regles associés dans le pfsense pour chacune de nos regles:

This prevents the rule on master from automatically applying to other slave members. This does not prevent the rule on slaves from applying to other slave members. This does not prevent the rule on slaves from applying to other slave members.

NAT reflection

Use system default

Filter rule association

Create new associated filter rule

View the filter rule

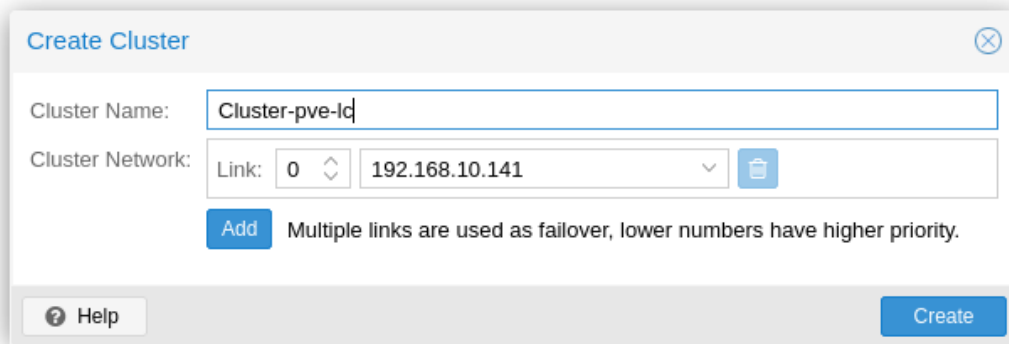
Rule Information

Creation du cluster et ajout des serveurs dans le proxmox:

7 / 22

On vas sur l'interface web du serveur pve01:

Dans Datacenter > Cluster > Cliquer sur "Create Cluster":



