

Mise en place et configuration du serveur d'hypervision Proxmox



1. Introduction

Proxmox Virtual Environment (Proxmox VE) est une solution de virtualisation open-source qui intègre KVM pour la virtualisation de machines et LXC pour les conteneurs. Il offre une interface web intuitive et supporte la haute disponibilité, le clustering et la sauvegarde automatisée.

2. Prérequis

- Un serveur physique ou une machine virtuelle avec au minimum 8 Go de RAM et un processeur supportant la virtualisation (Intel VT-x ou AMD-V).
- Un disque dur avec au moins 32 Go d'espace libre.
- Une connexion Internet stable.
- Un accès à l'ISO de Proxmox (téléchargeable depuis proxmox.com).

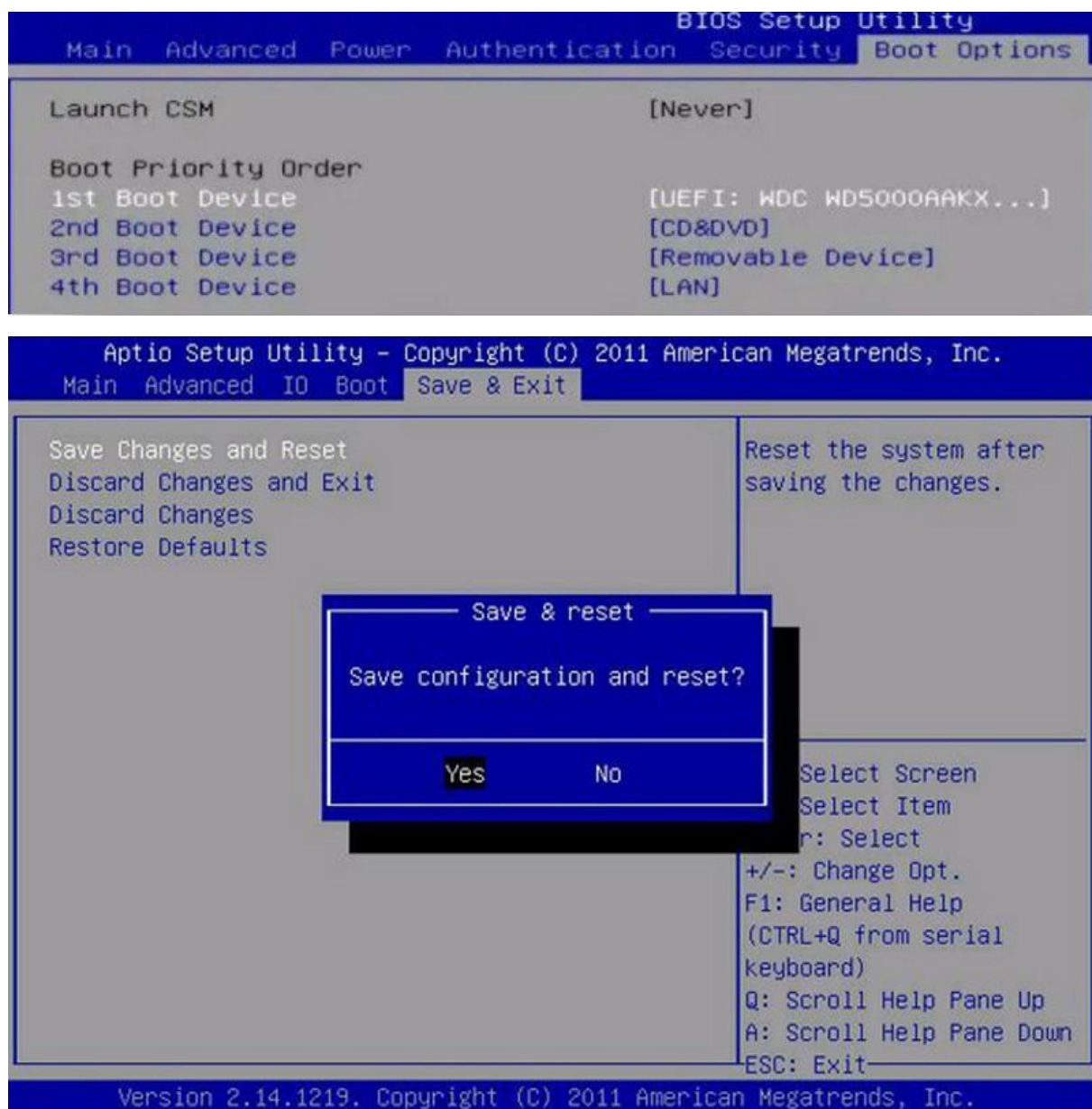
3. Installation de Proxmox

3.1. Téléchargement de l'ISO

1. Rendez-vous sur le site officiel de Proxmox.
2. Téléchargez l'image ISO la plus récente.
3. Créez une clé USB bootable avec Rufus (Windows) ou dd (Linux) :

3.2. Installation sur le serveur

1. Démarrez votre serveur en bootant sur la clé USB.



2.Sélectionnez Install Proxmox VE.