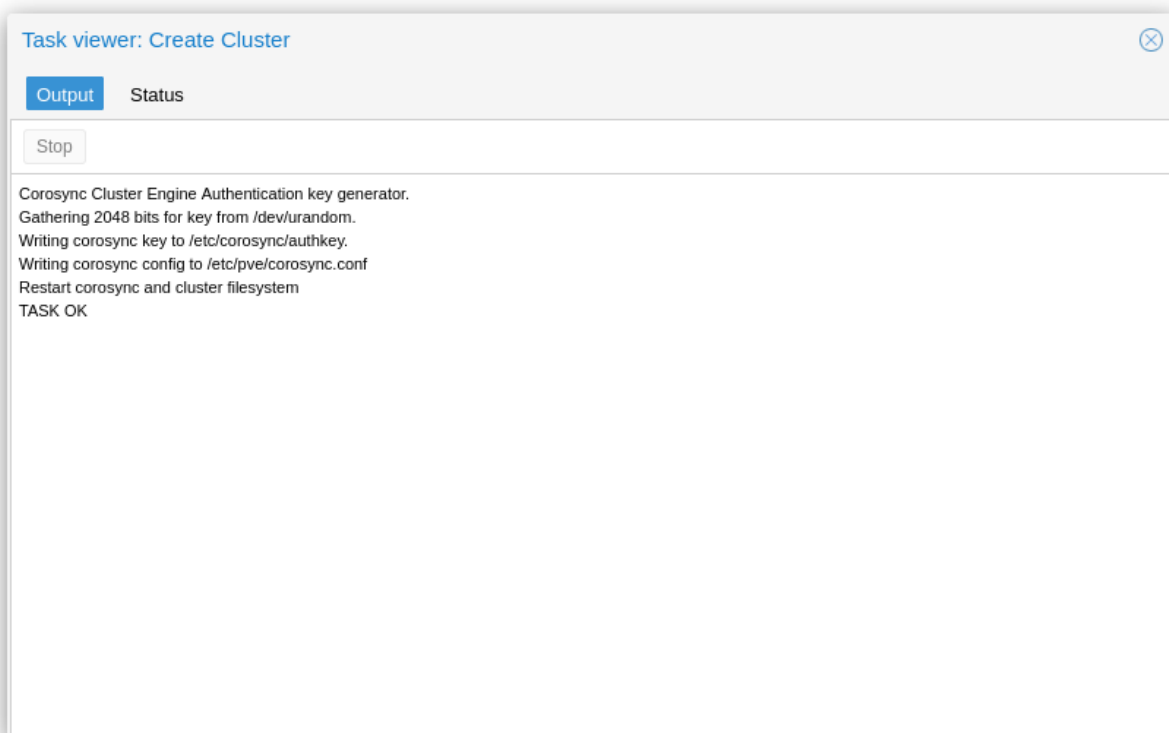
Create Cluster

Cluster Name: Cluster-pve-Id

Cluster Network: Link: 0 192.168.10.141

Add Multiple links are used as failover, lower numbers have higher priority.

Help Create



Task viewer: Create Cluster

Output Status

Stop

Corosync Cluster Engine Authentication key generator.
Gathering 2048 bits for key from /dev/urandom.
Writing corosync key to /etc/corosync/authkey.
Writing corosync config to /etc/pve/corosync.conf
Restart corosync and cluster filesystem
TASK OK

Ensuite on ajoute pve02 et pve03 au cluster:

Sur pve01 cliquer sur "Join Information" et copier la clef

Cluster Join Information

Copy the Join Information here and use it on the node you want to add.

IP Address:

192.168.10.141

Fingerprint:

33:17:72:3A:85:91:44:78:4E:1D:FB:2D:31:A1:18:64:9D:6A:17:F2:D0:12:32:7F:20:C5:92:4D:F0:B7:82:D1

Join Information:

eyJjcEFkZkhJc3MiOiIOTlUuMTY4LjEwLWJlE0MSIsImZpbmdlcniByaW50IjoiaMzM6MTc6NzI6M0E6ODU6OTE6NDQ6Nzg6NEU6MUQ6Rkl6MkQ6MzE6QTc6MTg6NjQ6OUQ6NQ6NE6MTc6Rjl6RD6MTG6MzI6N0Y6MjA6QzU6OTI6NEEQ6RjA6Qjc6ODI6RDEILCJwZWVYTGlua3MiOmsiMCi6IjE5MTkxNGJmMTAuMTQxLn0slnJpbmdfYWwkcil6WyxtOTlUuMTY4LjEwLWJlE0MSIsIdCI6MjBhR3RhSl6ev.12ZX.1zaW9uIlloiiMilslNlNYZF1dGniOlLvbhlslmNvhbmZnZ192ZX.1zaW9uIlloii

Copy Information

Sur pve02 et pve03 cliquer sur "Join Cluster" et coller la clef précédemment copié sur pve01 en entrant le mot de passe root de pve01

Cluster Join

☒ Assisted join:

Paste encoded cluster join information and enter password.

Information:

Q6RjA6Qjc6ODIERDEILCJwZWVYtGlua3MiOnsiMCi6IjE5MI4xNjguMTAuMTQxin0SnJpbmdfYWWRkcil6WylxOTluMTY4LjEwLjEOMSJdLCJ0b3RlbiS6eyJ2ZzXJzaW9uljoimlslNIY2F1dGgiOiJvbislmlNvbmZpZ192ZXJzaW9uljoIMSlslmlwX3ZlcnNpb24iOiJpcHY0LTlTYiLCJjbHVzdGVyX25hbWUiOiJDbHVzdGVyLXB2S1sYylslmxpbmRmbW9kZSI6InBhc3NpdmlUilCJpbmRicmZhY2UiOnsiMCi6eyJsaW5rbnVtYmVyIjoimcJ39fX19

Peer Address:

192.168.10.141

Password:

.....

Fingerprint:

33:17:72:3A:85:91:44:78:4E:1D:FB:2D:31:A1:18:64:9D:6A:17:F2:D0:12:32:7F:20:C5:92:4D:F0:B7:82:D1

Cluster Network:

Link: 0 IP resolved by node's hostname peer's link address: 192.168.10.141

Help

Join "Cluster-pve-1c"

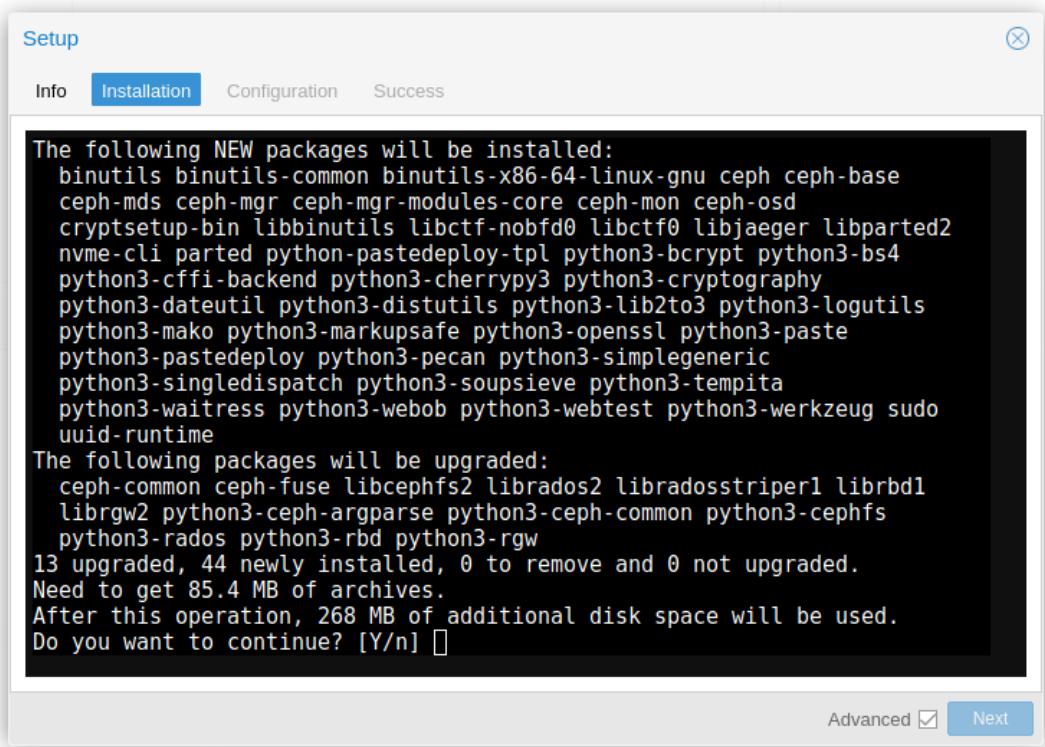
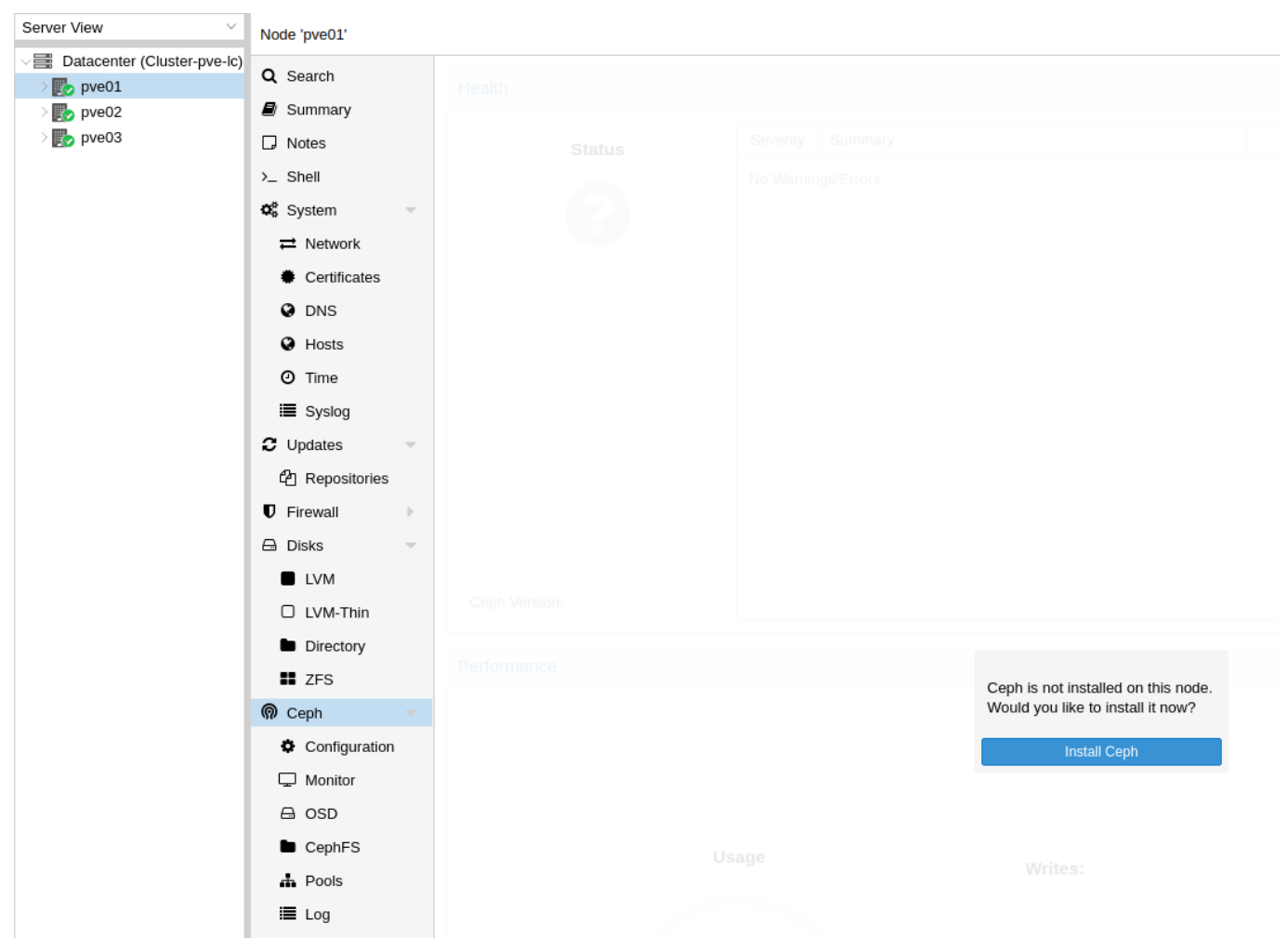
Ensuite nous pouvons nous reconnecter sur l'interface de pve01 et nous pouvons voir que pve02 et pve03 on étaient ajoutés avec succès sur le cluster