Welcome to Proxmox Virtual Environment

Install Proxmox VE
Install Proxmox VE (Debug mode)
Rescue Boot
Test memory (Legacy BIOS)

3. Acceptez les termes et conditions.



END USER LICENSE AGREEMENT (EULA)

END USER LICENSE AGREEMENT (EULA) FOR PROXMOX VIRTUAL ENVIRONMENT (PROXMOX VE)

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Abort

Previous

I agree

4. Choisissez le disque de destination pour l'installation.



Proxmox Virtualization Environment (PVE)

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

Press the Next button to continue installation.

- **Please verify the installation target**
The displayed hard disk is used for 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.

Target Harddisk: Options

Abort Previous Next

5. Configurez votre fuseau horaire et votre clavier.



Location and Time Zone selection

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

Press the Next button to continue installation.

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

Country

Time zone:

Keyboard Layout:

Abort Previous Next

6. Renseignez un mot de passe root et une adresse e-mail.



The image shows the 'Administration Password and E-Mail Address' screen of the Proxmox VE Installer. At the top, there is a banner with the Proxmox logo and the text 'Proxmox VE Installer'. Below the banner, the title 'Administration Password and E-Mail Address' is displayed in orange. The main content area contains two columns of text. The left column explains that Proxmox Virtual Environment is a full-featured, highly secure GNU/Linux system based on Debian and asks the user to provide the root password. The right column contains two bullet points: one for the password (8+ characters, letters, numbers, and symbols) and one for the email address (valid email address for alerts). Below these instructions, a note says 'Press the Next button to continue installation.' The bottom section contains three input fields: 'Password' (masked with dots), 'Confirm' (masked with dots), and 'E-Mail' (containing 'Un_mail@domaine'). At the bottom left is an 'Abort' button, and at the bottom right are 'Previous' and 'Next' buttons.

Proxmox Virtual Environment is a full featured highly secure GNU/Linux system based on Debian.

Please provide the *root* password in this step.

- **Password:** Please use a strong password. It should have 8 or more characters. Also combine letters, numbers, and symbols.
- **E-Mail:** Enter a valid email address. Your Proxmox VE server will send important alert notifications to this email account (such as backup failures, high availability events, etc.).

Press the Next button to continue installation.

Password:

Confirm:

E-Mail:

7. Configurez votre réseau (IP statique recommandée).



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 installation.

Afterwards press the Next button. You will be shown a list of the options that you chose during the previous steps.

- **IP address:** Set the IP address for your server.
- **Netmask:** Set the netmask of your network.
- **Gateway:** IP address of your gateway or firewall.
- **DNS Server:** IP address of your DNS server.

Management Interface:	ens18 - ba:33:cf:2f:a9:2f (virtio_net) ▼
Hostname (FQDN):	nodes1.yourdomain.tld
IP Address:	192.168.30.57
Netmask:	255.255.240.0
Gateway:	192.168.16.1
DNS Server:	10.10.0.1

Abort

Previous

Next

8. Lancez l'installation et redémarrez une fois terminée.



Proxmox VE Installer

Summary

Please verify the displayed informations. Once you press the **Install** button, the installer will begin to partition your drive(s) and extract the required files.

Option	Value
Filesystem:	ext4
Disk(s):	/dev/sda
Country:	France
Timezone:	Europe/Paris
Keymap:	fr
E-Mail:	un_mail@domaine
Management Interface:	enp0s3
Hostname:	pve
IP:	192.168.1.30
Netmask:	255.255.255.0
Gateway:	192.168.1.1
DNS:	192.168.1.1

Abort

Previous

Install



Proxmox VE Installer

Installation successful!

The Proxmox Virtual Environment is now installed and ready to use.

• Next steps

Reboot and point your web browser to the selected IP address on port 8006:

`https://192.168.1.30:8006`

Also visit www.proxmox.com for more information.