The screenshot shows the Proxmox Virtual Environment 7.2-3 web interface. The browser tabs at the top are labeled 'vSphere - PVE_LC_03 - Sn', 'PVE_LC_03', 'PVE_LC_02', and 'PVE_LC_01'. The address bar shows the URL 'https://10.30.10.126:1001/#v1:0:18:4:11:.....=cluster'. The interface has a sidebar on the left with a 'Server View' dropdown and a 'Datacenter' section containing a tree view with 'Datacenter (Cluster-pve-lc)' expanded, showing three nodes: 'pve01', 'pve02', and 'pve03'. The main content area is divided into a left sidebar with a search bar and a list of menu items (Search, Summary, Notes, Cluster, Ceph, Options, Storage, Backup, Replication, Permissions, Users, API Tokens, Two Factor, Groups), and a right pane titled 'Cluster Information'. The 'Cluster Information' pane contains buttons for 'Create Cluster', 'Join Information', and 'Join Cluster', and displays the 'Cluster Name' as 'Cluster-pve-lc'. Below this is a section titled 'Cluster Nodes' with a table listing the nodes: 'pve01', 'pve02', and 'pve03'.

Cluster Information	
Create Cluster	Join Information
Join Cluster	
Cluster Name:	Cluster-pve-lc
Cluster Nodes	
Nodename	
pve01	
pve02	
pve03	

Installation CEPH:

Sur notre pve01 installer CEPH



The screenshot shows the 'Setup' window with the 'Configuration' tab selected. The 'Ceph cluster configuration' section includes fields for 'Public Network IP/CIDR' (192.168.10.141/24) and 'Cluster Network IP/CIDR' (Same as Public Network). The 'First Ceph monitor' section shows 'Monitor node' set to 'pve01'. A yellow warning box states: 'Additional monitors are recommended. They can be created at any time in the Monitor tab.' The 'Number of replicas' is set to 3 and 'Minimum replicas' is set to 2. At the bottom, there is a 'Help' button, an 'Advanced' checkbox (checked), and a 'Next' button.

Setup

Info Installation **Configuration** Success

Ceph cluster configuration:

Public Network IP/CIDR: 192.168.10.141/24

Cluster Network IP/CIDR: Same as Public Network

First Ceph monitor:

Monitor node: pve01

Additional monitors are recommended. They can be created at any time in the Monitor tab.

Number of replicas: 3

Minimum replicas: 2

Help Advanced ☒ Next

Faire de meme sur pve02 et pve03 a difference pret que cette fois ci la configuration lors de l'install CEPH est déjà initialisé sur la conf de notre pve01

Setup

Info Installation **Configuration** Success

Ceph cluster configuration:

Public Network IP/CIDR: 192.168.10.143/24

Cluster Network IP/CIDR: Same as Public Network

First Ceph monitor:

Monitor node: pve03

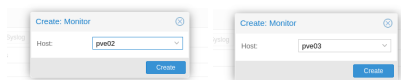
Additional monitors are recommended. They can be created at any time in the Monitor tab.

Configuration already initialized

Help Advanced ☐ Next

Maintenant nous allons créer des moniteurs pour chacun de nos pve:

Dans pve01 cliquer sur CEPH > Monitor > Create



Créer un OSD :

Dans pve01 cliquer sur CEPH > OSD > Create: OSD (répéter l'opération sur les deux autres pve)

Create: Ceph OSD

Disk:

/dev/sdb

DB Disk:

use OSD disk

DB size (GiB):

Automatic

Encrypt OSD:☐

WAL Disk:

use OSD/DB disk

Device Class:

auto detect

WAL size (GiB):

Automatic

Note: Ceph is not compatible with disks backed by a hardware RAID controller. For details see [the reference documentation](#).

Help

Advanced☒

Create

Vous allez obtenir cela

vSphere - PVE_LC_03

PVE_LC_03

PVE_LC_02

PVE_LC_01

Virtualisation_TP_Proxmox

pve01 - Proxmox Virtu

ssh - How to fix? "kex_e

https://10.30.10.126:1001/#v1:0:=node%2Fpve03:4:42:::=cluster

PROXMOX Virtual Environment 7.2-3

Search

Server View

Node 'pve03'

Reload

Create: OSD

Manage Global Flags

No OSD selected

Name	Class	OSD Type	Status	Version	weight	reweight	Used (%)	Total	Apply/Commit Latency (ms)
default									
pve03				16.2.7					
osd.2	ssd	bluestore	up / in	16.2.7	0.0488	1.00	0.01	50.00 GiB	3 / 3
pve02				16.2.7					
osd.1	ssd	bluestore	up / in	16.2.7	0.0488	1.00	0.01	50.00 GiB	2 / 2
pve01				16.2.7					
osd.0	ssd	bluestore	up / in	16.2.7	0.0488	1.00	0.01	50.00 GiB	2 / 2

Ensuite nous allons créer un pool de stockage:

Dans pve01 cliquer sur CEPH > pools > Create

Create: Ceph Pool

Name:

pool_cluster_lc

Size:

3

PG Autoscale Mode:

on

Add as Storage:

☒

Min. Size:

3

Crush Rule:

replicated_rule

Target Ratio:

0.0

Target Size:

0

GiB

of PGs:

128

Target Ratio takes precedence.

Min. # of PGs:

0

Help

Advanced ☒

Create

Un disque est apparu sur les pve de notre cluster

vSphere - PVE_LC_03 - x PVE_LC_03 x PVE_LC_02 x PVE_LC_01 x

← → ↺

https://10.30.10.126:1001/#v1:0:=node%2Fpve01:4:43:.....=cluster

PROXMOX Virtual Environment 7.2-3

Search

Server View

Datacenter (Cluster-pve-lc)

pve01

local (pve01)

local-lvm (pve01)

pool_cluster_lc (pve01)

pve02

local (pve02)

local-lvm (pve02)

pool_cluster_lc (pve02)

pve03

local (pve03)

local-lvm (pve03)

pool_cluster_lc (pve03)

Node 'pve01'