192.168.1.30

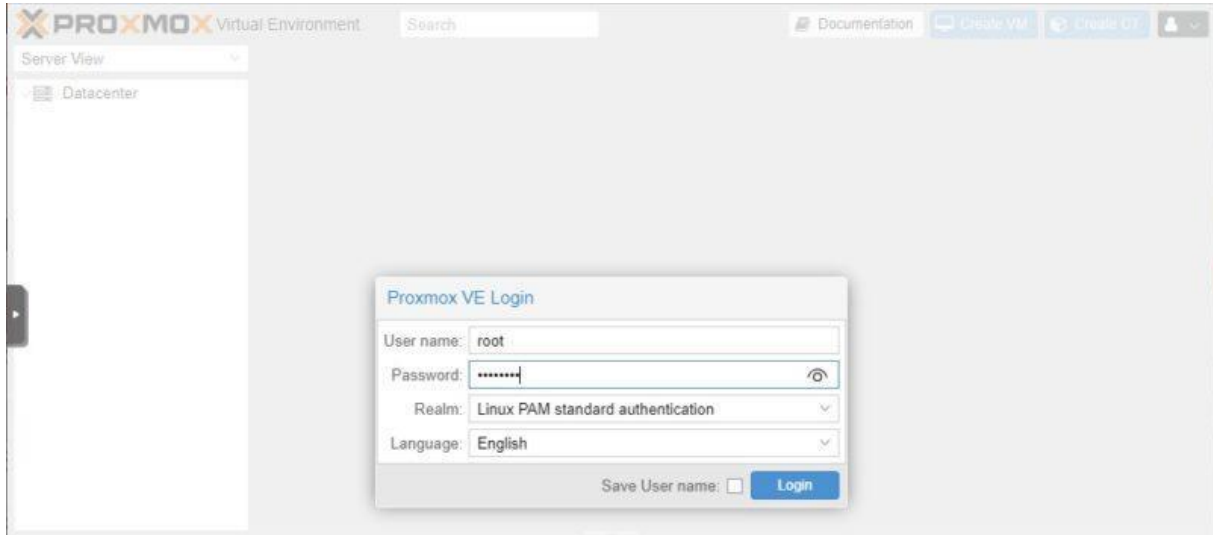
Abort

Reboot

4. Configuration

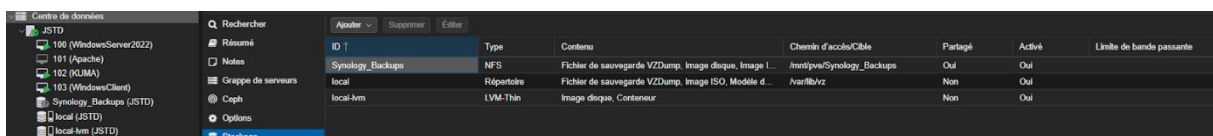
1. Accès à l'interface Web

1. Accédez à l'interface Web en utilisant un navigateur et en entrant : `https://<adresse-ip-proxmox>:8006`

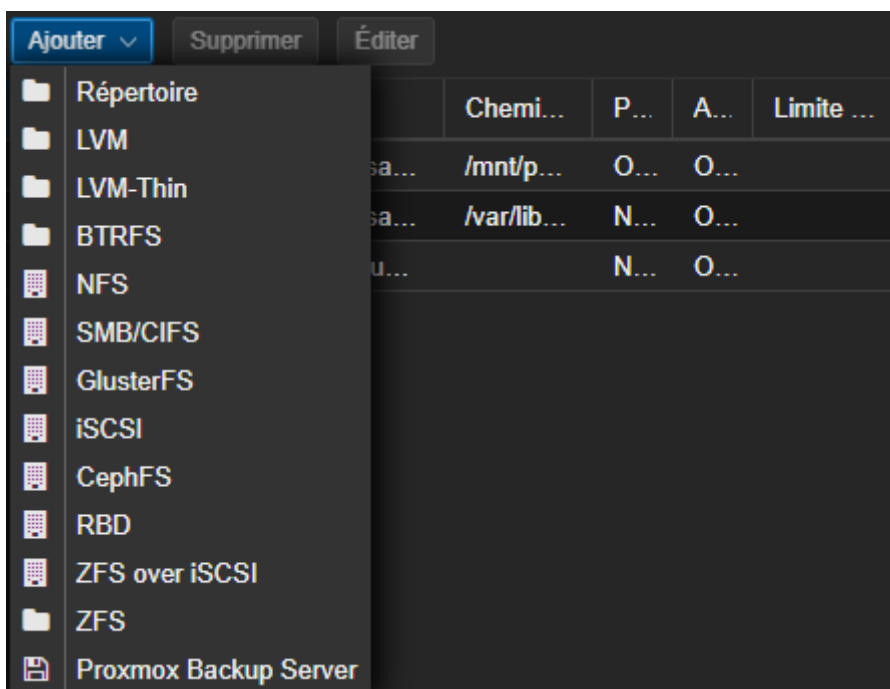


Connectez-vous avec root et le mot de passe défini lors de l'installation.