Search

Summary

Notes

Shell

System

Network

Certificates

DNS

Hosts

Time

Svslog

Create Edit Destroy

Name

device_health_metrics

pool_cluster_lc

Test de résilience et d'autoréparation

Eteindre pve02 > Retirer un disque > le rallumer > Observer le comportement de l'OSD partagé

15 / 22

Dans VSphere clique droit sur pve02 eteint > Changer les parametres systemes

Ajouter un périphérique

CPU	4		
Mémoire	4	Go	
Disque dur 1	32	Go	
Disque dur 2	50	Go	
Contrôleur SCSI 0	Paravirtuel VMware		
Adaptateur réseau 1	DsPG-S3814		Connecter...
Adaptateur réseau 2	DsPG-S3814		Connecter...
Lecteur CD/DVD 1	Fichier ISO banque de données		Connecter...
Carte vidéo	Spécifier les paramètres personnalisés		
Périphériques de sécurité	Non configuré		
Périphérique VMCI			
Autre	Matériel supplémentaire		

On rallume pve02 On peut voir que malgré la suppression du deuxième disque pve02 a toujours accès au pool OSD "pool_cluster_lc" Mais un disque est détecté comme down

▼ Datacenter (Cluster-pve-lc)

▼ pve01

- local (pve01)
- local-lvm (pve01)
- pool_cluster_lc (pve01)

▼ pve02

- local (pve02)
- local-lvm (pve02)
- pool_cluster_lc (pve02)

▼ pve03

- local (pve03)
- local-lvm (pve03)
- pool_cluster_lc (pve03)

Reload | Create: OSD | Manage Global Flags

Name	Class	OSD Type	Status	Version
▼ default				
▼ pve03				16.2.7
osd.2	ssd	bluestore	up / in	16.2.7
▼ pve02				16.2.7
osd.1	ssd	bluestore	down / in	16.2.7
▼ pve01				16.2.7
osd.0	ssd	bluestore	up / in	16.2.7

On éteint à nouveau pve02
Et on remet un deuxième disque de 50GO

Modifier les paramètres

PVE_LC_02

×

Matériel virtuel

Options VM

Ajouter un périphérique

> CPU

4

⌵

ⓘ

> Mémoire

4

⌵

Go

⌵

> Disque dur 1

32

Go

⌵

> Nouveau disque dur *

50

Go

⌵

> Contrôleur SCSI 0

Paravirtuel VMware

> Adaptateur réseau 1

DsPG-S3814

⌵

☑ Connecter...

> Adaptateur réseau 2

DsPG-S3814

⌵

☑ Connecter...

> Lecteur CD/DVD 1

Fichier ISO banque de données

⌵

☑ Connecter...

> Carte vidéo

Spécifier les paramètres personnalisés

⌵

> Périphériques de sécurité

Non configuré

Périphérique VMCI

> Autre

Matériel supplémentaire

Annuler

OK

On vas dans OSD
On clique sur In puis start
Et on voit que l'OSD a bien était réintégré

Reload

Create OSD

Manage Global Flags

osd 1: Start Stop Restart Out In More

Name	Class	OSD Type	Status	Version	weight	reweight	Used (%)	Total	Apply/Commit Latency (ms)
default									
pve03				16.2.7					
osd.2	ssd	bluestore	up 🟢 / in 🟢	16.2.7	0.0488	1.00	0.03	50.00 GiB	0 / 0
pve02				16.2.7					
osd.3	ssd	bluestore	up 🟢 / in 🟢	16.2.7	0.0488	1.00	0.02	50.00 GiB	0 / 0
pve01				16.2.7					
osd.0	ssd	bluestore	up 🟢 / in 🟢	16.2.7	0.0488	1.00	0.03	50.00 GiB	0 / 0

Ensuite on éteind à nouveau tout nos serveurs
Et on y ajoute une 3 eme carte réseau pour le vmbr0 que nous avons supprimé pour le bond0

Dans chacun des pve aller dans network > Create > Linux Bridge

Create: Linux Bridge

Name:

vmbr0

IPv4/CIDR:

192.168.10.201/24

Gateway (IPv4):

IPv6/CIDR:

Gateway (IPv6):

Autostart:

☒

VLAN aware:

☐

Bridge ports:

ens256

Comment:

MTU:

1500

Help

Advanced ☒

Create

Création du conteneur:

Télécharger le templates debian 11

Dans pve01 > local > CT Templates > Templates

Templates

Search

Type	Package	Version	Description
Section: mail (2 Items)			
lxc	proxmox-mailgateway-7.0-standard	7.0-1	Proxmox Mailgateway 7.0
lxc	proxmox-mailgateway-6.4-standard	6.4-1	Proxmox Mailgateway 6.4
Section: system (20 Items)			
lxc	alpine-3.13-default	20210419	LXC default image for alpine 3.13 (20210419)
lxc	debian-11-standard	11.0-1	Debian 11 Bullseye (standard)
lxc	centos-8-default	20201210	LXC default image for centos 8 (20201210)
lxc	almalinux-8-default	20210928	LXC default image for almalinux 8 (20210928)
lxc	ubuntu-18.04-standard	18.04.1-1	Ubuntu Bionic (standard)
lxc	archlinux-base	202104...	ArchLinux base image.
lxc	fedora-34-default	20210427	LXC default image for fedora 34 (20210427)
lxc	centos-7-default	20190926	LXC default image for centos 7 (20190926)
lxc	ubuntu-16.04-standard	16.04.5-1	Ubuntu Xenial (standard)
lxc	debian-10-standard	10.7-1	Debian 10 Buster (standard)
lxc	rockylinux-8-default	20210929	LXC default image for rockylinux 8 (20210929)
lxc	opensuse-15.3-default	20210925	LXC default image for opensuse 15.3 (20210925)
lxc	ubuntu-21.04-standard	21.04-1	Ubuntu 21.04 Hirsute (standard)
lxc	fedora-35-default	20211111	LXC default image for fedora 35 (20211111)

Download

Créer le conteneur dans pve01

Create: LXC Container

General

Template

Disks

CPU

Memory

Network

DNS

Confirm

Node:

pve01

CT ID:

100

Hostname:

Unprivileged container:

☒

Nesting:

☒

Resource Pool:

Password:

Confirm password:

SSH public key:

Load SSH Key File

Help

Advanced ☒

Back

Next

Create: LXC Container

General

Template

Disks

CPU

Memory

Network

DNS

Confirm

Storage:

local

Template:

.11-standard_11.0-1_amd64.tar.gz

Help


Advanced ☒

Back

Next

Create: LXC Container

General Template **Disks** CPU Memory Network DNS Confirm

rootfs 


Storage:




Disk size (GiB):

Enable quota: ☐ ACLs:

Mount options:

Skip replication: ☐

 Add

 Help Advanced ☒  Back  Next

Create: LXC Container

General Template Disks CPU Memory **Network** DNS Confirm

Name: IPv4: ☒ Static ☐ DHCP




MAC address: IPv4/CIDR:

Bridge: Gateway (IPv4):