2. Pour ajouter un stockage pour les machines virtuelles allez dans Datacenter > Stockage.



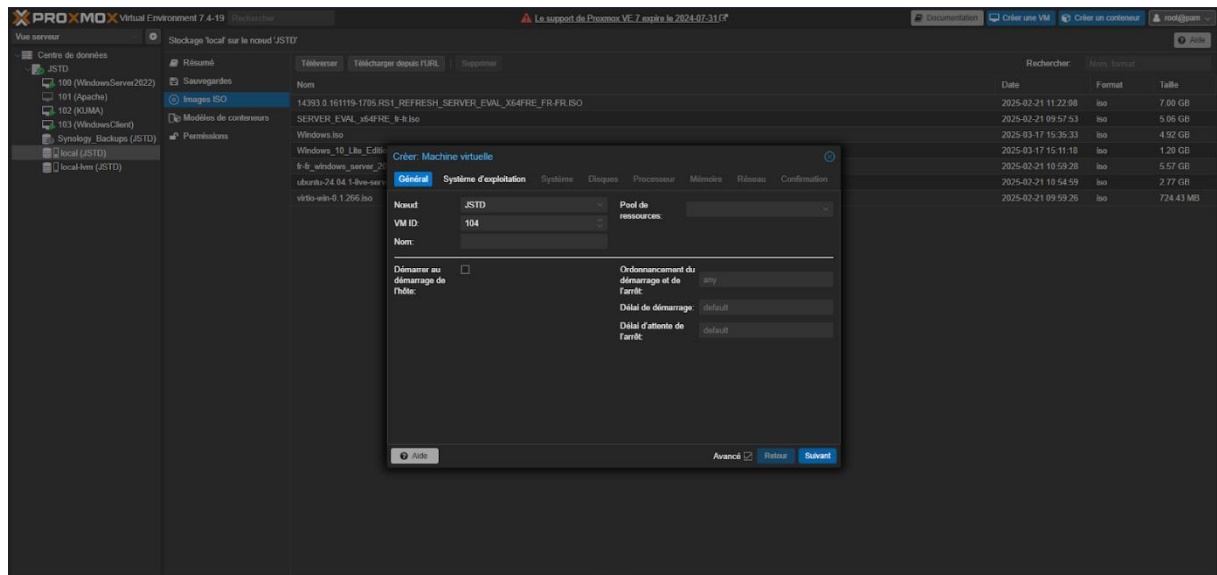
3. Cliquez sur Ajouter et choisissez un type de stockage (dans notre cas on sélectionnera répertoire.).



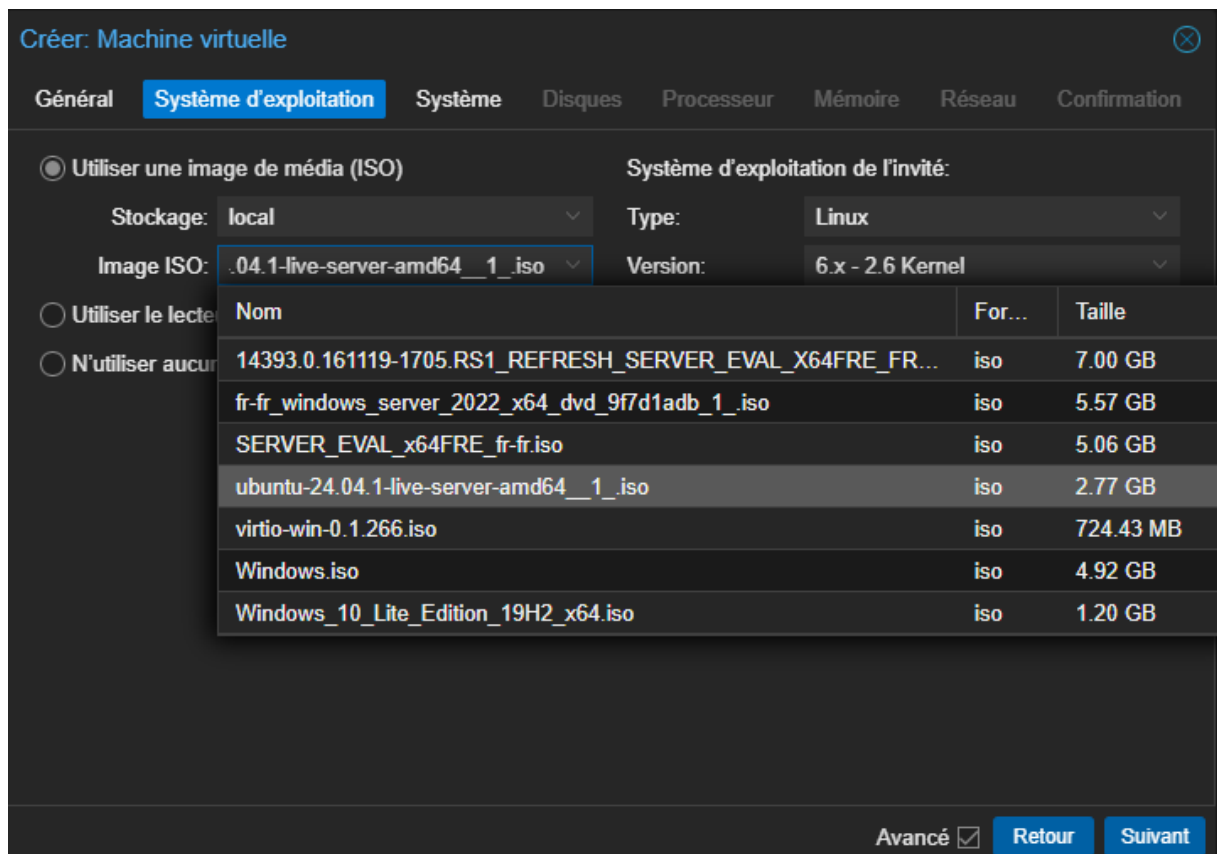
Configurez les paramètres et sauvegardez.

4. Pour créer une machine virtuelle, cliquez sur Créer VM.

1. Donnez un nom à la VM.



2. Choisissez l'ISO d'installation.



3. Configurez les paramètres du processeur, de la RAM et du stockage.

Créer: Machine virtuelle

Général

Système d'exploitation

Système

Disques

Processeur

Mémoire

Réseau

Confirmation

scsi0

Disque

Bande passante

Bus/périphérique:

SCSI

0

Cache:

Par défaut (Aucun ca

Contrôleur SCSI:

VirtIO SCSI single

Abandonner:

Stockage:

local-lvm

IO thread:

Taille du disque (GiB):

32

Format:

Image disque brute (

Émulation de SSD:

Sauvegarde:

En lecture seule:

Passer la réplication:

E-S asynchrones:

Par défaut (io_uring)

Ajouter

Avancé ☒

Retour

Suivant

Créer: Machine virtuelle

Général

Système d'exploitation

Système

Disques

Processeur

Mémoire

Réseau

Confirmation

Supports de processeur:

1

Type:

Par défaut (kvm64)

Cœurs:

1

Total de cœurs:

1

Processeurs virtuels:

1

Unités processeur:

100

Limite d'utilisation processeur:

illimité

Activer NUMA:

Affinité processeur:

Tous les cœurs

Extra CPU Flags:

Default	-	md-clear	Required to let the guest OS know if MDS is mitigated correctly
Default	-	pcid	Meltdown fix cost reduction on Westmere, Sandy-, and IvyBridge Intel CPUs
Default	-	spec-ctrl	Allows improved Spectre mitigation with Intel CPUs

Aide

Avancé ☒

Retour

Suivant

Créer: Machine virtuelle

Général

Système d'exploitation

Système

Disques

Processeur

Mémoire

Réseau

Confirmation

Mémoire (MiB):

2048

Mémoire minimale (MiB):

2048

Partages:

Par défaut (1000)

Élasticité mémoire (ballooning):

☒

Aide

Avancé ☒

Retour

Suivant

4. Démarrez la VM et suivez l'installation de l'OS.

Vous avez maintenant installé et configuré Proxmox sur votre serveur. Vous pouvez facilement créer et gérer des machines virtuelles ainsi que des conteneurs pour optimiser l'utilisation de vos ressources. Grâce à son interface web intuitive et ses nombreuses fonctionnalités, Proxmox vous offre une solution de virtualisation performante et évolutive. Si vous avez des questions ou rencontrez des difficultés, n'hésitez pas à consulter la documentation officielle.