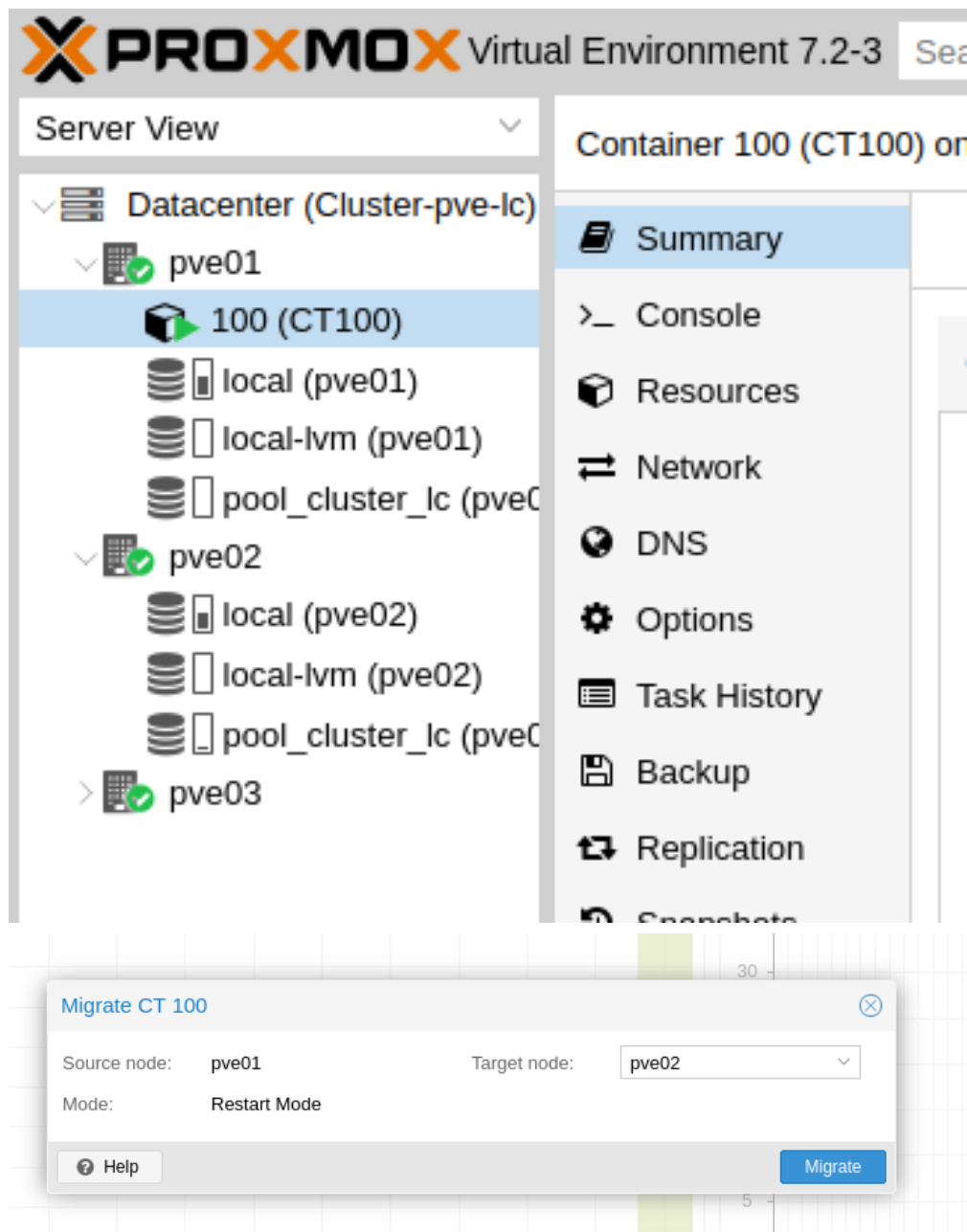
VLAN Tag: IPv6: ☒ Static ☐ DHCP ☐ SLAAC

Rate limit (MB/s): IPv6/CIDR:

Firewall: ☒ Gateway (IPv6):

 Help Advanced ☒  Back  Next

On démarre le conteneur
Ensuite on clique en haut à droite sur "migrate"
On sélectionne notre pve02 et on clique sur migrate



Notre conteneur a bien été migré vers notre pve02

Task viewer: CT 100 - Migrate (pve01 ---> pve02)

OutputStatus

Stop

2022-05-16 13:27:27 shutdown CT 100

2022-05-16 13:27:32 starting migration of CT 100 to node 'pve02' (192.168.10.142)

2022-05-16 13:27:32 volume 'pool_cluster_lc:vm-100-disk-0' is on shared storage 'pool_cluster_lc'

2022-05-16 13:27:32 start final cleanup

2022-05-16 13:27:34 start container on target node

2022-05-16 13:27:34 # /usr/bin/ssh -e none -o 'BatchMode=yes' -o 'HostKeyAlias=pve02' root@192.168.10.142 pct start 100

2022-05-16 13:27:42 migration finished successfully (duration 00:00:16)

TASK OK

Server view

▼

Datacenter (Cluster-pve-lc)

▼

pve01

local (pve01)

local-lvm (pve01)

pool_cluster_lc (pve01)

▼

pve02

100 (CT100)

local (pve02)

local-lvm (pve02)

pool_cluster_lc (pve02)

>

pve03